Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Baker City
California
Oakland | Irvine

August 31, 2021

Nicholas Acklam
Washington State Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia, Washington 98504

RE: RESPONSE TO AUGUST 30, 2019 LETTER REGARDING FURTHER ACTION AT THE WOODWORTH & CO INC. LAKEVIEW PLANT
2800 104TH STREET COURT SOUTH, LAKEWOOD, WASHINGTON
FARALLON PN: 188-002
VCP IDENTIFICATION NO: SW1012

Dear Nicholas Acklam:

Farallon Consulting, L.L.C. (Farallon) has prepared this letter to provide a response and additional information requested by the Washington State Department of Ecology (Ecology) in its letter regarding Further Action at the Following Site: Woodworth & Co Inc. Lakeview Plant from Nicholas Acklam of Ecology to Branislav Jurista of Farallon dated August 30, 2019 (Opinion Letter) for the property at 2800 104th Street Court South in Lakewood, Washington (herein referred to as the Lakeview Facility) (Figure 1). In the Opinion Letter, Ecology stated that it supports issuance of a No Further Action determination with an environmental covenant for the Lakeview Facility, if additional characterization, evaluation, and reporting is completed, including:

- Collection of additional data supporting that recently discovered releases are appropriately delineated and remediated at the Lakeview Facility and confidence that future releases will be prevented;
- Conducting additional sampling and evaluation of the aquifers to ensure that trichloroethene (TCE) contamination is not present in a sole-source aquifer used as a public drinking water source and that it will not enter the Lakewood Water District drinking water system;
- Conducting additional groundwater monitoring events at the Lakeview Facility to obtain sufficient information for Ecology to adequately evaluate groundwater contaminant trends or restoration timeframes; and
- Conducting additional characterization to define the lateral and vertical extents of contamination in some areas of the Lakeview Facility.

Specific Ecology comments are detailed below in italics, followed by Farallon's response. The term "Site" used in the following sections as defined under the Washington State Model Toxics Control Act Cleanup Regulation (MTCA) refers to the portions of the Lakeview Facility where hazardous substances have come to be located at concentrations exceeding applicable MTCA cleanup levels.

CHARACTERIZATION OF THE SITE

Ecology Comment: *Ecology has determined your characterization of the Site is not sufficient to establish cleanup standards and select a cleanup action.*

PETROLEUM HYDROCARBONS

Remedial investigation in 2017 detected petroleum hydrocarbons in several areas of the Site, including the equipment parking area, equipment storage area, hot mix area, and the former recycled stockpile area. Ecology is particularly concerned with the results at the equipment storage carport area where petroleum hydrocarbons were detected at 12,000 milligrams per kilograms (mg/kg) following remedial activities. Other areas of concern include the hot mix storage area, where a heavy sheen was observed, and the area surrounding monitoring well MW-16, where petroleum hydrocarbons were released to the deep aquifer. These results show an increase of petroleum concentrations in soil and groundwater since the completion of remedial actions. Ecology is concerned that the increase in contaminant concentrations may be attributable to recent or ongoing releases of hazardous substances into the environment, potentially due to poor best management practices.

For the remedial investigation, ensure sufficient information has been collected to determine the lateral and vertical extents of contamination throughout the Site, including the areas of newly discovered contamination. Provide to Ecology both plan view and geologic cross section concentration isopleth maps of the Site. Include the extents of contamination with respect to surface and subsurface features, geologic strata, and groundwater elevations and flows at the Site. To support an environmental covenant, clearly indicate in plan view and cross section the extents of the Site, and indicate the specific volumes and areas where cleanup standards are exceeded. Ensure that the feasibility study addresses all contamination at the Site.

FARALLON RESPONSE

Supplemental subsurface investigation activities were completed in December 2019 and January 2020 to address Ecology’s request for lateral and vertical delineation of petroleum hydrocarbons in soil and groundwater in the areas where petroleum hydrocarbons were detected during the 2017 investigation activities. The specific locations that were subject to supplemental subsurface investigation consisted of the Former Recycled Stockpile Area proximate to former monitoring well MW-24 and boring MW-24T; the Hot-Mix Storage Area proximate to boring B-19; the Equipment Storage Carport Area proximate to boring B-12; the Former Asphalt-Testing Laboratory Area proximate to boring B-16; and the area proximate to monitoring well MW-16 (Figure 2). The concentration of total petroleum hydrocarbons (TPH) as oil-range organics (ORO) of 130 milligrams per kilogram (mg/kg) detected in soil in boring B-10 in the Equipment Parking Area was significantly less than the MTCA Method A cleanup level of 2,000 mg/kg, and therefore was not investigated further. The drilling for the supplemental subsurface investigation was provided by Holt Services, Inc. of Edgewood, Washington; test pitting was conducted by Miles Resources of Puyallup, Washington.

The results from DRO and ORO soil analyses are summarized in Table 1 and discussed by Site Area below. The laboratory analytical reports are included in Attachment A.

Former Recycled Stockpile Area

Borings B-36 through B-40 and test pits B-41 through B-43 were completed in accessible areas surrounding the Former Recycled Stockpile Area (Figure 3) to delineate petroleum hydrocarbons in soil north, south, east, and west of boring MW-24T. Due to the steep slope, woods, and unstable ground from recently placed reclamation fill, the area north and west of boring MW-24T could not be accessed safely to drill using a direct-push rig. Therefore, borings B-39 and B-40 were advanced using a hand-auger.

Borings B-36, B-37, and B-38 were completed south, east-southeast, and east-northeast of boring MW-24T, respectively, to a depth of approximately 15 feet below ground surface (bgs) using direct-push drilling methods. Soil samples were collected from boring B-36 at depths of 5.0, 10.0, and 13.0 feet bgs; and from borings B-37 and B-38 at depths of 5.0, 10.0, and 13.0 feet bgs, and analyzed for TPH as diesel-range organics (DRO) and ORO by Northwest Method NWTPH-Dx. ORO was detected at a concentration of 2,300 mg/kg in the soil sample collected from boring B-36 at a depth of 5.0 feet bgs, which exceeds the MTCA Method A cleanup level of 2,000 mg/kg, but is less than the calculated Site-specific MTCA Method B cleanup level for the Former Recycled Stockpile Area of 3,739 mg/kg previously approved by Ecology.[1] ORO was detected at concentrations exceeding the laboratory reporting limit but less than MTCA Method A and B cleanup levels in soil samples collected from boring B-36 at depths of 10.0 and 13.5 feet bgs, from boring B-37 at a depth of 5.0 feet bgs, and from boring B-38 at depths of 5.0 and 10.0 feet bgs. DRO was detected at concentrations less than the MTCA Method A and calculated Site-specific Method B cleanup levels in the soil sample collected from boring B-36 at a depth of 13.5 feet bgs and from boring B-38 at a depth of 5.0 feet bgs; however, the laboratory noted that the reported concentrations in both samples were impacted by hydrocarbons in the oil-range.

Borings B-39 and B-40 were completed west and north of boring MW-24T to depths of 3.5 and 4.0 feet bgs, respectively, using a hand-auger. The borings were terminated due to refusal at depths where dense or gravelly soil was encountered. Soil samples were collected from the total depth of each boring and analyzed for DRO and ORO. ORO was detected at a concentration exceeding the laboratory reporting limit but less than MTCA Method A and Site-specific Method B cleanup levels in the soil sample collected from boring B-39 at a depth of 3.5 feet bgs. DRO was not detected at the laboratory practical quantitation limit (PQL) in the soil sample collected from boring B-39.

Test pits B-41 through B-43 were completed south, west, and southeast of boring B-36 to a depth of approximately 5 feet bgs via backhoe, to delineate ORO impacts detected in boring B-36. Soil samples were collected from the bottom of each test pit and analyzed for DRO and ORO. DRO

[1] Letter Regarding Opinion on Proposed Cleanup of the Following Site: Woodworth & Co. Lakeview Plant, 2800 104th Street South, Tacoma (Lakewood) dated February 15, 2011 from Charles S. Cline of Ecology to Branislav Jurista of Farallon.

and ORO were detected at concentrations exceeding the laboratory reporting limit, but less than MTCA Method A and calculated Site-specific Method B cleanup levels in each of the soil samples collected from test pits B-41 through B-43. The laboratory noted that the reported DRO concentrations in soil samples were impacted by hydrocarbons in the oil-range.

The lateral extent of petroleum hydrocarbons exceeding the MTCA Method A cleanup level in soil at the Former Recycled Stockpile Area is delineated: to the east by analytical results for soil samples collected from borings B-37 and B-38; to the west by results from boring B-39; to the north by results from boring B40; and to the south by results from borings B-41 through B43. Vertical delineation of petroleum hydrocarbon impact at concentrations exceeding the MTCA Method A in soil is complete by analytical results for soil samples collected from borings MW-24T and B-36. Cross sections A-A’ and B-B’ depict the limits of ORO contamination in soil and groundwater at the Former Recycled Stockpile Area in vertical view (Figures 4 and 5, respectively). TPH has not been detected at concentrations exceeding the Site-specific Method B cleanup level in soil; therefore, TPH is not a contaminant concern for soil in the Former Recycled Stockpile Area.

A reconnaissance groundwater sample was collected from a temporary well installed in boring B-36 and analyzed for DRO and ORO. DRO and ORO were detected at concentrations of 2,700 and 3,300 micrograms per liter (µg/l), respectively, which exceeds the MTCA Method A cleanup level of 500 µg/l. A Site-specific MTCA Method B cleanup level for TPH was not calculated for this area of the Site. The laboratory analytical reports are included in Attachment A. Boring logs are included in Attachment B.

Hot-Mix Storage Area

Borings B-30 through B-34 were completed southeast, east, north, west, and southwest of boring B-19 to a depth of approximately 10 feet bgs using direct-push drilling methods, to delineate ORO concentrations exceeding MTCA Method A cleanup level detected in soil in the Hot-Mix Storage Area (Figure 6). Soil samples were collected from each boring at depths of 3.0 and 10.0 feet bgs and submitted for laboratory analysis for DRO and ORO.

DRO was detected at a concentration exceeding the laboratory reporting limit, but less than the MTCA Method A cleanup level in the soil sample collected from boring B-34 at a depth of 3.0 feet bgs. DRO was not detected in any of the other soil samples collected from borings B-30 through B-34. ORO was detected at concentrations exceeding the laboratory reporting limit, but less than the MTCA Method A cleanup level in the soil samples collected from borings B-31, B-33, and B-34 at a depth of 3.0 feet bgs. ORO was not detected in any of the soil samples collected from borings B-30 through B-34 at a depth of 10.0 feet bgs.

Delineation of the lateral extent of ORO at concentrations exceeding the MTCA Method A cleanup level in soil at the Hot-Mix Storage Area has been completed to the southeast, east, north, west, and southwest by analytical results for soil samples collected from borings B-30, B-31, B-32, B-33, and B-34, respectively. Delineation of the vertical extent of ORO in soil at concentrations exceeding the MTCA Method A cleanup level has been completed by the results for a soil sample collected from boring B-19 at a depth of 10.0 feet bgs. Cross section C-C’ depicts the limits of ORO contamination in soil at the Hot-Mix Storage Area in vertical view (Figure 7). The laboratory analytical reports are included in Attachment A. Boring logs are included in Attachment B.

Equipment Storage Carport Area

Borings B-25, B-26, B-27, B-28, and B-29 were completed southeast, east, south, north, and west of boring B-12, respectively, to a depth of approximately 15 feet bgs on using direct-push drilling methods, to delineate the detection of ORO at a concentration exceeding the MTCA Method A cleanup level in soil from boring B-12, located in the Equipment Storage Carport Area (Figure 8). Boring B-35 was completed north of boring B-28 to a depth of approximately 9 feet bgs on December 19, 2019 using direct-push drilling methods. Soil samples were collected from borings B-25, B-26, B-28, B-29, and B-35 at a depth of 9 feet bgs; from borings B-27 and B-29 at a depth of 12 feet bgs; and from borings B-25 through B-28 at a depth of 15 feet bgs, and submitted for laboratory analysis for ORO and DRO.

ORO was detected at concentrations exceeding the laboratory reporting limit, but less than the MTCA Method A cleanup level in the soil sample collected from borings B-25 and B-27 at a depth of 9.0 feet bgs, and the soil sample collected from boring B-29 at a depth of 12.0 feet bgs. ORO was detected at a concentration equivalent to the MTCA Method A cleanup level in the soil sample collected from boring B-28 at a depth of 9.0 feet bgs. DRO was detected at a concentration exceeding the laboratory PQL, but less than the MTCA Method A cleanup level in a sample collected from boring B-28 at a depth of 9.0 feet bgs. However, the laboratory noted that the reported DRO concentration was impacted by hydrocarbons in the oil-range. DRO and ORO were not detected in the soil sample collected from boring B-35 at a depth of 9.0 feet bgs.

Delineation of the lateral extent of ORO in soil at the Equipment Storage Carport Area has been completed to the southeast, east, north, and west by analytical results for soil samples collected form borings B-25, B-26, B-28, B-29, and B-35. Delineation of the vertical extent of ORO in soil in the Equipment Storage Carport Area has been completed by results for the soil sample collected from boring B-27 at a dept of 15.0 feet bgs. Boring B-27 is proximate to boring B-12, where elevated ORO concentrations were previously detected. Cross section D-D’ depicts the limits of ORO contamination in soil and groundwater at the Equipment Storage Carport Area in vertical view (Figure 9). The laboratory analytical reports are included in Attachment A. Boring logs are included in Attachment B.

Former Asphalt-Testing Laboratory Area

Boring B-24 was completed north of boring B-16 to a depth of approximately 10 feet bgs using direct-push drill methods, to delineate ORO detected at a concentration exceeding the MTCA Method A cleanup level in soil in boring B-16, located in the Former Asphalt-Testing Laboratory Area (Figure 10). Prior investigations delineated the extent of ORO impacts exceeding the MTCA Method A cleanup level in soil to the west, southwest, south, and east-northeast by analytical results for soil samples collected from borings B-13, B-14, B-15, and B-17, respectively. Soil samples were collected from boring B-24 at depths of 2.4 and 10.0 feet bgs, and submitted for laboratory analysis for DRO and ORO. DRO was not detected in either of the soil samples collected from boring B-24. ORO was detected at a concentration less than the MTCA Method A cleanup level in the soil sample collected from boring B-24 at a depth of 2.4 feet bgs.

Delineation of the lateral extent of ORO at concentrations exceeding the MTCA Method A cleanup level in soil at boring B-16 has been completed to the north by results for the soil samples collected from boring B-24, and by results for soil samples previously collected at borings in other directions. Delineation of the vertical extent of ORO in soil has been completed by analytical results from soil samples collected from boring B-16 at depth of 10.0 and 17.5 feet bgs. Cross section E-E' depicts the limits of ORO contamination in soil and groundwater at the Former Asphalt-Testing Laboratory Area in vertical view (Figure 11). The laboratory analytical reports are included in Attachment A. Boring logs are included in Attachment B.

CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBONS (CPAHS)

Due to concerns about air emissions from historical hot asphalt mixing operations, Ecology previously requested that Site soils be analyzed for cPAHs. Based on Ecology's request, additional soil analysis was completed for cPAHs at several areas across the Site. Concentrations of cPAHs were detected at multiple locations above Ecology's MTCA Method A cleanup screening levels for soil, including the equipment storage carport area, the roofing shredded building, and the former asphalt-testing laboratory area.

These results indicate that a new release or a previously undiscovered release may have been identified. Since the cPAH release and transport mechanisms are not yet identified,' additional investigation is warranted to determine the nature and extent of contamination.

Ecology suggests including delineation of cPAHs at the Site in plan view concentration isopleth maps and geologic cross sections for the remedial investigation and site conceptual model, and evaluating remediation of areas of cPAHs in the remedial investigation and feasibility study as appropriate.

FARALLON RESPONSE

Supplemental subsurface investigation activities were completed in December 2019 to address Ecology's request for lateral and vertical delineation of carcinogenic polycyclic aromatic hydrocarbons (cPAHs) in soil in the areas where cPAHs were detected during 2017 investigation activities. The specific locations subject to supplemental subsurface investigation consisted of the Hot-Mix Storage Area proximate to boring B-19, the Equipment Storage Carport Area proximate to boring B-12, and the Former Asphalt-Testing Laboratory Area proximate to boring B-16 (Figure 2).

The total toxicity equivalent concentrations (TECs) for cPAH mixtures of 0.0063 mg/kg in soil from boring B-18 in the Asphalt Plant Area and 0.072 mg/kg in soil from boring MW-24T in the Former Recycled Stockpile Area were less than the MTCA Method A cleanup level of 0.1 mg/kg, and were not further investigated.

The results from cPAH soil analyses are summarized in Table 2 and discussed by Site area below. The laboratory analytical reports are included in Attachment A. Boring logs are included in Attachment B.

Hot-Mix Storage Area

Soil samples collected from borings B-30, B-32, and B-34 were used to evaluate for the presence of cPAHs in the Hot-Mix Storage Area (Figure 6). Soil samples were collected from borings B-30, B-32, and B-34 at a depth of 10.0 feet bgs, and submitted for laboratory analysis for cPAHs by U.S. Environmental Protection Agency (EPA) Method 8270D/SIM. cPAHs were not detected at the laboratory PQL in the soil samples collected from boring B-30, B-32, or B-34. Therefore, cPAHs are not considered constituents of potential concern (COPCs) for the Hot-Mix Storage area.

Equipment Storage Carport Area

Borings B-25, B-26, B-27, B-28, and B-29 were completed southeast, east, south, north, and west of boring B-12, respectively, and were used to delineate the lateral extent of cPAHs in the Equipment Storage Carport Area (Figure 8). Soil samples collected from borings B-25, B-26, B-28, and B-29, at a depth of 9 feet bgs and from boring B-27 at a depth of 12 and 15 feet bgs were submitted for laboratory analysis for cPAHs.

cPAHs were not detected in any of the soil samples collected from boring B-25, B-26, B-28, or B-29. cPAHs were detected at a TEC of 0.105 mg/kg in the soil sample collected from boring B-27 at a depth of 12.0 feet bgs, which slightly exceeds the MTCA Method A cleanup level of 0.1 mg/kg. cPAHs were not detected at the laboratory PQL in the soil sample collected from boring B-27 at a depth of 15.0 feet bgs.

Delineation of the lateral extent of cPAHs in soil at the Equipment Storage Carport Area has been completed by analytical results for soil samples collected from borings B-25, B-26, B-28, and B-29. Delineation of the vertical extent of cPAHs in soil in the Equipment Storage Carport Area has been completed by results for the soil sample collected from boring B-27 at a depth of 15.0 feet bgs (Figure 8).

Former Asphalt-Testing Laboratory Area

Boring B-21 was completed south of boring B-16; borings B-22 and B-24 were completed north of boring B-16; and boring B-23 was completed east of boring B-16 to a depth of approximately 10 feet bgs using direct-push drilling methods, to delineate cPAH detected at a concentration exceeding the MTCA Method A TEC cleanup level in soil collected from boring B-16 in the Former Asphalt-Testing Laboratory Area (Figure 10). Soil samples were collected from boring B-24 at a depth of at 2.4 feet bgs, from borings B-21 and B-23 at a depth of 3.0 feet bgs, and from boring B-22 at a depth of 10.0 feet bgs, and submitted for laboratory analysis for cPAHs.

cPAHs were detected at TEC concentrations less than the MTCA Method A cleanup level in the soil samples collected from borings B-21, B-23, and B-24. cPAHs were not detected at the laboratory PQL in the sample collected from boring B-22 at a depth of 10.0 feet bgs.

Delineation of the lateral extent of cPAHs in soil at the Former Asphalt-Testing Laboratory Area has been completed to the south by analytical results for soil samples from boring B-21; to the east by results for soil samples from boring B-23; and to the north by results for soil samples from borings B-22 and B-24. The lateral extent of cPAHs in soil at the Former Asphalt-Testing Laboratory Area was delineated to the west in 2017 by analytical results for soil samples from boring B-13. Delineation of the vertical extent of cPAHs in soil in the Former Asphalt-Testing Laboratory Area has been completed by results for the soil sample collected from boring B-22 at a depth of 10.0 feet bgs (Figure 11).

GROUNDWATER MONITORING

Groundwater sampling has been completed infrequently and is insufficient for Ecology to evaluate trends at particular monitoring wells or areas. To collect sufficient information for Ecology to evaluate trends, we recommend sampling Site monitoring wells at regular intervals. Use the groundwater monitoring results to evaluate and report on the lateral and vertical extents of contamination and concentration trends.

Continue to measure geochemical parameters including temperature, pH, oxygen reduction potential (ORP), and conductivity. Provide contaminant concentration isopleth maps in plan view and geologic cross section delineating the Site. Plan view and geologic cross section concentration isopleth maps will be necessary to determine appropriate conditional points of compliance for any environmental covenant, and will be included as attachments to any environmental covenant determined appropriate for the Site.

FARALLON RESPONSE

Supplemental groundwater monitoring and sampling events were conducted in 202 from January 6 through 10 and January 23, May 15, June 10 and 22, September 29 and 30, and December 18; and on February 23 and 24, 2021 to address Ecology’s request for additional groundwater data. Groundwater elevations recorded on January 6, 2020 (Table 3) were used to estimate groundwater flow direction at the Site. In the shallow water-bearing zone, groundwater was determined to flow generally inward at the Lakeview Facility toward areas with lower relief, consistent with prior groundwater monitoring events (e.g., groundwater flow from the southeastern boundary of the Site toward the northwest, groundwater flow from the eastern boundary of the Site toward the west, groundwater flow from the northeastern boundary of the Site toward the southwest) (Figure 12). Groundwater in the deep water-bearing zone at the Site was determined to flow predominantly to the north-northeast, consistent with prior groundwater monitoring events (Figure 13).

Diesel-Range Organics and Oil-Range Organics

Groundwater samples were collected in January 2020 from monitoring wells MW-9R, MW-11, MW-13, MW-16R, and SVE-5; in May 2020 from monitoring wells MW-11 and SVE-5; in June 2020 from monitoring wells MW-11 and SVE-5; in September 2020 from monitoring wells MW-6, MW-9R, MW-13, MW-16R, and SVE-5; in December 2020 from monitoring wells MW-9R, MW-13, MW-16R, and SVE-5; in January 2021 from monitoring well MW-36; and in February 2021 from monitoring wells MW-6 and MW-36, and submitted for laboratory analysis for DRO and ORO. The groundwater samples collected in December 2020 from monitoring wells MW-9R, MW-13, MW-16R, and SVE-5 were submitted for laboratory analysis additionally for benzene, toluene, ethylbenzene, and xylenes (BTEX); cPAHs; extractable petroleum hydrocarbons, and volatile petroleum hydrocarbons for calculation of MTCA Method B cleanup levels.

The results from DRO and ORO groundwater analyses are summarized in Table 4. The extent of DRO- and/or ORO-impacted groundwater for the Former Recycled Stockpile Area is shown on Figure 3, for the Equipment Storage Carport Area on Figure 8, and for the Former Asphalt-Testing Laboratory Area on Figure 10. Groundwater results for monitoring wells MW-9R and MW-16R are discussed below under the “Monitoring Wells” heading. Monitoring wells tentatively selected for monitoring natural attenuation are discussed below under the “Monitored Natural Attenuation” heading.

The groundwater samples collected in December 2020 from monitoring wells MW-9R, MW-13, MW-16R, and SVE-5 were submitted for laboratory analysis additionally for extractable petroleum hydrocarbons, volatile petroleum hydrocarbons, BTEX, naphthalenes, and cPAHs, to calculate the Site-specific MTCA Method B cleanup level in the four groundwater areas represented by those wells impacted by DRO and ORO. The results from these analyses were entered into the Ecology *Workbook Tools for Calculating Soil and Ground Water Cleanup Levels under the MTCA, User’s Guide for MTCATPH 11.1 & MTCASGL 11.0, Publication No. 01-09-073,* revised December 2007, to calculate Site-specific MTCA Method B cleanup levels for TPH. The resulting worksheets are provided in Attachment C.

The calculated TPH concentration for the sample from monitoring well MW-9R was 301.78 µg/l, less than the calculated MTCA Method B cleanup level for TPH for the MW-9R area of 493.93 µg/l. The calculated TPH concentration for the sample from monitoring well MW-16R was 369.49 µg/l, less than the calculated MTCA Method B cleanup level for TPH for the MW-16R area of 585.04 µg/l. Based on the calculated TPH results and the MTCA Method B cleanup levels, cleanup of TPH-impacted groundwater in the shallow and deep water-bearing zones around monitoring wells MW-9R and MW-16R is not warranted.

The calculated TPH concentration for the sample from monitoring well MW-13 was 478.48 µg/l, less than the calculated MTCA Method B cleanup level for TPH for the monitoring well MW-13 area of 614.50 µg/l. Based on the calculated TPH result, further cleanup of TPH-impacted groundwater in the shallow water-bearing zone around monitoring well MW-13 is not warranted.

The calculated MTCA Method B cleanup level for TPH for the SVE-5 area is 798.68 µg/l; the calculated concentration of TPH for the SVE-5 sample was 1,866.49 µg/l. Based on the calculated TPH result, the concentrations of TPH in the shallow water-bearing zone in the Former Asphalt-Testing Laboratory Area are not protective of groundwater. Monitoring well SVE-5 was further evaluated for the potential to act as a conduit for transport of TPH-contaminated groundwater from the shallow water-bearing zone to the deep water-bearing zone, discussed below under the “Monitoring Wells” heading. The laboratory analytical reports are included in Attachment A.

Carcinogenic Polycyclic Aromatic Hydrocarbons

Groundwater samples were collected in January 2020 from monitoring wells MW-11, MW-13, and SVE-5; and in December 2020 from monitoring wells MW-9R, MW-13, MW-16R, and SVE-5, and submitted for laboratory analysis for cPAHs by EPA Method 8270E SIM.

cPAHs were not detected in the groundwater samples collected from monitoring well MW-9R, MW-11, MW-16R, or SVE-5. cPAHs were detected with a TEC less than the MTCA Method A cleanup level of 0.1 µg/l in the January 2020 groundwater sample collected from monitoring well MW-13. The results from cPAH groundwater analyses are summarized in Table 5. The laboratory analytical reports are included in Attachment A.

Chlorinated Volatile Organic Compounds

Groundwater samples were collected in January 2020 from shallow water-bearing zone wells MW-3, MW-9R, MW-26, SVE-3, SVE-6, and SVE-12; and from deep water-bearing zone wells MW-2, MW-9B, MW-14, MW-15, MW-16R, MW-18, MW-20, MW-22, MW-23, MW-25, SVE-1, SVE-2, SVE-8, AS-1, AS-2, AS-3, AS-4, AS-6, AS-7, and AS-8; and in September 2020 from shallow water-bearing zone well SVE-12 and deep water-bearing zone wells MW-9B and MW-20, and submitted for analysis for chlorinated volatile organic compounds (CVOCs) by EPA Method 8260D.

TCE was detected at a concentration of 12 µg/l in the September 2020 groundwater sample collected from shallow water-bearing zone monitoring well SVE-12, which exceeds the MTCA Method A cleanup level of 5 µg/l. TCE concentrations in the remaining shallow water-bearing zone monitoring wells ranged from non-detect at monitoring wells MW-9R and MW-26 to 4.0 µg/l at monitoring well SVE-6, which are less than the MTCA Method A cleanup level. The results for CVOC groundwater analyses are summarized in Table 6.

The horizontal extent of TCE-impacted groundwater is limited to the area immediately surrounding monitoring well SVE-12. The down-gradient extent of TCE in shallow water-bearing zone groundwater is defined by analytical results for groundwater samples collected from monitoring wells SVE-1 and SVE-6 (Figure 14). The cross- and up-gradient extent of TCE in shallow water-bearing zone groundwater is defined by analytical results for groundwater samples collected from remediation well SVE-3 and monitoring wells MW-1 and MW-26 (Figure 14).

TCE was detected at concentrations of 13, 7.9 and 19 µg/l in the January 2020 groundwater samples collected from deep water-bearing zone monitoring wells MW-2, MW-14, and MW-20, respectively; and at a concentration of 17 µg/l in the September 2020 groundwater sample collected from monitoring well MW-20, which exceed the MTCA Method A cleanup level of 5 µg/l. TCE concentrations in the remaining deep water-bearing zone monitoring wells ranged from non-detect at monitoring wells MW-9B, MW-16R, AS-1, AS-2, AS-3, AS-4, AS-6, AS-7, and AS-8 to 3.1 µg/l at monitoring well MW-15, which are less than the MTCA Method A cleanup level. The results from CVOC groundwater analyses are summarized in Table 6. The laboratory analytical reports are included in Attachment A.

The down-gradient extent of TCE in groundwater in the deep water-bearing zone has been defined by analytical results for groundwater samples collected from monitoring wells MW-22 and MW-23 (Figure 15). Analytical results for groundwater samples collected from monitoring wells SVE-2, AS-3, AS-4, and AS-7 define the cross-gradient extent of TCE contamination in the deep water-bearing zone (Figure 15). The up-gradient extent of TCE contamination in the deep water-bearing zone has been defined by analytical results for groundwater samples collected from monitoring wells AS-2, AS-3, and MW-25 (Figure 15).

The vertical extent of concentrations of TCE exceeding the MTCA Method A cleanup level in groundwater has been defined by analytical results for groundwater samples collected from deep water-bearing zone monitoring wells MW-14C and MW-15 and air sparge wells AS-1, AS-2, AS-3, AS-4, AS-6, AS-7, and AS-8 (Figure 16).

Metals

Groundwater samples were collected in January 2020 from shallow water-bearing zone monitoring wells MW-9R, MW-12, MW-31, MW-32, MW-34, and MW-35, and from deep water-bearing zone monitoring wells MW-9B and MW-12B; in September 2020 from shallow water-bearing zone monitoring wells MW-9R, MW-31, and MW-35, and deep water-bearing zone monitoring well MW-9B; and in July 2021 from shallow water-bearing zone monitoring well MW-9A, and deep water-bearing zone monitoring well MW-9D, and submitted for analysis for total and dissolved arsenic and lead.

The results from the arsenic and lead groundwater analyses are summarized in Table 7, shown on Figure 17, and discussed below under the “Groundwater Geochemistry” heading. The laboratory analytical reports are included in Attachment A.

<u>AQUIFER(S)</u>

The Chambers-Clover Creek Watershed underlies the Site, and has been designated as a sole-source aquifer for approximately 400,000 residents in DuPont, Fircrest, Lakewood, Ruston, Steilacoom, Tacoma, and University Place. This regional aquifer is reported to be separated from the deep water-bearing zone at the Site by a silt and silty gravel aquitard.

An industrial water supply well is currently screened at a depth of 107 to 129 feet below ground surface (bgs), presumably below the aquitard within the regional aquifer. The industrial supply well was reportedly installed during 1969 to a total depth of 187 feet bgs and screened from 167 to 187 feet bgs, and later perforated from 107 to 129 feet bgs.

TCE was detected in the industrial water supply well at a concentration of 0.39 micrograms per liter (µg/I) in a groundwater sample collected in December 2017, consistent with previously reported groundwater TCE concentration results. It is unclear to Ecology how TCE is entering the industrial water supply well across the aquitard. Possibilities that Ecology is currently concerned about include:

- *The industrial well is compromised and leaks between aquifers.*

- *The aquitard is not comprehensive in this area of the Site and is transmitting contamination to deeper regional groundwater.*
- *The industrial water supply well is screened above the aquitard and shallow groundwater contamination extends to at least 130 feet below ground surface.*

Ecology will need additional reporting and analyses evaluating subsurface strata, groundwater flow, and contamination in groundwater throughout the Site. Plan view and geologic cross section concentration isopleth maps will likely support an analyses demonstrating with boring logs, groundwater elevations, and contaminant chemistry how the Site impacts the regional aquifer.

Ecology also recommends working with the Lakewood Water District to evaluate the release of TCE detected at the Site. Public water supply wells 88th and Pine J-1 and J-2 are located less than 1-mile north of the Site. The deeper water-bearing unit flow is reported to the north-northeast from the Site.

Lakewood well pumping rates and capture zones should be evaluated and included in the remedial investigation. For the remedial investigation, determine if TCE released from this Site is impacting or could impact water supply wells.

Finally, to support an environmental covenant at the Site, appropriate conditional points of compliance will need to be determined and proposed for all aquifers at the Site. Collect sufficient data from proposed conditional points of compliance to support their use for the long term groundwater monitoring that will be needed with the environmental covenant.

FARALLON RESPONSE

TCE distribution in the deep water-bearing zone and the industrial supply well is shown on Figure 15. Cross section F-F’ shown on Figure 16 depicts the lithology around the industrial supply well. Based on the available boring logs, the silt and silty gravel unit (also described on the drilling log for the industrial supply well as sandy clay) functioning as an aquitard at a depth from approximately 83 to 91 feet bgs beneath the Site is present and appears to be continuous in the area proximate to the industrial supply well. The industrial supply well is screened within a sand and gravel unit present below the sandy clay aquitard. On December 4, 2019, Farallon and Holt Services, Inc. conducted a down-well camera survey to ascertain whether the driller’s log for the industrial supply well is accurate (Attachment D). The two well perforation depths indicated on the boring log matched the ones observed, with the screen interval depth ranging from approximately 107 to 129 feet bgs (178 to 156 feet North American Vertical Datum of 1988 [NAVD88]) and 167 to 187 feet bgs (118 to 98 feet NAVD88).

Groundwater samples were collected on January 10, 2020 from the industrial supply well; on January 9, 2020 from air sparge wells AS-1 through AS-4, AS-6, and AS-7; on January 23, 2020 from air sparge wells AS-6 and AS-8; and on January 8, 2020 from monitoring well MW-2, to evaluate whether TCE in the deep water-bearing zone was being transmitted to the deeper regional groundwater aquifer (Table 6). Air sparge wells AS-7 and AS-8 are approximately 55 feet south and 23 feet north of the industrial supply well, respectively, and are screened immediately above the silt and silty gravel aquitard at a depth ranging from approximately 92.7 to 94.7 feet bgs (190.8 to 192.8 feet NAVD88) and 70.9 to 72.9 feet bgs (208.5 to 210.5 feet NAVD88) (Figure 15). Monitoring well MW-2 is approximately 45 feet south of the industrial supply well and 5 feet north of air sparge well AS-7, and is screened in the deep water-bearing zone at the Site within the TCE groundwater plume at a depth ranging from approximately 19.6 to 34.6 feet bgs (248 to 263 feet NAVD88) (Figures 15 and 16). The groundwater samples were submitted for laboratory analysis for CVOCs. There were no detections of CVOCs, including TCE, at the laboratory PQL in the January 2020 groundwater samples from the industrial supply well, or in air sparge well AS-1 through AS-4, AS-6, AS-7, or AS-8, with the exception of 1,1,1-trichloroethane and 1,1-dichloroethane detected at concentrations less than MTCA cleanup levels in the groundwater sample from air sparge well AS-7. TCE was detected at a concentration of 13 µg/l in the groundwater sample collected in January 2020 from monitoring well MW-2. The laboratory analytical reports are included in Attachment A. The January 2020 groundwater results for groundwater samples from the air sparge wells and the industrial supply well do not suggest that contaminated groundwater extends to the depth of the aquitard, or that it is vertically migrating through the aquitard to impact the industrial supply well. The down-well survey of the industrial supply well coupled with results for the groundwater samples collected from the base of the deep water-bearing zone wells indicate that none of the three scenarios that were a subject of Ecology concern is viable:

- The industrial supply well is not compromised, and does not leak between aquifers.
- There is no evidence that the aquitard is leaky in this area of the Site, or that it is transmitting contamination to deeper regional groundwater, as results for groundwater samples collected from wells screened at the base of the deep-water-bearing zone near the top of the aquitard indicate that groundwater at those depths is not impacted.
- Based on the down-well camera survey identifying screen intervals matching the driller's well log, the industrial supply well is not screened above the aquitard, and groundwater sampling results show that shallow groundwater contamination does not extend to 130 feet bgs.

Another possible source of low TCE concentrations in the industrial supply well is TCE migration via deep groundwater from an up-gradient source. Joint Base Lewis McChord has known releases of TCE to groundwater; the potential exists for groundwater impacted with TCE at concentrations less than the MTCA Method A cleanup level to have migrated onto the Lakeview Facility. Empirical data for groundwater samples collected over the years from deep water-bearing zone monitoring wells installed proximate to the southern Lakeview Facility property boundary and up-gradient of the Former Asphalt-Testing Laboratory Area (e.g., monitoring wells MW-15, MW-25, MW-29) suggest that low concentrations of TCE are migrating onto the Lakeview Facility from an off-Site source. Other than the industrial supply well, no wells are screened within the regional aquifer in the immediate vicinity of the Lakeview Facility to confirm groundwater impacts migrating onto the Lakeview Facility from an up-gradient source.

On October 30, 2019, Farallon requested information from the Lakewood Water District regarding the capture zones for water supply wells in its district to evaluate whether water supply wells in the vicinity of the Site could potentially capture groundwater from the Lakeview Facility. A representative of the Lakewood Water District provided a map of the water supply well locations and stated that the Lakewood Water District does not track specific capture zones by well or well cluster, but instead considers the entire area within the district to be part of the capture zone for its wells (Attachment E). The Lakeview Facility is located outside of the eastern boundary of the Lakewood Water District, who confirmed that groundwater beneath the Lakeview Facility is not considered part of the capture zone.

The Scotts well cluster, also known as the G-well cluster, and the 88th and Pine well cluster, also known as the J-well cluster, located in the Lakewood Water District, are the water supply wells in the Lakewood Water District closest to the Site. Farallon searched the Washington State Department of Health drinking water database for volatile organic compounds (VOCs) data for the G-well and J-well clusters for the time period between December 2017 and July 2021. One sample was collected from the G-well cluster on June 21, 2019, one sample from the J-well cluster on August 18, 2017, and one sample from the J-well cluster on March 22, 2018, and analyzed for VOCs, including TCE. No VOCs were detected in the water samples collected from the G-well or J-well clusters, with the exception of chloroform and total trihalomethane, detected in the 2017 sample collected from the J-well cluster. Based on the information available from the Lakewood Water District, VOCs in groundwater at the Site are not impacting water supply wells in the Lakewood Water District.

MONITORED NATURAL ATTENUATION (MNA)

Ecology previously requested that non-parametric statistical methods (Mann Kendall) be used to support a natural attenuation assessment. This information was not provided in the most recent feasibility study. Please assess natural attenuation at the site. Use the information to assess predicted restoration timeframes and support use of conditional points of compliance for the cleanup. Ecology recommends using EPA's technical protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water (EPA/600/R-98/128; September 1998) as a guide to evaluate MNA.

FARALLON RESPONSE

Non-parametric statistical analyses of CVOCs were completed for groundwater from monitoring well SVE-12 screened in the shallow water-bearing zone, and monitoring wells MW-2, MW-14, MW-15, MW-20, MW-22 and MW-23 screened in the deep water-bearing zone, to assess natural attenuation of CVOCs in Site groundwater, per Ecology request. Mann-Kendall trend analyses were completed using EPA ProUCL Software Version 5.1 to statistically determine whether concentrations of CVOCs in Site groundwater were decreasing, remaining stable, or increasing. The predicted restoration time frames were calculated using the Ecology Natural Attenuation Analysis Tool Package for Petroleum-Contaminated Ground Water, Package A. Concentration trends at monitoring wells with a sufficient number of samples and concentrations of one or more CVOCs exceeding the cleanup level in groundwater were evaluated (Table 6).

Shallow Water-Bearing Zone

TCE was detected at concentrations exceeding the MTCA Method A cleanup level in shallow water-bearing zone groundwater samples collected from monitoring well SVE-12 in the Former Asphalt-Testing Laboratory Area. CVOCs were not detected at a concentration exceeding groundwater cleanup levels in shallow water-bearing zone groundwater samples collected from any other Site groundwater monitoring well.

Based on the Mann-Kendall trend analysis, there is no statistically significant evidence of a decreasing trend in TCE at the monitoring well SVE-12 location (Attachment F).

Monitoring wells MW-14 and SVE-12 have been tentatively selected for monitoring natural attenuation parameters (Figure 20) pending Ecology's approval of the point of compliance locations.

DRO and ORO were detected at concentrations exceeding cleanup levels in shallow water-bearing zone groundwater samples collected from monitoring wells MW-6, MW-11, and MW-36 in the Former Recycled Stockpile Area. These monitoring wells have been tentatively selected for monitoring natural attenuation parameters (Figure 20) pending Ecology's approval of the point of compliance locations.

Arsenic was detected at concentrations exceeding cleanup levels in the shallow-water bearing zone groundwater samples collected from MW-12, MW-31, and MW-35. These monitoring wells have been tentatively selected for monitoring natural attenuation parameters (Figure 20) pending Ecology's approval of the point of compliance locations. Detailed investigations regarding arsenic and lead concentrations in this area are discussed further under the "Groundwater Geochemistry" heading.

Deep Water-Bearing Zone

TCE was detected at concentrations exceeding cleanup levels in deep water-bearing zone groundwater samples collected from monitoring wells MW-2, MW-14, and MW-20 in the Former Asphalt-Testing Laboratory Area during the most-recent groundwater monitoring events: monitoring wells MW-2 and MW-14 in January 2020, and monitoring well MW-20 in January and September 2020. CVOCs were not detected at a concentration exceeding groundwater cleanup levels in deep water-bearing zone groundwater samples in any other Site groundwater monitoring wells. Based on the Mann-Kendall trend analysis, there is statistically significant evidence of a decreasing trend in concentrations of TCE in groundwater at the locations of monitoring wells MW-14, and MW-20, and at down-gradient monitoring well MW-22. (Attachment F). A statistically significant trend could not be identified for the TCE concentrations detected in monitoring well MW-2, which is located mid-plume. However, historical data indicate that TCE concentrations in groundwater at monitoring well MW-2 were as high as 31 µg/l in 1994,[2]

---

[2] *Remedial Investigation/Feasibility Study Report, Woodworth & Company, Inc., Lakeview Facility, 2800 104th Street South, Lakewood, Washington 98499, Toxics Cleanup Program VCP No. SW 1012* dated August 19, 2009 prepared by Farallon for Woodworth & Company, Inc.

indicating that TCE concentrations at this location are reducing over time. The predicted restoration time frame for TCE in groundwater at source area monitoring well MW-20 indicates that the MTCA Method A cleanup level will be reached in 2060. Concentrations of TCE in groundwater at monitoring well MW-14 is predicted to reach the MTCA Method A cleanup level in 2027. According to recent data, the Method A cleanup level for TCE in groundwater has been achieved at down-gradient monitoring well MW-22.

Monitoring wells MW-2 and MW-20, and soil vapor extraction well SVE-1 have been tentatively selected for monitoring natural attenuation parameters (Figure 20) pending Ecology's approval of the point of compliance locations.

VAPOR INTRUSION/TCE

The vapor intrusion assessment was revised to evaluate the potential for migration of TCE from soil gas into future buildings under an industrial exposure scenario based on the current site use as a gravel mine. The vapor intrusion assessment concluded that TCE contaminated groundwater does not pose a vapor intrusion risk.

Based on the analysis provided, Ecology will need soil gas sample results from the Site to complete the assessment prior to reconstruction and redevelopment of the property. Because only an industrial exposure scenario has been evaluated, current Site use will need to be institutionalized in an environmental covenant limiting future use of the Property to similar industrial uses. Ecology suggests it may be beneficial for you to evaluate additional possible Site uses, and therefore not limit future Site use.

Please also evaluate and report on the acute risks of TCE as part of the overall Site risk using guidelines from US EPA."' Consider if pregnant women or children risk exposure from indoor air. Ecology's Toxic Cleanup Program has recently drafted an implementation memo providing guidance on this issue.

FARALLON RESPONSE

TCE concentrations detected in groundwater in the shallow water-bearing zone were used to evaluate the potential for vapor intrusion at the Site. TCE concentrations detected in groundwater samples from the shallow water-bearing wells do not exceed the non-residential short-term vapor intrusion screening level for groundwater of 31 µg/l, which is protective of the current industrial use at the Lakeview Facility. As noted in the Addendum to Focused Feasibility Study and Disproportionate Cost Analysis Report,[3] placement of 30 feet of clean fill at the Lakeview Facility is one of the regulatory requirements for site reclamation, due to the gravel and sand mining operations previously conducted at the Lakeview Facility. Construction and redevelopment cannot proceed until the reclamation has been completed. No residences or buildings for human occupancy are present within 30 feet of the TCE groundwater plume in the shallow water-bearing

[3] *Addendum to Focused Feasibility Study and Disproportionate Cost Analysis Report, Lakeview Facility, 2800 104th Street Court South, Lakewood, Washington, VCP Identification No. SW1012* dated August 3, 2018 prepared by Farallon for Woodworth Capital, Inc. (FFS Addendum).

zone. The environmental covenant will have a provision for soil gas sampling and vapor mitigation, if necessary, for any new buildings that may be constructed following completion of fill placement as part of the site reclamation.

GROUNDWATER GEOCHEMISTRY

Ecology previously provided that stockpiling of recycled concrete aggregate at the Site likely has increased the pH of shallow groundwater. During the December 2017 groundwater monitoring event, pH was detected as high as 13.01 (MW-9B) in the deep aquifer and as high as 12.52 in the shallow aquifer (MW-31). High levels of lead and arsenic have been detected in shallow groundwater in this area (MW-12 and MW-31), potentially a result of elevated pH in this area of the Site leaching those metals from soil into groundwater.

Based on the pH levels identified during the December 2017 groundwater sampling event (13.01 MW-9B deep aquifer and 12.52 MW-31 shallow aquifer) groundwater appears to classify as Dangerous Waste per WAC 173-303. Ecology recommends working with Ecology's Hazardous Waste & Toxics Reduction Program to ensure purge water generated is properly handled.

Groundwater oxygen reduction potential (ORP) values less than 50 millivolts (mV) are indicative of reduced geochemical conditions.2" Reduced groundwater as low as -400.5 mV correlated with arsenic has been measured in Site monitoring wells (MW-12 and MW-31).

The shallow groundwater unit flows into a low elevation area within the center of the Property. Large stockpiles of recycled concrete aggregate have also been reported in this area. It appears likely that rainwater infiltration through recycled concrete aggregate piles may have caused reaction with the concrete lime and altered both pH and ORP in this area of the Site. The nature and extents of groundwater contamination in this area are unknown, as the downgradient monitoring well (MW-30) has been dry during sampling events.

Ecology suggests evaluating groundwater chemistry throughout the Site, and delineating areas where geochemical conditions are conducive to metals or other contaminant mobilization, and areas where metals or other contaminant mobilization has been detected. Include these areas in the remedial investigation and feasibility study, and delineate them in plan view and geologic cross section.

Additional groundwater monitoring data are also needed to define the extent of arsenic and lead in groundwater. Ecology further recommends, if not already done so, to implement best management practices (BMPs).

FARALLON RESPONSE

In response to detections of elevated pH values in deep water-bearing zone monitoring well MW-9B, and of arsenic and lead in shallow water-bearing zone monitoring wells MW-12 and MW-31, Farallon conducted a series of activities in January 2021 to evaluate pH in soil and groundwater. Activities conducted to evaluate elevated pH in groundwater proximate to monitoring well MW-9B consisted of: advancing two borings for soil and reconnaissance groundwater sampling and installing shallow water-bearing zone monitoring well MW-9A and deep water-bearing zone monitoring well MW-9D; redeveloping monitoring well MW-9B and conducting a down-well camera survey of the well to evaluate its condition; decommissioning monitoring well MW-9B; and conducting groundwater sampling (Figure 18). In response to detections of dissolved arsenic and lead in shallow water-bearing zone monitoring wells MW-12 and MW-31, Farallon installed two monitoring wells and sampled groundwater throughout and proximate to the Arsenic and Lead Plume in Groundwater Area to evaluate the nature and extent of these constituents in the shallow water-bearing zone. Dissolved arsenic and lead rather than total metals concentrations are considered representative of groundwater conditions at the Lakeview Facility, as approved by Ecology in the Opinion Letter.

On January 4 and 5, 2021, the boring for monitoring well MW-9A was advanced to a total depth of 115 feet bgs. A Farallon Geologist collected soil and reconnaissance groundwater samples at selected intervals starting from the ground surface to the final depth of the boring for field-screening. The samples were retained for potential laboratory analysis for pH. Soil samples were collected generally every 10 feet; reconnaissance groundwater water samples were collected at depths of 32, 55, 75, 95, 102, and 115 feet bgs, and were measured for pH in accordance with American Public Health Association Standard Method SM 4500-H B. Soil and reconnaissance groundwater samples were measured using a standalone pencil-type pH meter. Field measurements of pH in soil ranged from 7.2 to 11.0, with the highest pH of approximately 11.0 measured at a depth of 30 to 32 feet bgs (Table 9). A pH of 9.5 to 8.9 was measured in soil samples collected at depths from 35 to 70 feet bgs, respectively, and of 7.2 to 8.2 in soil samples collected at depths greater than 80 feet bgs. Field measurements of pH in reconnaissance groundwater samples ranged from 6.55 to 8.24, indicating that groundwater was not affected by the elevated pH in soil.

Monitoring well MW-9A was installed in the boring and screened from 22 to 32 feet bgs in the shallow water-bearing zone. The boring void below the screened interval was filled with hydrated bentonite. The boring log for monitoring well MW-9A is provided in Attachment B. Following well development on January 6, 2021, Farallon measured a pH value of 6.55 in the field in a groundwater sample collected from monitoring well MW-9A, further confirming that groundwater in the shallow water-bearing zone in the vicinity of monitoring well MW-9A is not impacted by the elevated pH. A groundwater sample was collected from monitoring well MW-9A on February 23, 2021 and laboratory-analyzed for pH by Standard Method SM 4500-H B. The laboratory reported a pH of 6.8.

On January 18, 2021, Farallon redeveloped monitoring well MW-9B to investigate the contribution of accrued sediment and/or stagnant water to prior elevated pH measurements in groundwater at this well. Monitoring well MW-9B was screened in the deep water-bearing zone with a screen interval from approximately 109.3 to 119.3 feet bgs. The depth to groundwater during redevelopment was measured at 53.8 feet below the top of casing. Redevelopment was conducted using a motorized Waterra pump equipped with tubing and a foot-valve at 10-foot intervals starting at 63 feet bgs to a maximum depth of 119 feet bgs. During redevelopment, after approximately 5 gallons of water had been removed from each interval, a Farallon Geologist measured pH in groundwater using both a multimeter equipped with a flow-through cell and a stand-alone pencil-type pH meter (Table 8). At 63- and 73-foot-bgs intervals, the measured pH values ranged from 11.7 to 12.9. Measured pH values decreased with depth to 8.9 and 9.3 at 83 feet bgs, and to 8.2 and 8.4 at 93 feet bgs. Further decreases of pH to 7.7 and 7.8 were measured at 103 feet bgs. The final pH values recorded at approximately 120 feet below the top of casing were 7.4 and 7.5. The pump intake was raised to approximately 75 feet bgs, where an additional 20 gallons of water was removed from the well. Following completion of well redevelopment, pH was measured at 7.4 and 7.8 in a groundwater sample collected at 75 feet bgs.

On January 25, 2021, Farallon video-scoped monitoring well MW-9B with a down-well camera to investigate potential causes of elevated pH values previously measured in groundwater at this well. Results from inspecting the well casing with the camera showed a breach in the casing at a depth of approximately 30 feet bgs, which was allowing saturated soil to seep into the well, affecting the pH in the well casing. A Farallon Geologist in field described the saturated soil as dark reddish brown. Due to the breach in casing, the decision was made to decommission monitoring well MW-9B and replace it with monitoring well MW-9D. Monitoring well MW-9B was decommissioned by Cascade Drilling, L.P. of Woodinville, Washington on February 10, 2021 by placing hydrated bentonite chips in the well casing, and removing the monument at the ground surface.

Due to adverse weather conditions, installation of replacement deep water-bearing zone monitoring well MW-9D was conducted over the course of several days between February 10 and 18, 2021. The boring for monitoring well MW-9D was advanced to a depth of 119 feet bgs, and the well screen was placed from 109 to 119 feet bgs. During boring advancement activities, a soil sample was collected at a depth of 30 feet bgs and laboratory-analyzed for pH by EPA Method 9045D. A pH of 11.3 was detected in the soil sample (Table 8). Following completion of well development, Farallon recorded a pH measurement of 7.6 in a groundwater sample collected from monitoring well MW-9D on February 24, 2021. The sample was submitted for laboratory analysis of pH by EPA Method 9045D. The recorded laboratory measurement of pH was 7.3.

In July 2021, Farallon returned to the Lakeview Facility to sample shallow water-bearing zone monitoring well MW-9A and deep water-bearing zone monitoring well MW-9D for pH and total and dissolved arsenic. Laboratory analysis of pH by EPA Method 9045D for monitoring wells MW-9A and MW-9D were 6.7 and 6.8, respectively (Table 8). Total and dissolved arsenic was detected at concentrations less than the MTCA Method A cleanup level in the groundwater samples collected from shallow water-bearing zone monitoring well MW-9A. Total or dissolved arsenic was not detected at the laboratory PQL in deep water-bearing zone monitoring well MW-9D (Table 7).

Based on the results from the additional subsurface investigation, groundwater in the shallow and deep water-bearing zones beneath the Site proximate to former monitoring well MW-9B and new monitoring wells MW-9A and MW-9D is not impacted with elevated pH. The elevated pH value observed in prior groundwater samples collected from monitoring well MW-9B was the result of the seep occurring in an interval of soil with elevated pH at a depth of between approximately 30 and 32 feet bgs. The seep was observed from the breach in the monitoring well casing at a depth of approximately 30 feet bgs, which was introducing saturated soil from the noted interval into the casing of monitoring well MW-9B. Additionally, pH values in groundwater samples collected from new monitoring wells MW-9A screened in the shallow water-bearing zone and MW-9D screened in the deep water-bearing zone ranged from 6.55 to 7.8, demonstrating that pH values in groundwater in the shallow and deep water-bearing zones are neutral. Elevated pH in groundwater is limited to monitoring wells MW-31 and MW-12, located in the northeastern portion of the Lakeview Facility.

To further evaluate the nature and extent of elevated concentrations of arsenic and lead in shallow water-bearing zone groundwater proximate to monitoring wells MW-31 and MW-12, Farallon installed monitoring well MW-35 west of monitoring well MW-31 on January 8, 2020 (Figure 2). Due to a lack of water in down-gradient shallow monitoring well MW-31, Farallon sampled down-gradient shallow monitoring well MW-9R, installed on December 19, 2019 to replace decommissioned monitoring well MW-9.

Groundwater samples were collected from monitoring wells MW-12, MW-12B, and MW-31; newly installed monitoring well MW-35; up-gradient monitoring wells MW-32 and MW-34; and down-gradient monitoring well MW-9R from January 7 through 10, 2020; and monitoring wells MW-9R, MW-31, and MW-35 on September 30, 2020, and submitted for laboratory analysis for total and dissolved arsenic and lead. Groundwater samples were collected from deep water-bearing zone monitoring wells MW-9A and MW-9D on July 22, 2021, and submitted for laboratory analysis for total and dissolved arsenic.

Total arsenic was detected at concentrations ranging from 7.6 to 43 µg/l in the groundwater samples collected from monitoring wells MW-12, MW-31, MW-35, and MW-12B in January 2020, which exceed the MTCA Method A cleanup level of 5 µg/l. Dissolved arsenic was detected at concentrations ranging from 6.0 to 27 µg/l in the groundwater samples from monitoring wells MW-12, MW-31, and MW-35 in January 2020, which exceed the MTCA Method A cleanup level. Total arsenic was detected at a concentration less than the MTCA Method A cleanup level in the groundwater sample collected from up-gradient monitoring well MW-34; dissolved arsenic was not detected in the groundwater sample collected from monitoring well MW-34. Total or dissolved arsenic was not detected in the groundwater sample collected from up-gradient monitoring well MW-32. Total or dissolved arsenic was not detected in the groundwater samples collected from down-gradient monitoring well MW-9R.

Total and dissolved arsenic were detected at concentrations exceeding the MTCA Method A cleanup level in the January and September 2020 groundwater samples collected from monitoring well MW-9B. As discussed above, the breach in monitoring well MW-9B allowed saturated soil to seep into the well, resulting in elevated pH. Monitoring well MW-9B was decommissioned and replaced with monitoring well MW-9D, screened in the deep water-bearing zone. Shallow water-bearing zone monitoring well MW-9A was installed proximate to the location of former monitoring well MW-9B. Total and dissolved arsenic were detected at concentrations less than the MTCA Method A cleanup level in the groundwater sample collected from monitoring well

MW-9A. Total or dissolved arsenic was not detected at the laboratory reporting limit in the groundwater sample collected from monitoring well MW-9D.

Arsenic-impacted groundwater is limited in extent to the area immediately surrounding monitoring wells MW-12 and MW-31, and likely is associated with elevated pH in groundwater at those locations, causing mobilization of metals (Figure 19). Additionally, concentrations of dissolved arsenic detected in groundwater samples collected from monitoring wells MW-12 and MW-35 either were less than or slightly exceeded the background concentration of 8 µg/l of arsenic in groundwater for the Puget Sound area.[4] Ecology previously approved use of dissolved arsenic concentrations as representative of Site groundwater.[5]

Total lead was detected at concentrations of 18 and 500 µg/l in the groundwater samples collected from monitoring wells MW-12 and MW-31, respectively in January 2020. The reported concentrations of total lead in the groundwater sample collected from monitoring well MW-31 likely were impacted by the high turbidity of 118.47 nephelometric turbidity units for the sample recorded in the field. The concentration of total lead detected in the September 2020 groundwater sample collected from monitoring well MW-31 was 14 µg/l, with an associated turbidity of 9.27 nephelometric turbidity units. Dissolved lead was detected at concentrations less than the MTCA Method A cleanup level of 15 µg/l in the groundwater samples collected from monitoring wells MW-12 and MW-31. Total lead was detected at concentrations less than the MTCA Method A cleanup level in the groundwater samples collected from up-gradient wells MW-32 and MW-34; dissolved lead was not detected at the laboratory PQL in the groundwater samples collected from monitoring well MW-32 or MW-34. Total or dissolved lead was not detected at the laboratory PQL in the groundwater sample collected from down-gradient monitoring well MW-9R. The laboratory analytical reports are included in Attachment A. Boring logs are included in Attachment B.

Based on the groundwater results for dissolved lead, lead in groundwater is not a concern at the Site. Ecology previously approved use of concentrations of dissolved lead as representative of Site groundwater.[6]

Monitoring wells tentatively selected for monitoring natural attenuation of arsenic and lead are discussed under the "Monitored Natural Attenuation" heading above.

MONITORING WELLS

Monitoring well MW-16 (screened within the reported deep water bearing zone) was observed to have been damaged prior to the December 2017 sampling event and concentrations of petroleum hydrocarbons subsequently observed in the monitoring well were reported to not be representative

---

[4] *Natural Background Groundwater Arsenic Concentrations in Washington State, Results of a Study, Draft for Public Comment* dated July 2021 prepared by Ecology, Publication No. 14-09-044.
[5] Letter Regarding Response to Comments for the Woodworth & Co. Lakeview Plant, 2800 104th Street South, Tacoma (Lakewood) dated May 25, 2017 from Jeremy Hughes of Ecology to Branislav Jurista of Farallon.
[6] Ibid.

of groundwater quality."' Groundwater monitoring wells can act as a conduit in which contamination is transmitted downward into an aquifer.

Based on recently reported data results, it appears that the deep aquifer in the vicinity of MW-16 is currently impacted with petroleum hydrocarbons. Please evaluate the lateral and vertical extents of contamination in the area of MW-16 in the deep water-bearing zone.

Please note that any monitoring well destroyed or abandoned must be located and properly decommissioned in accordance with WAC 173-160-381 and 173-160-460. RCW 18.104.040 provides Ecology's authority. Ecology recommends working with Ecology's Water Resources Program to ensure monitoring wells abandoned or destroyed are properly decommissioned.

FARALLON RESPONSE

As discussed above, during the 2017 groundwater sampling event conducted at the Site, the monitoring well MW-16 monument, cap, and casing were observed to be damaged, and the well was decommissioned by overdrilling methods.[7] Replacement monitoring well MW-16R was installed in an accessible area approximately 50 feet northeast of monitoring well MW-16 to evaluate the detection of petroleum hydrocarbons in the deep aquifer (Figure 2). Shallow water-bearing zone monitoring well MW-9 was present in an area proximate to a large stockpile of concrete debris, and was in danger of being damaged by falling debris. Therefore, monitoring well MW-9 also was decommissioned, and was replaced by monitoring well MW-9R, installed adjacent to monitoring well MW-16R. Borings for monitoring wells MW-9R and MW-16R were completed to depths of 25 and 40 feet bgs, respectively, using a sonic drill rig. Monitoring well MW-9R was installed to a depth of 25.0 feet bgs, with a 10-foot screen from 15.0 to 25.0 bgs. Monitoring well MW-16R was installed to a depth of 38.5 feet bgs, with a 10-foot screen from 28.5 to 38.5 feet bgs. Boring logs for monitoring wells MW-9R and MW-16R are provided in Attachment B.

During drilling, soil cuttings were screened for visual and olfactory evidence of petroleum hydrocarbon contamination, and measured for VOCs using a portable photoionization detector. No evidence of petroleum contamination was detected in the soil cuttings from the borings advanced for installation of monitoring well MW-9R or MW-16R.

Groundwater samples were collected from monitoring wells MW-9R and MW-16R (Figure 2) on January 7 or 8, September 29, and December 18, 2020, and submitted for laboratory analysis for DRO and ORO. ORO was detected at concentrations ranging from 460 to 1,700 µg/l in the groundwater samples collected from monitoring well MW-9R, some detections exceeding the MTCA Method A cleanup level of 500 µg/l. ORO was detected at concentrations ranging from 450 to 1,300 µg/l in the groundwater samples collected from monitoring well MW-16R, some detections exceeding the MTCA Method A cleanup level. DRO was detected at concentrations ranging from 290 to 630 µg/l in groundwater samples collected from monitoring well MW-9R, some detections exceeding the MTCA Method A cleanup level. DRO was detected at concentration less than the MTCA Method A cleanup level in groundwater samples collected from

[7] FFS *Addendum*.

monitoring well MW-16R. The analytical results for groundwater samples collected from replacement monitoring wells MW-9R and MW-16R confirm that ORO and DRO are present in the shallow water-bearing zone, and that DRO is present in the deep water-bearing zone, at concentrations exceeding the MTCA Method A cleanup level in the vicinity of monitoring wells MW-9R and MW-16R. However, the calculated concentrations of TPH in groundwater of 301.78 µg/l at monitoring well MW-9R in the shallow water-bearing zone and of 369.49 µg/l at monitoring well MW-16R in the deep water-bearing zone are protective based on the calculated Method B cleanup levels of 493.93 and 585.04 µg/l, respectively, as discussed above in the Groundwater Monitoring section.

Remediation well SVE-5 was installed with a long screen from 10 to 38 feet bgs to facilitate soil vapor extraction for remediation of TCE contamination. Soil vapor extraction at the Site has been discontinued and, due to the long screen and potential for this well to serve as a conduit between the shallow and deep water-bearing zones, well SVE-5 was decommissioned by overdrilling methods in January 2021. Monitoring well MW-36 was installed approximately 10 feet east-southeast of well SVE-5 to continue groundwater monitoring in the shallow water-bearing zone at this location.

The boring for monitoring well MW-36 was completed to a depth of 20 feet bgs using a sonic drill rig. Monitoring well MW-36 was installed to a depth of 16.5 feet bgs, with a 10-foot screen from 6.5 to 16.5 feet bgs. The boring log for monitoring well MW-36 is provided in Attachment B.

During drilling, soil cuttings were screened for visual and olfactory evidence of petroleum hydrocarbon contamination, and measured for VOCs using a portable photoionization detector. A slightly elevated photoionization detector reading of 20.0 parts per million was recorded for the soil cuttings from the boring at a depth of 15.0 feet bgs. No other evidence of petroleum contamination was detected in the soil cuttings from the boring advanced for installation of monitoring well MW-36.

Soil samples were collected from the boring for monitoring well MW-36 at depths of 5.0, 10.0, 15.0, and 20.0 feet bgs, and submitted for laboratory analysis for DRO and ORO. DRO was detected at a concentration of 180 mg/kg in the soil sample collected at a depth of 15.0 feet bgs, less than the MTCA Method A cleanup level of 2,000 mg/kg. DRO or ORO was not detected at the laboratory reporting limit in the soil samples collected at depths of 5.0, 10.0, or 20.0 feet bgs. The laboratory analytical reports are included in Attachment A. Boring logs are included in Attachment B.

UPDATES TO CONCEPTUAL SITE MODEL

A conceptual site model describing the sources of contamination, contaminants and media of concern, the nature and extent of contamination, the fate and transport of constituents of concern, and potential exposure pathways was provided in the FFS-DCA, and revised in the FFS Addendum. The conceptual site model has been updated, as necessary, to incorporate data collected for the Site since submittal of the FFS Addendum. The updates to the conceptual site model are presented below.

The contaminants and media of concern by area are summarized below:

- Equipment Parking Area: Based on the analytical results for soil samples, the calculated concentration of TPH in groundwater from monitoring well MW-13, and calculation of a Site-specific MTCA Method B cleanup level for groundwater in the area of monitoring well MW-13, no contaminants or media of concern are in the Equipment Parking Area (Figure 2).
- Former Recycled Stockpile Area: The contaminants and medium of concern are DRO and ORO in the shallow water-bearing zone groundwater (Figure 3). Soil is not a medium of concern, as concentrations of TPH in soil do not exceed the calculated Site-specific MTCA Method B cleanup level for the Former Recycled Stockpile Area previously approved by Ecology[8] (Table 1).
- Hot-Mix Storage Area: The contaminant and medium of concern remain limited to ORO in shallow soil (Figure 6).
- Equipment Storage Carport Area: The contaminants and media of concern are ORO and cPAHs in soil, and DRO and ORO in shallow groundwater (Figure 8).
- Former Asphalt-Testing Laboratory Area: The contaminants and media of concern are ORO and cPAHs in shallow soil, and TCE in shallow and deep water-bearing zone groundwater (Figure 10).
- SVE-5 Area: The contaminants and medium of concern for the area proximate to monitoring well MW-36 and former well SVE-5 are DRO and ORO in shallow groundwater (Figure 10).
- Arsenic and Lead Plume in Groundwater Area: The contaminant and medium of concern is dissolved arsenic in shallow groundwater. The dissolved arsenic plume is coincident with elevated pH in groundwater at monitoring wells MW-12 and MW-31, but not with neutral pH at monitoring well MW-35 (Figure 17).

The nature and extent of contamination are summarized below by media:

- Soil:

  ORO-impacted soil occurs in the Hot-Mix Storage Area in an area approximately 30 by 45 feet to a maximum depth of approximately 10 feet bgs. ORO- and cPAH-impacted soil occurs in the Equipment Storage Carport Area in an area approximately 30 by 45 feet to a depth of approximately 15 feet bgs. ORO- and cPAH-impacted soil occurs in the Former Asphalt-Testing Laboratory Area in an area approximately 25 by 50 feet to a maximum depth of approximately 10 feet bgs.

---

[8] Letter Regarding Opinion on Proposed Cleanup of the Following Site: Woodworth & Co. Lakeview Plant, 2800 104th Street South, Tacoma (Lakewood) dated February 15, 2011 from Charles S. Cline of Ecology to Branislav Jurista of Farallon.

The extent of fill material potentially causing naturally occurring arsenic and lead to leach into shallow groundwater is limited to the easternmost area of the Lakeview Facility proximate to monitoring wells MW-12, and MW-31. The vertical extent of fill material in the northeastern area of the Lakeview Facility is estimated to be a maximum depth of 40 feet bgs. According to the results from groundwater sampling at newly installed monitoring wells MW-9A and MW-9D, the elevated pH in soil proximate to decommissioned monitoring well MW-9B does not affect groundwater quality at that location.

- Groundwater:

  The extent of ORO and DRO in shallow groundwater is limited to the Former Recycled Stockpile Area, the Equipment Storage Carport Area, and the SVE-5 Area, depicted on Figures 3, 8, and 10, respectively. Shallow groundwater flows to the interior of the Site toward monitoring well MW-9R. Shallow groundwater flow direction: in the Former Recycled Stockpile Area is east from the western property boundary; in the Equipment Storage Carport Area is north-northwest; and in the Former Asphalt-Testing Laboratory Area is north-northeast.

  The extent of ORO in deep groundwater is limited to the area around monitoring well MW-16R. The direction of deep groundwater flow is east-northeast at the location of MW-16R. The down-gradient extent of ORO in deep groundwater is defined by the analytical results for groundwater samples collected from monitoring well MW-9D.

  The extent of TCE in groundwater is limited to an area on the Site proximate to the source area associated with the Former Asphalt-Testing Laboratory (Figures 14 and 15). The direction of groundwater flow in the shallow water-bearing zone is north-northeast in this area of the Site (Figure 12). The down-gradient extent of TCE in shallow water-bearing zone groundwater is defined by analytical results for a reconnaissance groundwater sample collected from monitoring well SVE-1, and for groundwater samples collected from monitoring wells SVE-6 and MW-3 (Figure 14). The cross- and up-gradient extent of TCE in shallow water-bearing zone groundwater is defined by analytical results for groundwater samples collected from monitoring wells SVE-3 and MW-26. TCE has not been detected at concentrations exceeding the MTCA Method A cleanup level in groundwater samples collected from shallow water-bearing zone monitoring wells MW-5, MW-6, MW-10, MW-11, MW-12, MW-17A, or MW-27, installed proximate to the Lakeview Facility property boundaries.

  The direction of groundwater flow in the deep water-bearing zone ranges from north to northeast in the Former Asphalt-Testing Laboratory Area (Figure 13). The down-gradient extent of TCE in groundwater in the deep water-bearing zone is defined by analytical results for groundwater samples collected from monitoring wells MW-22 and MW-23 (Figure 15). Analytical results for groundwater samples collected from monitoring wells SVE-2, AS-3, AS-4, and AS-7 define the cross-gradient extent of TCE contamination in the deep water-bearing zone (Figure 15). The up-gradient extent of TCE contamination in the deep water-bearing zone is defined by analytical results for groundwater samples collected from monitoring wells MW-15, MW-25, MW-28 and MW-29 (Figure 15).

The vertical extent of concentrations of TCE exceeding the MTCA Method A cleanup level in groundwater is defined by analytical results for groundwater samples collected from deep water-bearing zone monitoring well MW-14C and air sparge wells AS-1, AS-2, AS-3, AS-4, AS-6, AS-7, and AS-8 (Figure 16).

The extent of dissolved arsenic in groundwater is limited to an area proximate to monitoring wells MW-12, MW-31, and MW-35 (Figure 17). The direction of groundwater flow in the shallow water-bearing zone is west-southwest in the area of monitoring wells MW-12 and MW-31, and south in the area of monitoring well MW-35 (Figure 12). The down-gradient extent of dissolved arsenic in shallow groundwater is defined by the discontinuous nature of the shallow water-bearing zone around monitoring well MW-30. Additionally, analytical results for the groundwater samples collected from monitoring well MW-9R define the down-gradient extent of dissolved arsenic in shallow water-bearing zone groundwater. The up-gradient extent of dissolved arsenic in shallow groundwater is defined by analytical results for the groundwater samples collected from monitoring wells MW-32, MW-33, and MW-34.

The vertical extent of dissolved arsenic in groundwater is defined by analytical results for a groundwater sample collected from monitoring well MW-12B, screened in the deep water-bearing zone. The groundwater flow direction for the deep groundwater-bearing zone in this area of the Site is northeast.

The MTCA Method A or Method B cleanup levels established for the constituents of concern at each area of concern are as follows:

- Soil:
  - DRO and ORO: 2,000 mg/kg, with the following exceptions:
    - Calculated MTCA Method B cleanup level for total TPH (sum of DRO and ORO): 3,699 mg/kg at the Equipment Parking Area
    - Calculated MTCA Method B cleanup level for total TPH (sum of DRO and ORO): 3,739 mg/kg at the Former Stockpile Area
  - cPAHs (TEC): 0.1 mg/kg
- Groundwater:
  - DRO and ORO: 500 µg/l, with the exception of the area of monitoring wells MW-9R and MW-16R and the Equipment Parking Area (monitoring well MW-13), where calculated TPH concentrations do not exceed the calculated MTCA Method B cleanup levels;
  - TCE: 5 µg/l;

- Dissolved arsenic: 5 µg/l (or the Puget Sound Area background level of 8 µg/l; and
- Dissolved lead: 15 µg/l.

The revised conditional points of compliance based on the updates to the conceptual site model are identified below in the section discussing the Feasibility Study.

RULES REGARDING CLEANUP LEVELS

Ecology does not concur with the Report's statement that silica gel cleanup results from recent sampling meet compliance standards based on the intent of WAC 173-340- 702(12)(b). WAC173-340-702(12)(b) refers to cleanup levels, not to the appropriateness of specific analytical methods.

Silica Gel

Ecology's May 25, 2017, opinion letter requested that silica gel cleanup be discontinued; nonetheless samples collected in 2017 were analyzed using silica gel cleanup (B-12, MW- 24T, etc.). Data for this Site to support the use of silica gel cleanup of analytical samples has not been provided for the remedial investigation. With the data currently available, Ecology considers reported concentrations using silica gel cleanup at this Site to be minimum estimates of contamination present at those locations. Additional information will be necessary to evaluate the use of silica gel cleanup of this Site's analytical samples.

If you choose to use silica gel cleanup on any samples used for delineation or MTCA compliance purposes, Ecology will need you to provide the following supporting information:

- *Reporting of both pre- and post-silica gel treatment results at all locations.*
- *Chromatograms, calculations, and numerical estimations of variability or laboratory measurements based on laboratory QA/QC, and supporting evidence and criteria for use of the method on a location-by-location basis.*
- *Sample results for this remedial investigation reported without the use of silica gel cleanup in plan view and cross section concentration isopleth maps.*
- *Results reported with and without silica gel treatment in tables.*
- *Evaluation of the impact of silica gel cleanup in both contaminated and non-contaminated areas. This will be especially important to understand the biogenic influence of organic matter at the Site.*
- *Justify and calculate the risk of polar breakdown metabolites as part of the site-specific cumulative risk.*

When used inappropriately, the use of silica gel cleanup of samples can artificially reduce the concentration of petroleum detected in a sample. Ecology is concerned that petroleum results at the Site are greater than what you reported using silica gel cleanup.

Ecology recognizes that there are situations where the use of silica gel treatment is appropriate at cleanup sites. An example is for sites with highly organic soils, such as peat, where very high concentrations of naturally occurring organic carbon impacts analytical results.

An example of data that may be useful for Ecology to support the use of silica gel cleanup is high measured soil sample carbon fractions both in impacted areas and upgradient of the Site, in adjacent unimpacted areas. Delineation of total and dissolved organic carbon in samples obtained at the Site and upgradient may provide support for use of silica gel cleanup.

It may alternately be appropriate to obtain sufficient upgradient samples not impacted by the release, and determine the amount that silica gel cleanup impacts those sample results. If a statistically significant difference is detected between upgradient samples with and without silica gel treatment, it may be appropriate to subtract that amount from sample results not analyzed with silica gel, but determined by other means to be impacted by the release.

If this approach is appropriate, be sure to carefully address how the Site was delineated, how the specific background samples were selected, and how the results were determined to be statistically significant. Ensure that you also report on organic carbon fractions in all samples.

Additional site reporting may provide sufficient information for Ecology to concur with the use of silica gel cleanup of samples at this Site. Until that analysis is provided, Ecology strongly suggests you avoid additional silica gel cleanup of analytical samples.

FARALLON RESPONSE

The soil sample collected on November 16, 2017 from boring B-12 at a depth of 9.0 feet bgs and the reconnaissance groundwater sample collected from boring MW-24T were analyzed for DRO and ORO with and without silica gel cleanup. The analytical results for the samples both with and without silica gel cleanup were reported in the FFS Addendum. The delineation of soil and/or groundwater impacted with DRO and/or ORO, and the selection of remedial alternatives described in this letter were not based on the 2017 samples analyzed with silica gel cleanup.

Farallon agrees that analysis of groundwater samples for DRO and ORO should be run without the silica gel cleanup procedure. Soil and groundwater samples collected at the Site in 2019, 2020, and 2021 and submitted for analysis for DRO and ORO were not analyzed using a silica gel cleanup preparation (Tables 1 and 4).

<u>Feasibility Study</u>

The feasibility study submitted in 2018 evaluated two cleanup alternatives; 1) institutional controls to prevent exposure to TCE, arsenic, and lead in groundwater by implementation of an environmental covenant to prohibit the use of groundwater as a potable water source at the Site, and 2) active cleanup of soil and groundwater. Alternative 1 was proposed as the recommended cleanup alternative, similar to a previous 2015 feasibility study and disproportionate cost analysis.

Conditional points of compliance were proposed for shallow groundwater at MW-3 (TCE), MW-9 (petroleum, lead, and arsenic), MW-32 (lead and arsenic), and MW-34 (lead and arsenic) and deeper groundwater MW-12B (TCE, lead, and arsenic). Monitoring wells MW-12 MW-13, MW-20, MW-31, SVE-5, and SVE-12 were additionally proposed to be sampled for natural attenuation. Monitoring well MW-9B was originally proposed as a conditional point of compliance, but was not included in the most recent feasibility study.

In the 2015 Feasibility Study, alternative 1 did not address the direct contact pathway for shallow soil contamination; however the revised feasibility study indicates that the environmental covenant will include engineering controls for shallow soil petroleum and cPAH soil contamination.

Ecology recommends updating the cleanup alternatives evaluation and disproportionate cost analysis based on recently collected data, evaluate at least three cleanup alternatives including at least one permanent cleanup alternative. Ecology needs to ensure that each remedial alternative evaluated:

- *Includes all contamination and pathways at the Site at all points of compliance.*
- *Meets minimum requirements for cleanup actions.*
- *Uses permanent solutions to the maximum extent practicable.*
- *Provides for a reasonable restoration timeframe.*

FARALLON RESPONSE

The evaluation of cleanup alternatives and the disproportionate cost analysis have been updated per Ecology's recommendation, discussed below.

Farallon screened and retained the following technologies for further evaluation (Table 10):

- Institutional Controls;
- In-Situ Treatment via Chemical Oxidation;
- In-Situ Treatment via Enhanced Aerobic Bioremediation;
- In-Situ Treatment via Air Sparging and Soil Vapor Extraction;
- Excavation and Off-Site Disposal; and
- In-Situ Treatment via Soil Solidification.

The remedial alternatives evaluated in this letter and their primary components are as follows:

- Alternative 1: Institutional and Engineered Controls
    - Implementing engineered controls in the form of an asphalt or concrete cap and/or a minimum of 15 feet of clean fill on top of contaminated soil. The mandatory reclamation of the Lakeview Facility includes placing up to 30 feet of clean fill on the existing ground surface.

  - Implementing institutional controls that include an Environmental Covenant restricting groundwater use for drinking water purposes at the Lakeview Facility, and health advisories and requirements for handling soil and groundwater with concentrations of DRO, ORO, cPAHs, TCE, and/or arsenic exceeding MTCA cleanup levels, if encountered.
  - Implementing long-term monitoring, consisting of: periodic (annual or every 18 months) groundwater monitoring at the conditional-point-of-compliance monitoring wells to ensure compliance with the provisions of the Environmental Covenant and to monitor the progress of natural attenuation of contaminants; and monitoring of engineered controls in terms of cap maintenance.
  - Conducting a vapor intrusion assessment prior to construction of any new buildings; and potentially implementing vapor mitigation measures (e.g., vapor barrier, subslab depressurization system) to mitigate risk for vapor migration into buildings, based on the results from the vapor intrusion assessment.
- Alternative 2: In-Situ Chemical Oxidation and Soil Solidification
  - In-Situ Chemical Oxidation via direct-push injection to treat residual soil and/or groundwater contamination in the Former Recycled Stockpile Area, the Hot-Mix Storage Area, Equipment Storage Carport Area, and the Former Asphalt-Testing Laboratory Area;
  - In-Situ Chemical Oxidation via direct-push injection into the shallow and deep water-bearing zones for treatment of TCE in groundwater at the Former Asphalt-Testing Laboratory Area; and
  - Soil Solidification via in-situ soil mixing of a Portland cement mixture for solidification of soil and groundwater for treatment of dissolved arsenic in groundwater at the location of monitoring wells MW-12 and MW-31, and potentially monitoring well MW-35 (although no elevated pH was identified in this area).
- Alternative 3: Source Removal, Enhanced Aerobic Degradation, and Monitored Natural Attenuation
  - Removal and off-Site disposal of soil with residual soil contamination, application of bioremediation reagents, and monitored natural attenuation of groundwater in the Former Recycled Stockpile Area, the Hot-Mix Storage Area (soil only), the Equipment Storage Carport Area, the Former Asphalt-Testing Laboratory Area (soil only), and the area of well SVE-5;
  - Air sparge and soil vapor extraction in the shallow and deep water-bearing zones for treatment of TCE in the Former Asphalt-Testing Laboratory Area; and
  - Removal and off-Site disposal of fill material and concrete waste for treatment of dissolved arsenic in groundwater at the location of monitoring wells MW-12, MW-31, and MW-35.

The evaluation of each cleanup alternative is presented in Table 11. A MTCA Composite Benefit Score was applied for each of the six evaluation criteria for permanence to the maximum extent practicable for each alternative. A MTCA Composite Benefit Score was calculated for each alternative by summing the mathematical product of the score multiplied by the indicated weighting factor for each of the six evaluation criteria. The basis for the weighting factors for the six evaluation criteria for permanence to the maximum extent practicable was obtained from Ecology guidance.[9] Table 11 provides the results from the evaluation. The following MTCA Composite Benefit Scores were calculated for the three remedial alternatives evaluated in this update:

- Alternative 1: 6.1
- Alternative 2: 7.4
- Alternative 3: 7.7

Cost is not given a weighting factor in the MTCA benefit score, but is weighed against the benefit score as a benefit-to-cost ratio for each alternative. The estimated costs for Alternatives 1, 2, and 3, rounded to the nearest $10 thousand, are presented in Tables 11, 12a, 12b, and 12c. The total estimated costs are as follows:

- Alternative 1: $129,000
- Alternative 2: $9.02 million
- Alternative 3: $30.59 million.

These costs include both short- and long-term costs associated with each alternative.

The disproportionate cost analysis indicates that the corresponding benefit associated with the treatment technologies presented in Alternatives 2 and 3 do not justify their substantially higher costs (Chart 1). If compliance with the provisions of the Environmental Covenant is not met, the groundwater treatment technologies under Alternative 2 will be employed as a contingency action.

Based on the results from the cleanup alternative evaluation and disproportionate cost analysis , the recommended alternative is Cleanup Alternative 1—Institutional and Engineered Controls for residual contamination at the Lakeview Facility to achieve a No Further Action determination from Ecology under the Voluntary Cleanup Program. Cleanup Alternative 1 provides a high degree of environmental benefit, is the most cost-effective of the three permanent technically feasible cleanup alternatives, and meets the MTCA requirements for selection of a cleanup action (Section 360 of Chapter 173-340 of the Washington Administrative Code (WAC 173-340-360).

As indicated under Alternative 1, long-term groundwater monitoring at the conditional point of compliance monitoring wells, and cap maintenance will be required periodically. In addition, if

[9] *Feasibility Study Checklist* dated May 2016 prepared by Ecology, Publication No. 16-09-007.

the property is redeveloped, a vapor intrusion assessment and potential vapor intrusion mitigation will be conducted.

UPDATES TO CONDITIONAL POINTS OF COMPLIANCE

Points of compliance are defined in WAC 173-340-200 as the locations where "cleanup levels established in accordance with WAC 173-340-720 through 173-340-760 shall be attained" to meet the requirements of MTCA. Once the cleanup levels have been attained at the defined points of compliance, constituents of concern at each affected area at the Lakeview Facility are no longer considered a threat to human health or the environment. The points of compliance for soil and groundwater are discussed below:

Soil

The point of compliance for soil is established for the protection of groundwater, and is defined as soil throughout the "site" exceeding cleanup levels protective of groundwater (WAC 173-340-740[6][b]). TCE, arsenic, or lead has not been detected at a concentration exceeding MTCA Method A cleanup levels in soil; therefore, cleanup levels for those constituents of concern have been attained at the standard point of compliance for soil. ORO, ORO, and cPAHs have been detected at concentrations exceeding MTCA Method A cleanup levels or calculated Site-specific MTCA Method B cleanup levels. Potential exposure will be addressed by engineering controls consisting of an asphalt or concrete cap and/or a minimum of 15 feet of clean fill cover.

Groundwater

The standard point of compliance for groundwater is defined as the uppermost level of the saturated zone extending vertically to the lowest depth that potentially could be impacted by the constituent of concern throughout the "site" (WAC 173-340-720[8][b]). For active cleanup alternatives, the standard points of compliance would include all monitoring wells within the limits of groundwater affected by constituents of concern at concentrations exceeding cleanup levels.

A conditional point of compliance is applicable where it is not practicable to meet the cleanup level throughout the "site" within a reasonable restoration time frame (WAC 173-340-720[8][c]). If the selected cleanup action includes a restriction on groundwater use in the form of an Environmental Covenant, the conditional points of compliance as close as practicable to the boundaries of the restrictive area of groundwater use will become applicable to the Lakeview Facility.

The following conditional points of compliance for shallow water-bearing zone groundwater have been selected (Figure 20):

- Monitoring well MW-3 and soil vapor extraction wells SVE-3 and SVE-6 for the TCE-affected Former Asphalt-Testing Laboratory Area;

- Monitoring well MW-9R for the DRO- and ORO-affected Former Recycled Stockpile Area, the DRO and ORO-affected Equipment Storage Carport Area, and Arsenic and Lead Plume in Groundwater Area (concentrations of dissolved lead currently do not exceed the MTCA Method A cleanup level in any monitoring wells; groundwater sampling will continue for a minimum of four quarters at wells where lead was previously detected at concentrations exceeding the MTCA Method A cleanup level, after which further sampling for dissolved lead can be discontinued); TPH will be analyzed for parameters required to establish Site-specific MTCA Method B cleanup levels.[10]
- Monitoring well MW-32 for the Arsenic and Lead Plume in Groundwater Area;
- Monitoring well MW-33 for the Arsenic and Lead Plume in Groundwater Area; and
- Monitoring well MW-34 for Arsenic and Lead Plume in Groundwater Area.

The following conditional point of compliance for the deep water-bearing zone groundwater has been selected (Figure 20):

- Monitoring wells MW-15 and MW-23 for the TCE-affected Former Asphalt-Testing Laboratory Area.

Monitoring wells tentatively selected for sampling for MNA parameters pending Ecology approval of the selected conditional points of compliance are indicated on Figure 20.

Farallon understands that reclamation of the Lakeview Facility will include placing up to 30 feet of clean fill in some of the areas of the selected conditional points of compliance for groundwater. Prior to any permanent filling of the areas of the selected conditional points of compliance for groundwater, Ecology will be contacted to discuss and seek concurrence for placement of alternative conditional points of compliance, if concentrations of constituents of concern still exceed cleanup standards in groundwater at that time.

ENVIRONMENTAL COVENANT

The recommended cleanup alternative is proposed as an institutional control with an environmental covenant to restrict groundwater from being used for potable water and engineering controls for shallow soil contamination. A draft Environmental Covenant was submitted to Ecology as Appendix D in the August 3, 2018, Addendum to the Focused Feasibility Study and Disproportionate Cost Analysis Report.

Ecology suggests that you reevaluate the preferred remedial alternative and the need for institutional controls after you complete the additional investigation and analyses suggested in

[10] *Calculation of Method B and Method C Cleanup Levels for Petroleum Mixtures*, 2006-2007, Supporting Material for Cleanup Levels and Risk Calculation, Ecology website accessed January 12, 2021 https://www.ezview.wa.gov/Portals/_1987/Documents/Documents/CalculationOfMethodBandMethodC_CULsForPetroleumMixtures_2006-2007.pdf.

this opinion. If institutional or engineered controls remain an appropriate part of the preferred remedial alternative determined through the feasibility study and disproportionate cost analysis, update the draft environmental covenant to manage implementation of needed institutional or engineered controls with consideration to the [listed] requirements.

FARALLON RESPONSE:

A revised draft Environmental Covenant will be prepared and submitted for Ecology review following receipt of confirmation that Ecology agrees that sufficient site characterization and proposed conditional points of compliance presented in this letter.

LONG TERM MONITORING PLAN (LTM)

The August 3, 2018, draft covenant included long term groundwater monitoring. It did not include long term soil vapor, indoor air monitoring, or cap monitoring. It also did not include a contingency plan describing actions that will be conducted if results exceed applicable cleanup levels at the conditional points of compliance., cap maintenance or repair of remedy is required, or contaminated soil is encountered during property redevelopment activities.

FARALLON RESPONSE

A revised draft Long-Term Monitoring Plan addressing Ecology's comments will be prepared and submitted for Ecology review following Ecology agreement of sufficient site characterization and proposed conditional points of compliance.

ENVIRONMENTAL COVENANT

The recommended cleanup alternative is proposed as an institutional control with an environmental covenant to restrict groundwater from being used for potable water and engineering controls for shallow soil contamination. A draft Environmental Covenant was submitted to Ecology as Appendix D in the August 3, 2018, Addendum to the Focused Feasibility Study and Disproportionate Cost Analysis Report.

Ecology suggests that you reevaluate the preferred remedial alternative and the need for institutional controls after you complete the additional investigation and analyses suggested in this opinion. If institutional or engineered controls remain an appropriate part of the preferred remedial alternative determined through the feasibility study and disproportionate cost analysis, update the draft environmental covenant to manage implementation of needed institutional or engineered controls with consideration to the [listed] requirements.

FARALLON RESPONSE

A revised draft Environmental Covenant will be prepared and submitted for Ecology review following receipt of confirmation that Ecology agrees that sufficient site characterization and proposed conditional points of compliance.

CLOSING

Farallon appreciates the opportunity to provide the requested information, and trusts that this provides sufficient information to address the comments provided in the Opinion Letter. If you have questions, please contact either of the undersigned at (425) 295-0800.

Sincerely,

Farallon Consulting, L.L.C.

Amanda M. Meugniot

Branislav Jurista

State of Washington
2821
Licensed Geologist
BRANISLAV JURISTA

Amanda Meugniot, L.G.
Associate Geologist

Brani Jurista, L.G., P.G.
Principal Geologist

Attachments:
- Figure 1, *Vicinity Map*
- Figure 2, *Property Plan*
- Figure 3, *Soil and Groundwater Analytical Data, Former Recycled Stockpile Area*
- Figure 4, *Cross Section A-A', Former Recycled Stockpile Area*
- Figure 5, *Cross Section B-B', Former Recycled Stockpile Area*
- Figure 6, *Soil Analytical Data, Hot-Mix Storage Area*
- Figure 7, *Cross Section C-C', Hot-Mix Storage Area*
- Figure 8, *Soil and Groundwater Analytical Data, Equipment Storage Carport Area*
- Figure 9, *Cross Section D-D', Equipment Storage Carport Area*
- Figure 10, *Soil Analytical Data, Former Asphalt-Testing Laboratory Area*
- Figure 11, *Cross Section E-E', Former Asphalt-Testing Laboratory Area*
- Figure 12, *Groundwater Elevation Contours for Shallow Water-Bearing Zone (January 2020)*
- Figure 13, *Groundwater Elevation Contours for Deep Water-Bearing Zone (January 2020)*
- Figure 14, *TCE Concentrations in Shallow Water-Bearing Zone*
- Figure 15, *TCE Concentrations in Deep Water- Bearing Zone*
- Figure 16, *Cross Section F-F', Former Asphalt-Testing Laboratory Area*
- Figure 17, *Groundwater Analytical Data, Arsenic and Lead Plume in Groundwater Area*
- Figure 18, *pH Investigation Monitoring Well Schematic*
- Figure 19, *Cross Section G-G'*
- Figure 20, *Proposed Engineered Control Areas and Conditional Points of Compliance for Groundwater*
- Table 1, *Soil Analytical Results for TPH and BTEX*
- Table 2, *Soil Analytical Results for cPAHs*
- Table 3, *Monitoring Well Elevation Data*
- Table 4, *Groundwater Analytical Results for TPH and BTEX*

Table 5, *Groundwater Analytical Results for PAHs*
Table 6, *Groundwater Analytical Results for Select VOCs*
Table 7, *Groundwater Analytical Results for Metals*
Table 8, *pH Readings Surrounding Monitoring Well MW-9B*
Table 9, *Natural Attenuation and Water Quality Parameters*
Table 10, *Cleanup Technology Screening*
Table 11, *Detailed Evaluation of Cleanup Alternatives*
Table 12a, *Summary of Estimated Cleanup Costs for Cleanup Alternatives 1, 2a, and 3a for TPH and cPAH Areas*
Table 12b, *Summary of Estimated Cleanup Costs for Cleanup Alternatives 1 , 2b, and 3b for TCE Areas*
Table 12c, *Summary of Estimated Cleanup Costs for Cleanup Alternatives 1, 2C, and 3c for Lead and Arsenic Areas*
Chart 1, *Disproportionate Cost Analysis Results*
Attachment A, Laboratory Analytical Reports
Attachment B, Boring Logs
Attachment C, Worksheets for Site-Specific Groundwater Cleanup Levels
Attachment D, Well Log for Industrial Supply Well
Attachment E, Lakewood Water District Documentation
Attachment F, Mann-Kendall Trend Analysis Graphs

cc: Jeff Woodworth, Woodworth Capital, Inc.

AM/BJ:bjj

FIGURES

RESPONSE TO AUGUST 30, 2019 LETTER REGARDING FURTHER ACTION AT THE WOODWORTH & CO INC. LAKEVIEW PLANT
2800 104th Street Court South
Lakewood, Washington

Farallon PN: 188-002

REFERENCE: 7.5 MINUTE USGS QUADRANGLE TACOMA SOUTH, WASHINGTON, DATED 2011

N

0 3,000
SCALE IN FEET

FARALLON CONSULTING

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

Your Challenges. Our Priority. | farallonconsulting.com

FIGURE 1

VICINITY MAP
LAKEVIEW FACILITY
2800 104th STREET COURT SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

Drawn By: TPerrin | Checked By: BJ | Date: 8/4/2021 | Disc Reference:

Document Path: Q:\Projects\188 Woodworth\002 Woodworth\Mapfiles\041 Report 202107\Figure-01_LakeviewVicinityMap_WA.mxd

LEGEND

- BORING (2017)
- BORING (2019 - 2021)
- MONITORING WELL SHALLOW WATER-BEARING ZONE
- MONITORING WELL DEEP WATER-BEARING ZONE
- DECOMMISSIONED WELL
- AIR SPARGE/SOIL VAPOR EXTRACTION WELL PAIR
- AIR SPARGE WELL
- SOIL VAPOR EXTRACTION WELL
- EXCAVATION LIMITS (2010)
- PROPERTY BOUNDARY
- A A' LINE OF CROSS SECTION

N

0 100 200

SCALE IN FEET

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

FARALLON CONSULTING

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

Your Challenges. Our Priority. | farallonconsulting.com

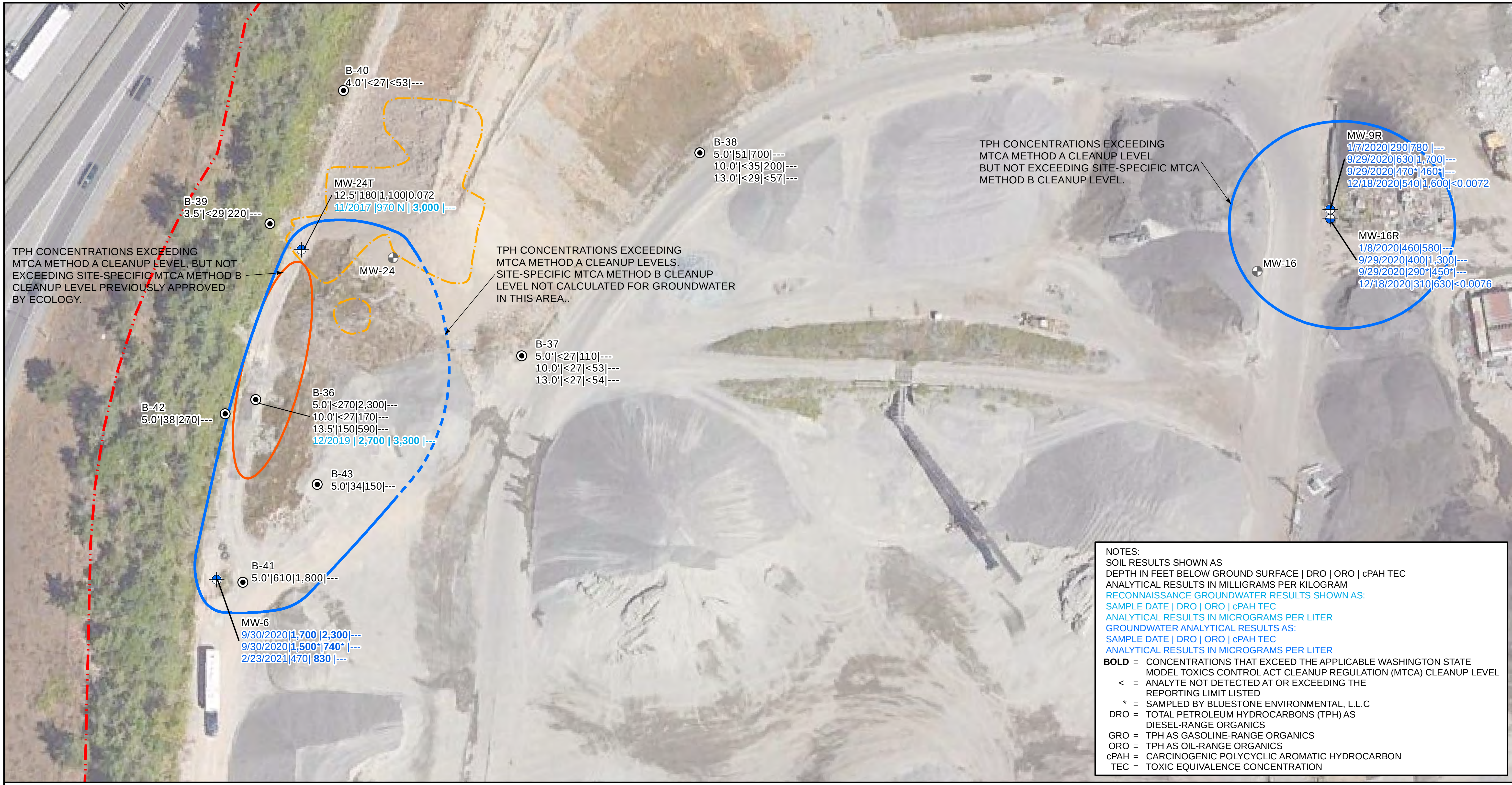
FIGURE 2

PROPERTY PLAN
LAKEVIEW FACILITY
2800 104TH STREET COURT SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

Drawn By: TPerrin | Checked By: CB | Date: 8/12/2021 | Disc Reference:

Document Path: Q:\Projects\188 Woodworth\002 Woodworth\Mapfiles\041 Report 202107\Figure-02_PropertyPlan.mxd



NOTES:
SOIL RESULTS SHOWN AS
DEPTH IN FEET BELOW GROUND SURFACE | DRO | ORO | cPAH TEC
ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM
RECONNAISSANCE GROUNDWATER RESULTS SHOWN AS:
SAMPLE DATE | DRO | ORO | cPAH TEC
ANALYTICAL RESULTS IN MICROGRAMS PER LITER
GROUNDWATER ANALYTICAL RESULTS AS:
SAMPLE DATE | DRO | ORO | cPAH TEC
ANALYTICAL RESULTS IN MICROGRAMS PER LITER

BOLD = CONCENTRATIONS THAT EXCEED THE APPLICABLE WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION (MTCA) CLEANUP LEVEL
< = ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED
* = SAMPLED BY BLUESTONE ENVIRONMENTAL, L.L.C
DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS
GRO = TPH AS GASOLINE-RANGE ORGANICS
ORO = TPH AS OIL-RANGE ORGANICS
cPAH = CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBON
TEC = TOXIC EQUIVALENCE CONCENTRATION

LEGEND

- BORING (2019 - 2021)
- MONITORING WELL DEEP WATER-BEARING ZONE
- MONITORING WELL SHALLOW WATER-BEARING ZONE
- DECOMMISSIONED WELL
- EXCAVATION LIMITS (2010)
- RESIDUAL CONTAMINATED GROUNDWATER EXCEEDING MTCA CLEANUP LEVEL
- RESIDUAL CONTAMINATED SOIL EXCEEDING MTCA CLEANUP LEVEL
- PROPERTY BOUNDARY

N

0 60
SCALE IN FEET

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

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

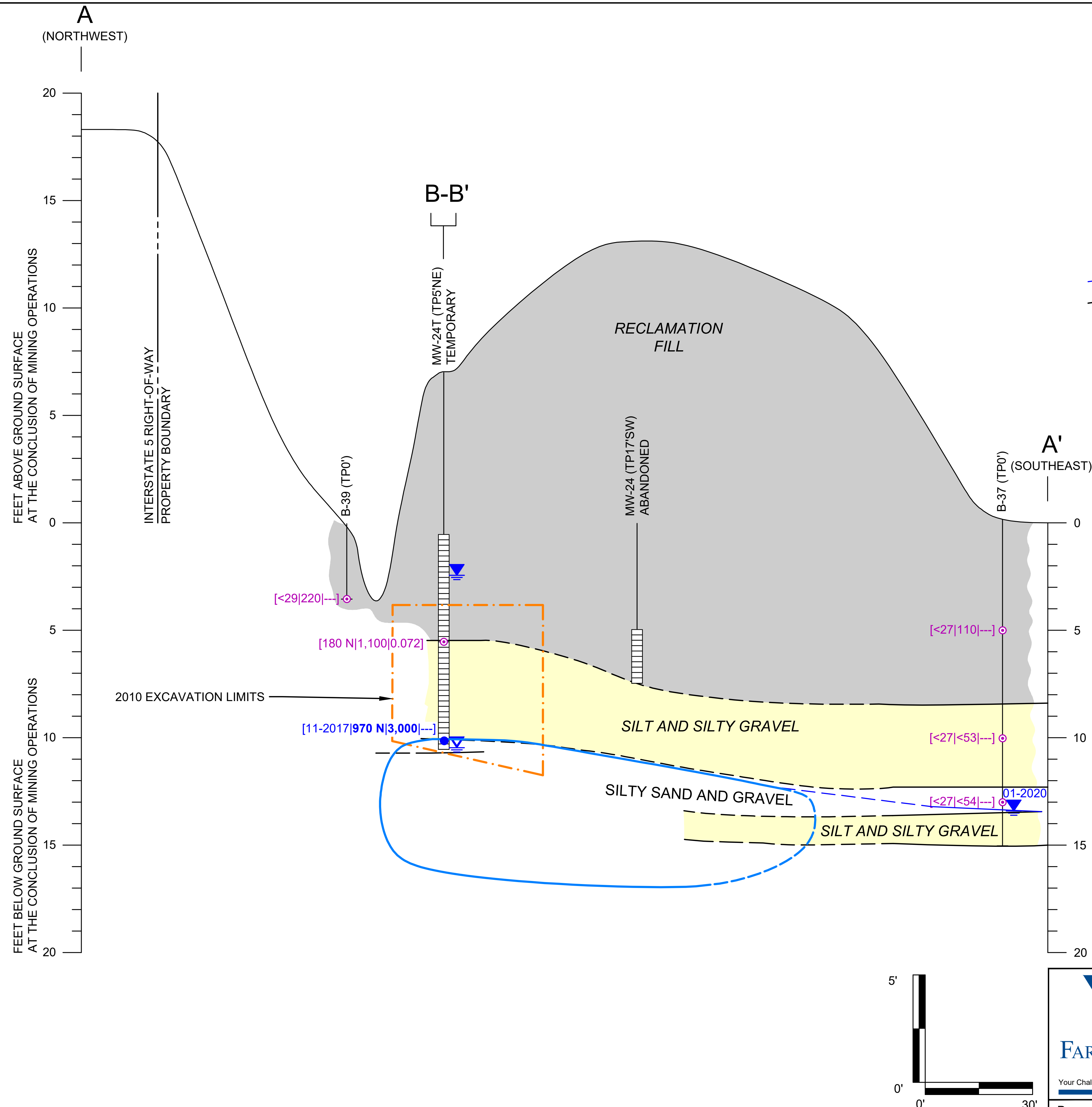
Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Baker City
California
Oakland | Irvine

FIGURE 3
SOIL AND GROUNDWATER ANALYTICAL DATA
FORMER RECYCLED STOCKPILE AREA
LAKEVIEW FACILITY
2800 104TH STREET COURT SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

Drawn By: TPerrin | Checked By: CB | Date: 8/16/2021 | Disc Reference:

Path: Q:\Projects\188 Woodworth\002 Woodworth\Mapfiles\041 Report 202107\Figure-03_RecycledStockpile_lndscp.mxd



LEGEND

MW-24 (TP17'SW) — BORING OR MONITORING WELL LOCATION TRANSPOSED (TP) IN FEET, NORTHEAST (NE) OR SOUTHWEST (SW), TO CROSS-SECTION LINE

SOIL SAMPLE LOCATION

APPROXIMATE STATIC GROUNDWATER LEVEL (WITH DATE)

STRATIGRAPHIC CONTACT (DASHED WHERE INFERRED)

BLANK CASING OR BORING

STATIC GROUNDWATER LEVEL

GROUNDWATER LEVEL AT TIME OF DRILLING

WELL SCREEN INTERVAL

GROUNDWATER SAMPLE LOCATION

[11-2017|**970**|**3,000**|---] = GROUNDWATER ANALYTICAL RESULT [DATE SAMPLED|DRO|ORO|cPAH TEC] ALL GROUNDWATER ANALYTICAL RESULTS IN MICROGRAMS PER LITER

[<29|220|---] = SOIL ANALYTICAL RESULT [DRO|ORO|cPAH TEC] ALL SOIL ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM

DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS

ORO = TPH AS OIL-RANGE ORGANICS

cPAH TEC = CARCINOGENIC (c) POLYCYCLIC AROMATIC HYDROCARBON (PAH) TOXIC EQUIVALENCY CONCENTRATION (TEC)

< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED

N = HYDROCARBONS IN THE OIL-RANGE ARE IMPACTING THE DIESEL-RANGE RESULT

--- = DENOTES SAMPLE NOT ANALYZED

BOLD = INDICATES CONCENTRATIONS EXCEEDING THE APPLICABLE WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION (MTCA) CLEANUP LEVEL

= TPH CONCENTRATIONS EXCEEDING MTCA METHOD A CLEANUP LEVELS. SITE-SPECIFIC MTCA B CLEANUP LEVEL NOT CALCULATED FOR GROUNDWATER IN THIS AREA. (DASHED WHERE INFERED)

= FILL

= SILT AND SILTY GRAVEL

= SILTY SAND AND GRAVEL

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

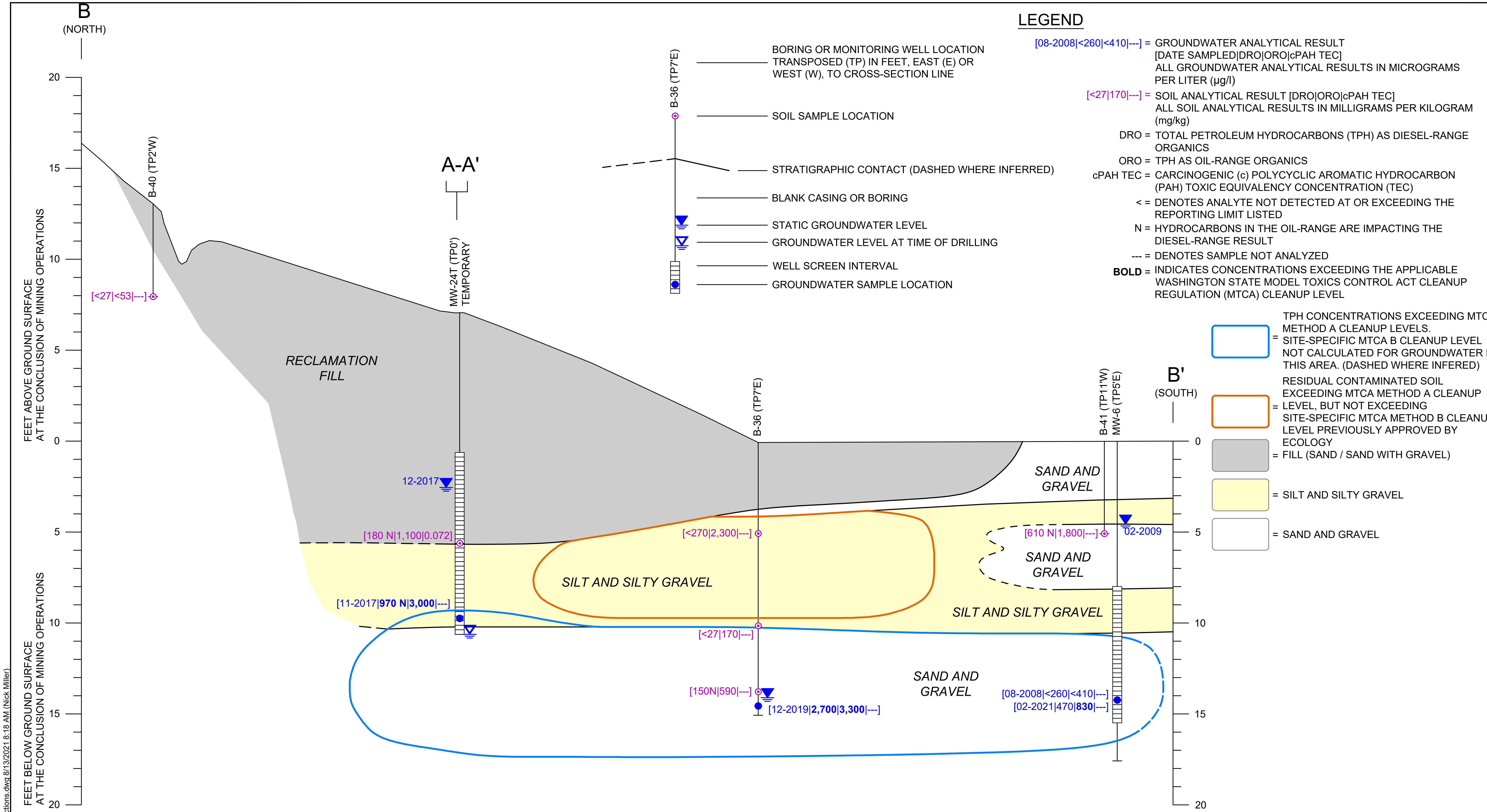
Drawn By: NM Checked By: MG

FIGURE 4

CROSS SECTION A-A'
FORMER RECYCLED STOCKPILE AREA
LAKEVIEW FACILITY
2800 104TH STREET SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

R:\Projects\188-002\CAD\188-002 X-Sections.dwg 8/13/2021 8:11 AM (Nick Miller)



R:\Projects\188-002\CAD\188-002 X-Sections.dwg 8/13/2021 8:18 AM (Nick Miller)

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

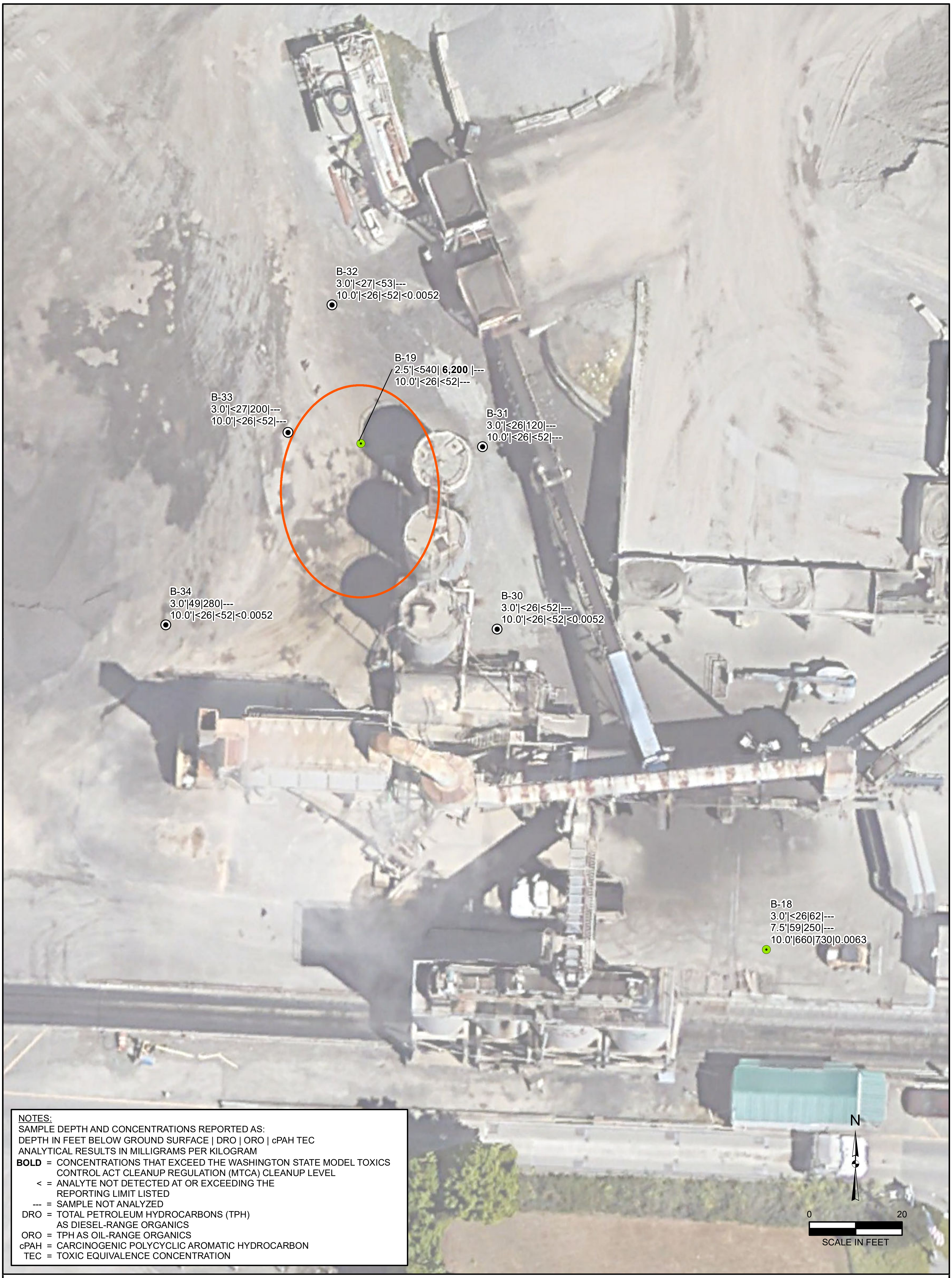
Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Baker City
California
Oakland | Irvine

Drawn By: NM Checked By: MG

FIGURE 5

CROSS SECTION B-B'
FORMER RECYCLED STOCKPILE AREA
LAKEVIEW FACILITY
2800 104TH STREET SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002



NOTES:
SAMPLE DEPTH AND CONCENTRATIONS REPORTED AS:
DEPTH IN FEET BELOW GROUND SURFACE | DRO | ORO | cPAH TEC
ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM

BOLD = CONCENTRATIONS THAT EXCEED THE WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION (MTCA) CLEANUP LEVEL
< = ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED
--- = SAMPLE NOT ANALYZED
DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS
ORO = TPH AS OIL-RANGE ORGANICS
cPAH = CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBON
TEC = TOXIC EQUIVALENCE CONCENTRATION

LEGEND

BORING (2017)
BORING (2019 - 2021)
SOIL EXCEEDING MTCA METHOD A CLEANUP LEVEL

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

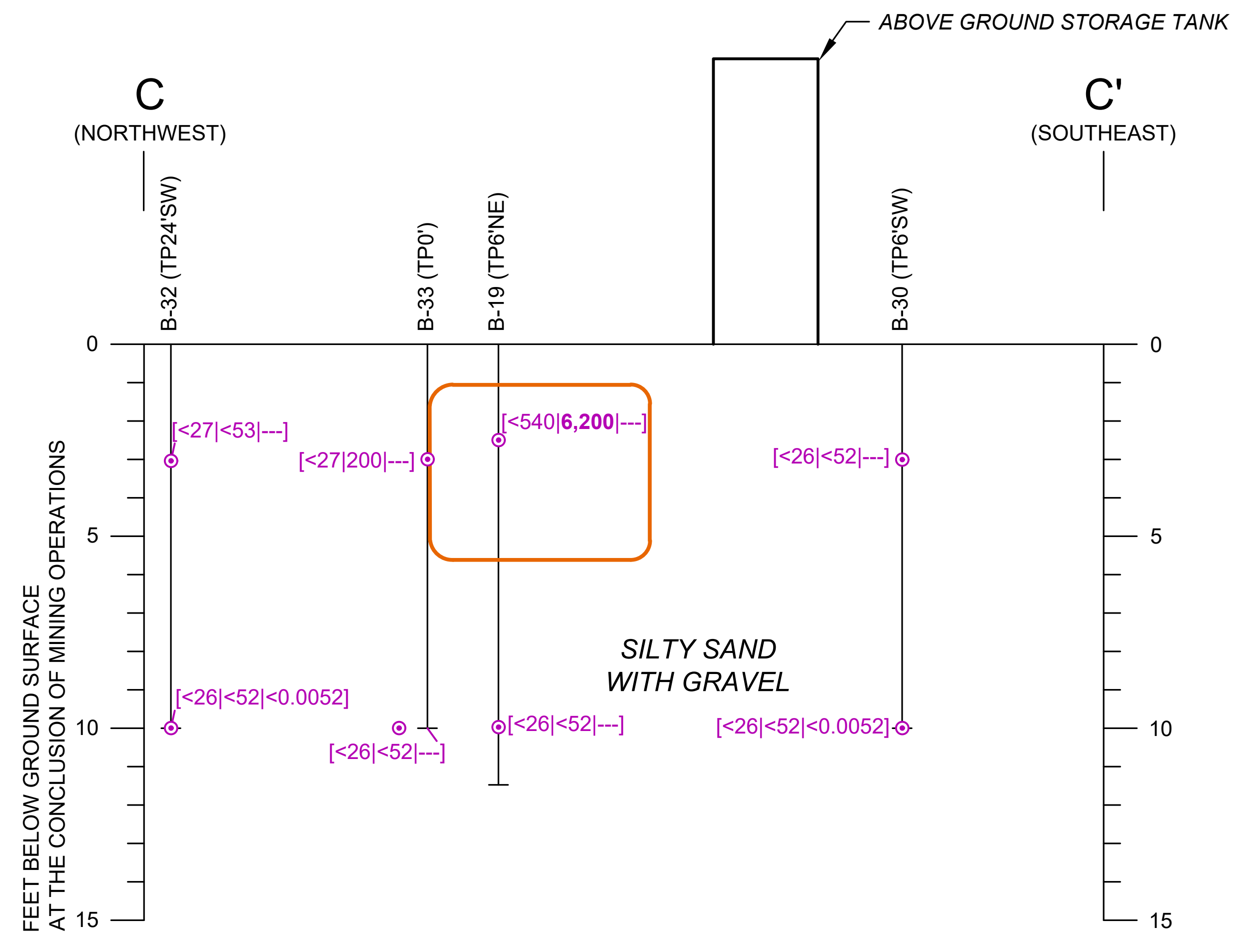
FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Baker City
California
Oakland | Irvine

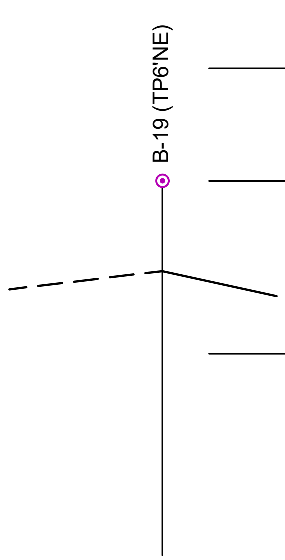
FIGURE 6
SOIL ANALYTICAL DATA
HOT-MIX STORAGE AREA
LAKEVIEW FACILITY
2800 104TH STREET COURT SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

Drawn By: TPerrin | Checked By: CB | Date: 8/16/2021 | Disc Reference:
Q:\Projects\188 Woodworth\002 Woodworth\Mapfiles\041 Report 202107\Figure-06_HotMixStorage_.mxd



LEGEND



BORING OR MONITORING WELL LOCATION TRANSPOSED (TP) IN FEET, NORTHEAST (NE) OR SOUTHWEST (SW), TO CROSS-SECTION LINE

SOIL SAMPLE LOCATION

STRATIGRAPHIC CONTACT (DASHED WHERE INFERRED)

BLANK CASING OR BORING

[<26|<52|<0.0052] = SOIL ANALYTICAL RESULT [DRO|ORO|cPAH TEC]
ALL SOIL ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM (mg/kg)

DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS

ORO = TPH AS OIL-RANGE ORGANICS

cPAH TEC = CARCINOGENIC (c) POLYCYCLIC AROMATIC HYDROCARBON (PAH) TOXIC EQUIVALENCY CONCENTRATION (TEC)

< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED

--- = DENOTES SAMPLE NOT ANALYZED

BOLD = INDICATES CONCENTRATIONS EXCEEDING THE WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION (MTCA) METHOD A CLEANUP LEVEL

= SOIL EXCEEDING MTCA METHOD A CLEANUP LEVEL

5'
0'
0'
20'

Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Baker City
California
Oakland | Irvine

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

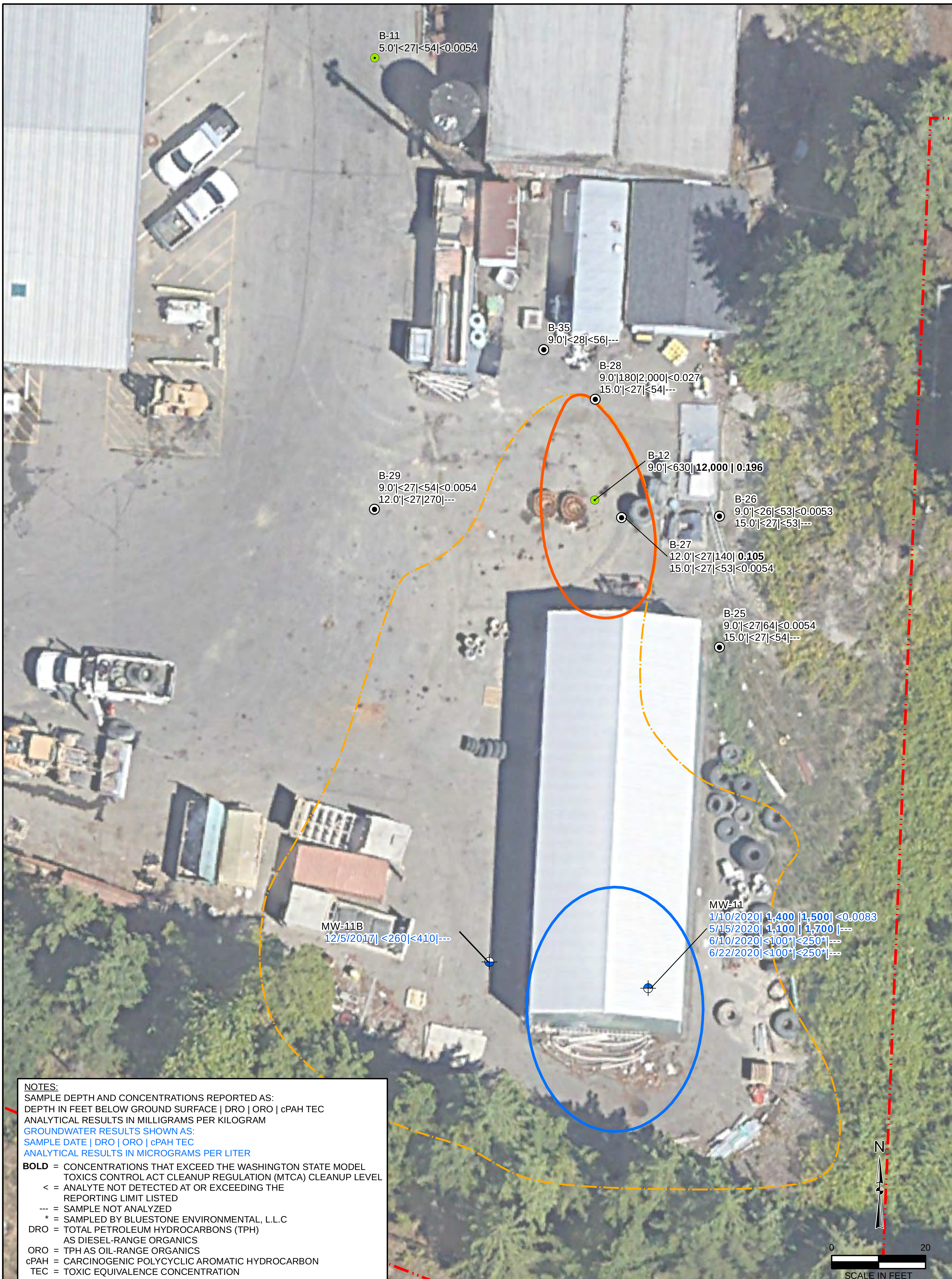
Drawn By: NM Checked By: MG

FIGURE 7

CROSS SECTION C-C'
HOT-MIX STORAGE AREA
LAKEVIEW FACILITY
2800 104TH STREET SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

R:\Projects\188-002\CAD\188-002 X-Sections.dwg 8/13/2021 8:19 AM (Nick Miller)



NOTES:
SAMPLE DEPTH AND CONCENTRATIONS REPORTED AS:
DEPTH IN FEET BELOW GROUND SURFACE | DRO | ORO | cPAH TEC
ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM
GROUNDWATER RESULTS SHOWN AS:
SAMPLE DATE | DRO | ORO | cPAH TEC
ANALYTICAL RESULTS IN MICROGRAMS PER LITER

BOLD = CONCENTRATIONS THAT EXCEED THE WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION (MTCA) CLEANUP LEVEL
< = ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED
--- = SAMPLE NOT ANALYZED
* = SAMPLED BY BLUESTONE ENVIRONMENTAL, L.L.C
DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS
ORO = TPH AS OIL-RANGE ORGANICS
cPAH = CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBON
TEC = TOXIC EQUIVALENCE CONCENTRATION

LEGEND

- BORING (2017)
- BORING (2019 - 2021)
- MONITORING WELL DEEP WATER-BEARING ZONE
- MONITORING WELL SHALLOW WATER-BEARING ZONE
- RESIDUAL CONTAMINATED GROUNDWATER EXCEEDING MTCA METHOD A CLEANUP LEVEL
- RESIDUAL CONTAMINATED SOIL EXCEEDING MTCA METHOD A CLEANUP LEVEL
- EXCAVATION LIMITS (2010)
- PROPERTY BOUNDARY

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

FARALLON CONSULTING

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

Your Challenges. Our Priority. | farallonconsulting.com

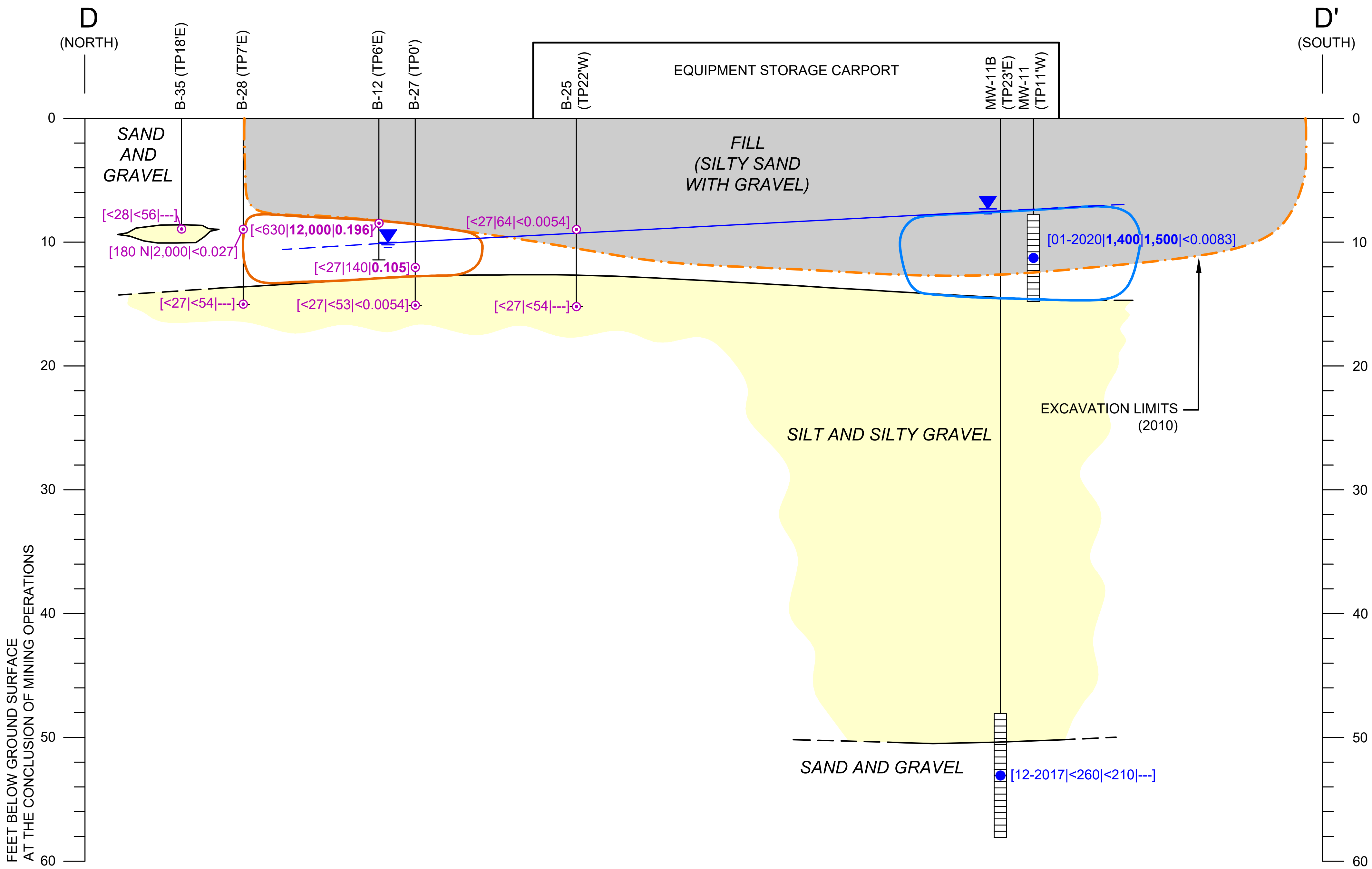
FIGURE 8

SOIL AND GROUNDWATER ANALYTICAL DATA
EQUIPMENT STORAGE CARPORT AREA
LAKEVIEW FACILITY
2800 104TH STREET COURT SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

Drawn By: TPerrin | Checked By: CB | Date: 8/16/2021 | Disc Reference:

Q:\Projects\188 Woodworth\002 Woodworth\Mapfiles\041 Report 202107\Figure-08_EquipStorageCarportl.mxd



LEGEND

BORING OR MONITORING WELL LOCATION TRANSPOSED (TP) IN FEET, EAST (E) OR WEST (W), TO CROSS-SECTION LINE (B-35 (TP18'E))

SOIL SAMPLE LOCATION

APPROXIMATE STATIC GROUNDWATER LEVEL (JANUARY 2020)

STRATIGRAPHIC CONTACT (DASHED WHERE INFERRED)

BLANK CASING OR BORING

STATIC GROUNDWATER LEVEL

WELL SCREEN INTERVAL

GROUNDWATER SAMPLE LOCATION

[01-2020|**1,400**|**1,500**|<0.0083] GROUNDWATER ANALYTICAL RESULT [DATE SAMPLED|DRO|ORO|cPAH TEC] ALL GROUNDWATER ANALYTICAL RESULTS IN MICROGRAMS PER LITER (µg/l)

[<26|<52|<0.0052] SOIL ANALYTICAL RESULT [DRO|ORO|cPAH TEC] ALL SOIL ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM (mg/kg)

DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS

ORO = TPH AS OIL-RANGE ORGANICS

cPAH TEC = CARCINOGENIC (c) POLYCYCLIC AROMATIC HYDROCARBON (PAH) TOXIC EQUIVALENCY CONCENTRATION (TEC)

N = HYDROCARBONS IN THE OIL-RANGE ARE IMPACTING THE DIESEL-RANGE RESULT

< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED

--- = DENOTES SAMPLE NOT ANALYZED

BOLD = INDICATES CONCENTRATIONS EXCEEDING THE WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION (MTCA) METHOD A CLEANUP LEVEL

= RESIDUAL CONTAMINATED SOIL EXCEEDING MTCA METHOD A CLEANUP LEVEL

= RESIDUAL CONTAMINATED GROUNDWATER EXCEEDING MTCA METHOD A CLEANUP LEVEL

= FILL (SILTY SAND WITH GRAVEL)

= SAND AND GRAVEL

= SILT AND SILTY GRAVEL

= GRAVEL WITH SILT AND SAND

10'
0'
0'
20'

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com
Washington: Issaquah | Bellingham | Seattle
Oregon: Portland | Baker City
California: Oakland | Irvine

Drawn By: NM Checked By: MG

FIGURE 9

CROSS SECTION D-D'
EQUIPMENT STORAGE CARPORT AREA
LAKEVIEW FACILITY
2800 104TH STREET SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

R:\Projects\188-002\CAD\188-002 X-Sections.dwg 8/13/2021 8:21 AM (Nick Miller)

NOTES:
SAMPLE DEPTH AND CONCENTRATIONS REPORTED AS:
DEPTH IN FEET BELOW GROUND SURFACE | DRO | ORO | cPAH TEC
ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM
GROUNDWATER ANALYTICAL RESULTS AS:
SAMPLE DATE | DRO | ORO | cPAH TEC
ANALYTICAL RESULTS IN MICROGRAMS PER LITER.

BOLD = CONCENTRATIONS THAT EXCEED THE WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION (MTCA) CLEANUP LEVEL
< = ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED
--- = SAMPLE NOT ANALYZED
DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS
ORO = TPH AS OIL-RANGE ORGANICS
cPAH = CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBON
TEC = TOXIC EQUIVALENCE CONCENTRATION

LEGEND

- BORING (2017)
- BORING (2019 - 2021)
- MONITORING WELL DEEP WATER-BEARING ZONE
- MONITORING WELL SHALLOW WATER-BEARING ZONE
- DECOMMISSIONED WELL
- AIR SPARGE/SOIL VAPOR EXTRACTION WELL PAIR
- AIR SPARGE WELL
- SOIL VAPOR EXTRACTION WELL
- RESIDUAL CONTAMINATED GROUNDWATER EXCEEDING MTCA METHOD A CLEANUP LEVEL
- RESIDUAL CONTAMINATED SOIL EXCEEDING MTCA METHOD A CLEANUP LEVEL

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

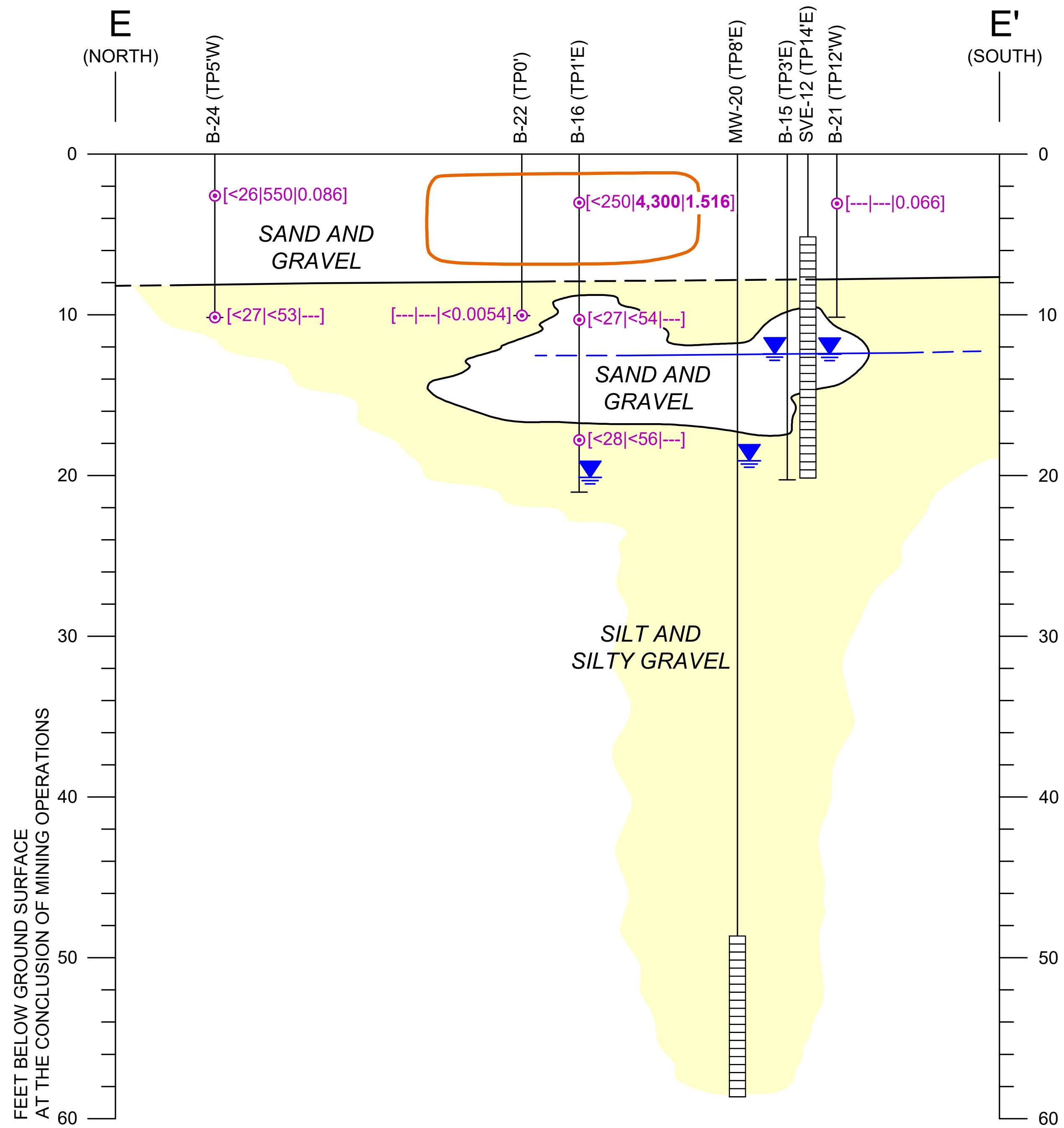
FARALLON CONSULTING
Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Baker City
California
Oakland | Irvine
Your Challenges. Our Priority. | farallonconsulting.com

FIGURE 10

SOIL ANALYTICAL DATA
FORMER ASPHALT-TESTING LABORATORY AREA
LAKEVIEW FACILITY
2800 104TH STREET COURT SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

Drawn By: TPerrin | Checked By: CB | Date: 8/16/2021 | Disc Reference:
Q:\Projects\188 Woodworth\002 Woodworth\Mapfiles\041 Report 202107\Figure-10_Zone-D_SoilAnalytical.mxd



LEGEND

B-24 (TP5'W) — BORING OR MONITORING WELL LOCATION TRANSPOSED (TP) IN FEET, EAST (E) OR WEST (W), TO CROSS-SECTION LINE

SOIL SAMPLE LOCATION

APPROXIMATE STATIC GROUNDWATER LEVEL (JANUARY 2020)

STRATIGRAPHIC CONTACT (DASHED WHERE INFERRED)

BLANK CASING OR BORING

STATIC GROUNDWATER LEVEL

WELL SCREEN INTERVAL

[<26|<52|<0.0052] = SOIL ANALYTICAL RESULT [DRO|ORO|cPAH TEC]
ALL SOIL ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM (mg/kg)

DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS

ORO = TPH AS OIL-RANGE ORGANICS

cPAH TEC = CARCINOGENIC (c) POLYCYCLIC AROMATIC HYDROCARBON (PAH) TOXIC EQUIVALENCY CONCENTRATION (TEC)

< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED

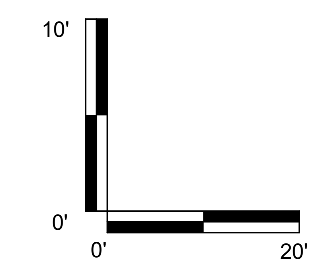
--- = DENOTES SAMPLE NOT ANALYZED

BOLD = INDICATES CONCENTRATIONS EXCEEDING THE WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION (MTCA) METHOD A CLEANUP LEVEL

= CONTAMINATED SOIL EXCEEDING MTCA METHOD A CLEANUP LEVEL

= SILT AND SILTY GRAVEL

= SAND AND GRAVEL



Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Baker City
California
Oakland | Irvine
FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

Drawn By: NM   Checked By: MG

FIGURE 11

CROSS SECTION E-E'
FORMER ASPHALT-TESTING LABORATORY AREA
LAKEVIEW FACILITY
2800 104TH STREET SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

R:\Projects\188-002\CAD\188-002 X-Sections.dwg 8/13/2021 8:14 AM (Nick Miller)

LEGEND

- MONITORING WELL SHALLOW WATER-BEARING ZONE
- DECOMMISSIONED WELL
- AIR SPARGE/SOIL VAPOR EXTRACTION WELL PAIR
- SOIL VAPOR EXTRACTION WELL
- SHALLOW WATER-BEARING ZONE NOT ENCOUNTERED
- PROPERTY BOUNDARY

280.00	GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
	APPROXIMATE DIRECTION OF GROUNDATER FLOW
(281.09)	GROUNDWATER ELEVATION (1/6/2020)
[269.45]	GROUNDWATER ELEVATION NOT USED IN CONTOURING (1/6/2020)
NM	NOT MEASURED

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

FARALLON CONSULTING

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

Your Challenges. Our Priority. | farallonconsulting.com

FIGURE 12

GROUNDWATER ELEVATION CONTOURS FOR SHALLOW WATER-BEARING ZONE (JANUARY 2020)
LAKEVIEW FACILITY
2800 104TH STREET COURT SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

Drawn By: TPerrin | Checked By: CB | Date: 8/16/2021 | Disc Reference:

Document Path: Q:\Projects\188 Woodworth\002 Woodworth\Mapfiles\041 Report 202107\Figure-12_GW_Contours.mxd

LEGEND

- MONITORING WELL DEEP WATER-BEARING ZONE
- DECOMMISSIONED WELL
- AIR SPARGE/SOIL VAPOR EXTRACTION WELL PAIR
- AIR SPARGE WELL
- SOIL VAPOR EXTRACTION WELL
- PROPERTY BOUNDARY
- 280.00 GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW
- (253.90) GROUNDWATER ELEVATION (1/6/2020)
- [279.98] GROUNDWATER ELEVATION NOT USED IN CONTOURING (1/6/2020)
- NM NOT MEASURED

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

FARALLON CONSULTING

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

Your Challenges. Our Priority. | farallonconsulting.com

FIGURE 13

GROUNDWATER ELEVATION CONTOURS FOR DEEP WATER-BEARING ZONE (JANUARY 2020)
LAKEVIEW FACILITY
2800 104TH STREET COURT SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

Drawn By: TPerrin | Checked By: BJ | Date: 8/6/2021 | Disc Reference:

Document Path: Q:\Projects\188 Woodworth\002 Woodworth\Mapfiles\041 Report 202107\Figure-13_GW_DeepContours.mxd

LEGEND

- MONITORING WELL DEEP WATER-BEARING ZONE
- MONITORING WELL SHALLOW WATER-BEARING ZONE
- DECOMMISSIONED WELL
- AIR SPARGE/SOIL VAPOR EXTRACTION WELL PAIR
- AIR SPARGE WELL
- SOIL VAPOR EXTRACTION WELL
- CURRENT EXTENT OF TCE PLUME IN SHALLOW WATER-BEARING ZONE GROUNDWATER
- SHALLOW WATER-BEARING ZONE NOT ENCOUNTERED
- PROPERTY BOUNDARY
- APPROXIMATE DIRECTION OF GROUNDATER FLOW

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

FARALLON CONSULTING

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

Your Challenges. Our Priority. | farallonconsulting.com

FIGURE 14

TCE CONCENTRATIONS IN SHALLOW WATER-BEARING ZONE
LAKEVIEW FACILITY
2800 104TH STREET COURT SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

Drawn By: TPerrin	Checked By: CB	Date: 8/16/2021	Disc Reference:

Document Path: Q:\Projects\188 Woodworth\002 Woodworth\Mapfiles\041 Report 202107\Figure-14_TCE_SWBZ.mxd

LEGEND

- MONITORING WELL DEEP WATER-BEARING
- DECOMMISSIONED WELL
- AIR SPARGE/SOIL VAPOR EXTRACTION WELL
- AIR SPARGE WELL
- SOIL VAPOR EXTRACTION
- CURRENT EXTENT OF TCE PLUME IN DEEP WATER-BEARING ZONE AT CONCENTRATIONS EXCEEDING MTCA METHOD A CLEANUP LEVEL
- FORMER EXTENT OF TCE CONCENTRATIONS IN DEEP WATER-BEARING ZONE GROUNDWATER EXCEED MTCA METHOD A CLEANUP LEVEL (2010)
- APPROXIMATE DIRECTION OF GROUNDATER FLOW
- PROPERTY BOUNDARY

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

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

FIGURE 15

TCE CONCENTRATIONS IN
DEEP WATER-BEARING ZONE
LAKEVIEW FACILITY
2800 104TH STREET COURT SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

Drawn By: TPerrin | Checked By: BJ | Date: 8/16/2021 | Disc Reference:

Document Path: Q:\Projects\188 Woodworth\002 Woodworth\Mapfiles\041 Report 202107\Figure-15_TCE_DWBZ.mxd

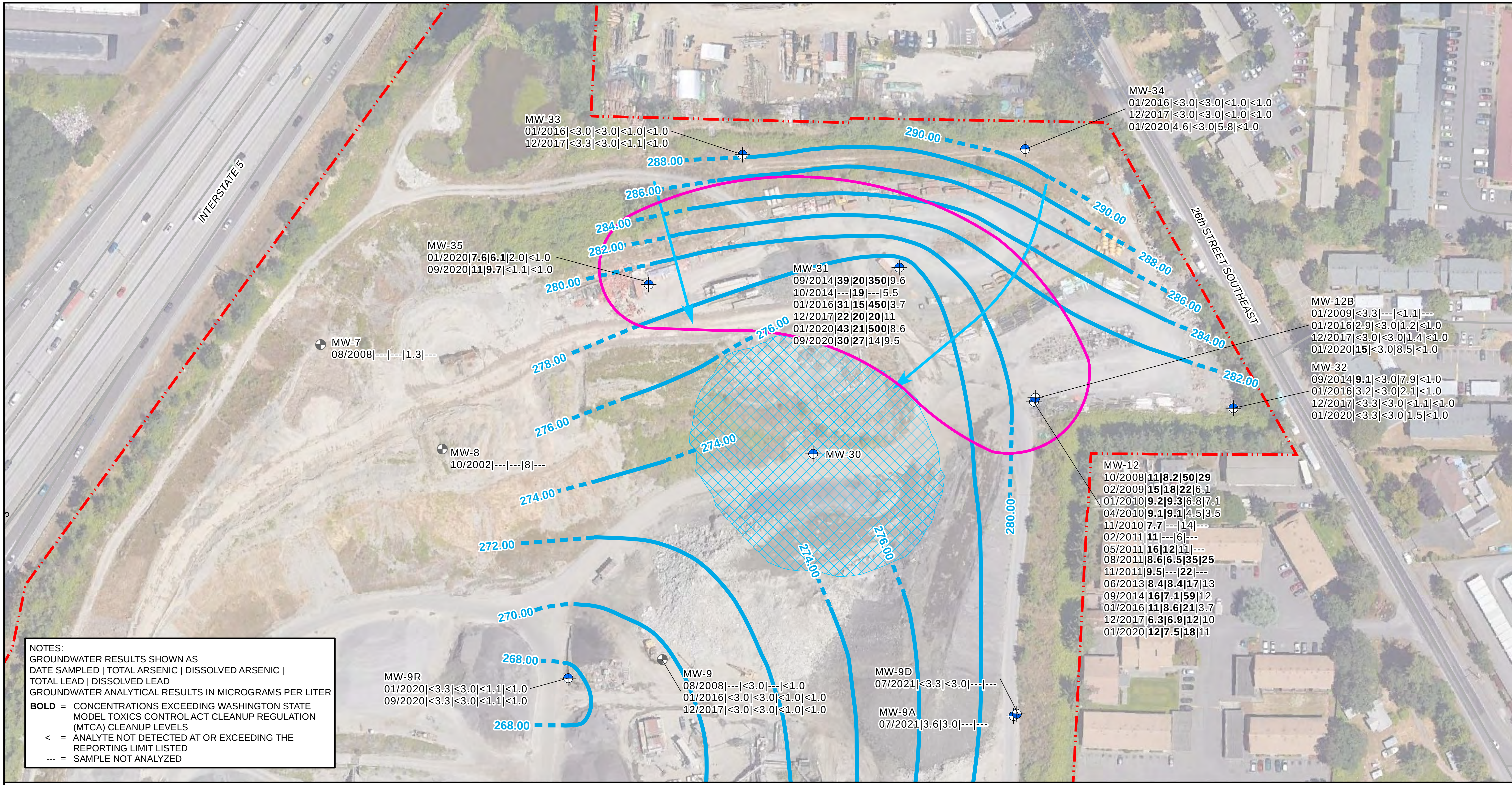
FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com
Washington: Issaquah | Bellingham | Seattle
Oregon: Portland | Baker City
California: Oakland | Irvine

FIGURE 16

CROSS SECTION F-F'
FORMER ASPHALT-TESTING LABORATORY AREA
LAKEVIEW FACILITY
2800 104TH STREET SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN:188-002

Drawn By: NM | Checked By: BJ | Date: 4/14/2020



NOTES:
GROUNDWATER RESULTS SHOWN AS
DATE SAMPLED | TOTAL ARSENIC | DISSOLVED ARSENIC |
TOTAL LEAD | DISSOLVED LEAD
GROUNDWATER ANALYTICAL RESULTS IN MICROGRAMS PER LITER

BOLD = CONCENTRATIONS EXCEEDING WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION (MTCA) CLEANUP LEVELS

< = ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED

--- = SAMPLE NOT ANALYZED

LEGEND

- MONITORING WELL DEEP WATER-BEARING ZONE
- MONITORING WELL SHALLOW WATER-BEARING ZONE
- DECOMMISSIONED WELL
- APPROXIMATE EXTENT OF ARSENIC AND/OR LEAD CONCENTRATIONS EXCEEDING MTCA METHOD A CLEANUP LEVELS IN AT SHALLOW WATER-BEARING ZONE
- 280.00 GROUNDWATER ELEVATION CONTOUR JANUARY 2020 (DASHED WHERE INFERRED)
- APPROXIMATE DIRECTION OF GROUNDATER FLOW
- SHALLOW WATER-BEARING ZONE NOT ENCOUNTERED
- PROPERTY BOUNDARY

N

0 120
SCALE IN FEET

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

FARALLON CONSULTING

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

Your Challenges. Our Priority. | farallonconsulting.com

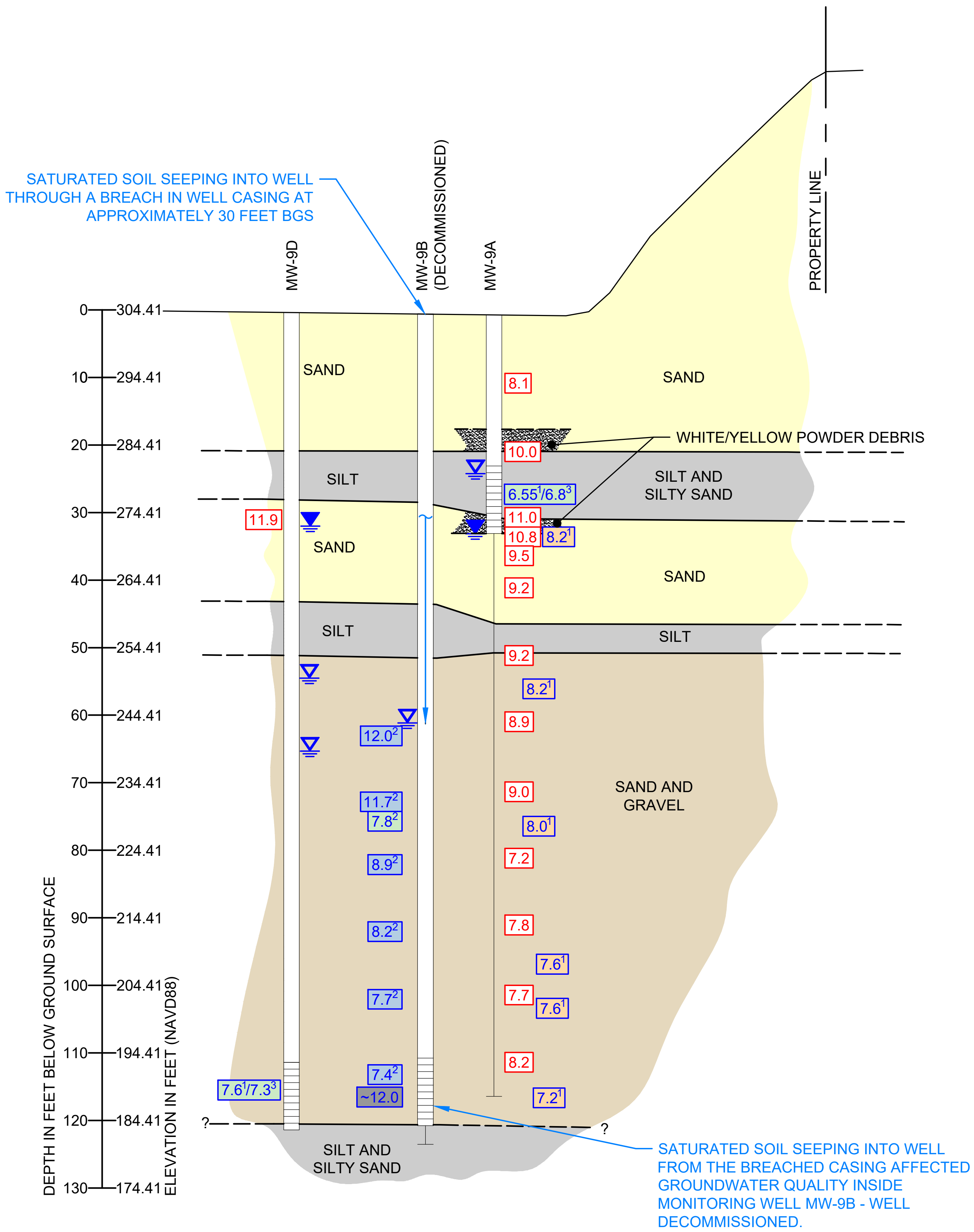
FIGURE 17

GROUNDWATER ANALYTICAL DATA
ARSENIC AND LEAD PLUME IN
GROUNDWATER AREA
LAKEVIEW FACILITY
2800 104TH STREET COURT SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

Drawn By: TPerrin | Checked By: CB | Date: 8/16/2021 | Disc Reference:

Path: Q:\Projects\188 Woodworth\002 Woodworth\Mapfiles\041 Report 202107\Figure-17_Metals_GW_tbld.mxd



VERTICAL SCALE : 1" = 20'
HORIZONTAL SCALE : NOT TO SCALE

LEGEND

~12.0	BLUE pH RESULTS IN GROUNDWATER
7.4**	RED pH RESULTS IN SOIL
~12.0	pH RESULT PRE-DEVELOPMENT
7.4^2	pH RESULT DURING DEVELOPMENT
$7.6^1/7.3^3$	pH RESULT POST-DEVELOPMENT
7.2^1	pH DURING RECONNAISSANCE GROUNDWATER SAMPLING
1	MEASURED USING A STANDALONE pH METER
2	MEASURED USING A MULTIMETER WITH FLOW-THROUGH CELL
3	pH ANALYZED IN A LABORATORY BY EPA METHOD 9045D
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
BGS	BELOW GROUND SURFACE
▽	WATER LEVEL (2021)
▼	WATER LEVEL AT TIME OF DRILLING

Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Baker City
California
Oakland | Irvine

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

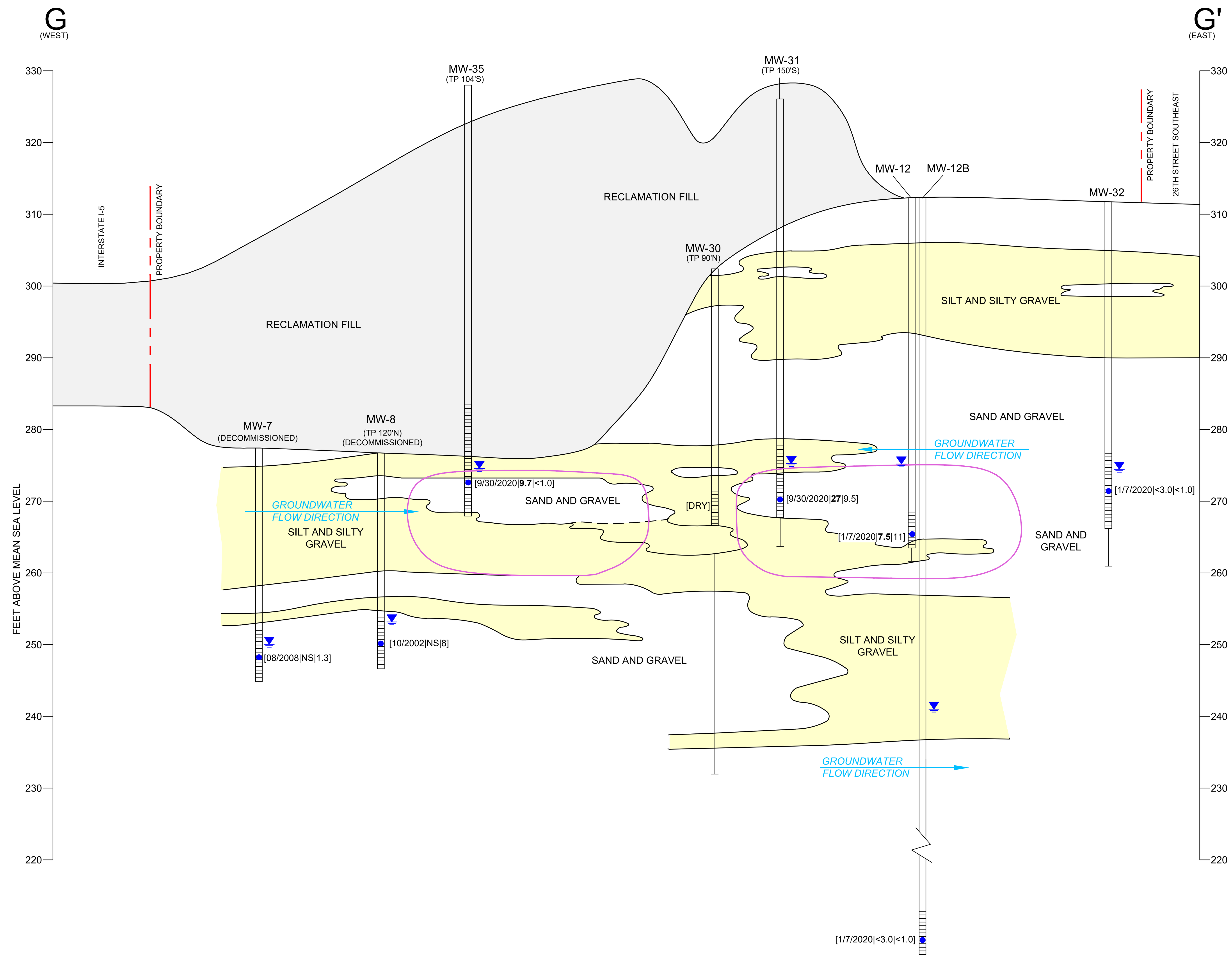
FIGURE 18

pH INVESTIGATION MONITORING WELL SCHEMATIC
LAKEVIEW FACILITY
2800 104TH STREET COURT SOUTH
LAKEWOOD, WASHINGTON

Drawn By: NM Checked By: CB

FARALLON PN: 188-002

R:\Projects\188-002\CAD\188-002 Well Schematic.dwg 8/5/2021 4:06 PM (Nick Miller)



LEGEND

MW-35 (TP 104'S) — BORING OR MONITORING WELL LOCATION TRANSPOSED (TP) IN FEET, EAST (E) OR WEST (W), TO CROSS-SECTION LINE

STRATIGRAPHIC CONTACT (DASHED WHERE INFERRED)

BLANK CASING OR BORING

STATIC GROUNDWATER LEVEL

WELL SCREEN INTERVAL

GROUNDWATER SAMPLE LOCATION

[9/12/2014|NT|8] = GROUNDWATER SAMPLE AS [DATE|As|Pb] ALL GROUNDWATER ANALYTICAL RESULTS IN MICRORAMS PER LITER (µg/l)

Pb = DISSOLVED LEAD

As = DISSOLVED ARSENIC

NS = NOT SAMPLED

BOLD = INDICATES CONCENTRATIONS EXCEEDING THE WASHINGTON STATE MODEL TOXICS CONTROL ACT (MTCA) CLEANUP REGULATION METHOD A CLEANUP LEVEL

= GROUNDWATER WITH ARSENIC AND/OR LEAD AT CONCENTRATIONS EXCEEDING MTCA METHOD A CLEANUP LEVEL

= FILL (SILTY SAND WITH GRAVEL)

= SAND AND GRAVEL

= SILT AND SILTY GRAVEL

10'

0'

0' 100'

FARALLON CONSULTING

Washington: Issaquah | Bellingham | Seattle

Oregon: Portland | Baker City

California: Oakland | Irvine

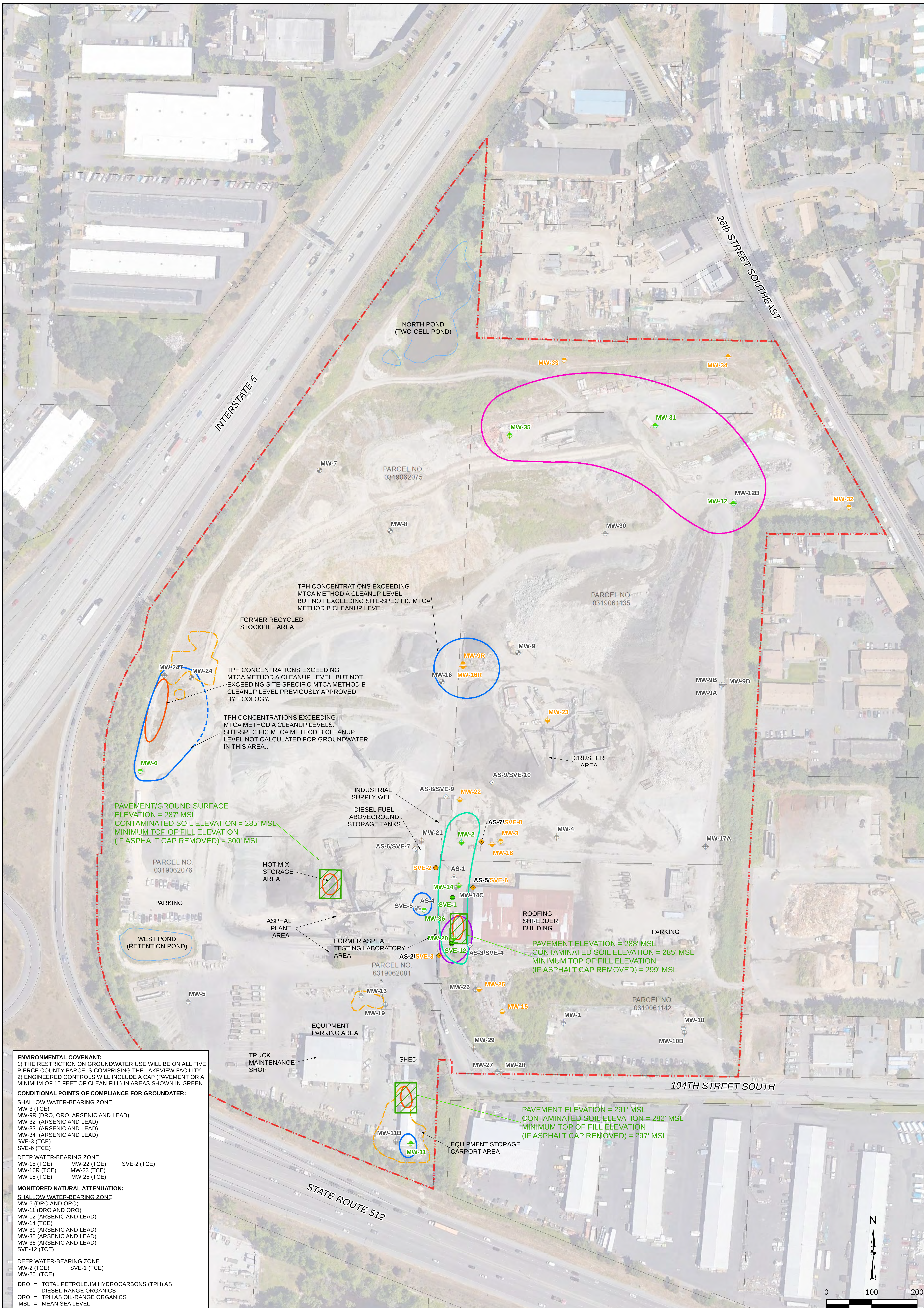
Your Challenges. Our Priority. | farallonconsulting.com

FIGURE 19

CROSS SECTION G-G'
LAKEVIEW FACILITY
2800 104TH STREET COURT SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN:188-002

Drawn By: NM Checked By: CB Date: 7/1/2021



ENVIRONMENTAL COVENANT:
1) THE RESTRICTION ON GROUNDWATER USE WILL BE ON ALL FIVE PIERCE COUNTY PARCELS COMPRISING THE LAKEVIEW FACILITY
2) ENGINEERED CONTROLS WILL INCLUDE A CAP (PAVEMENT OR A MINIMUM OF 15 FEET OF CLEAN FILL) IN AREAS SHOWN IN GREEN

CONDITIONAL POINTS OF COMPLIANCE FOR GROUNDATER:

SHALLOW WATER-BEARING ZONE
MW-3 (TCE)
MW-9R (DRO, ORO, ARSENIC AND LEAD)
MW-32 (ARSENIC AND LEAD)
MW-33 (ARSENIC AND LEAD)
MW-34 (ARSENIC AND LEAD)
SVE-3 (TCE)
SVE-6 (TCE)

DEEP WATER-BEARING ZONE
MW-15 (TCE) MW-22 (TCE) SVE-2 (TCE)
MW-16R (TCE) MW-23 (TCE)
MW-18 (TCE) MW-25 (TCE)

MONITORED NATURAL ATTENUATION:

SHALLOW WATER-BEARING ZONE
MW-6 (DRO AND ORO)
MW-11 (DRO AND ORO)
MW-12 (ARSENIC AND LEAD)
MW-14 (TCE)
MW-31 (ARSENIC AND LEAD)
MW-35 (ARSENIC AND LEAD)
MW-36 (ARSENIC AND LEAD)
SVE-12 (TCE)

DEEP WATER-BEARING ZONE
MW-2 (TCE) SVE-1 (TCE)
MW-20 (TCE)

DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS
ORO = TPH AS OIL-RANGE ORGANICS
MSL = MEAN SEA LEVEL
TCE = TRICHLOROETHENE

LEGEND

MW-10 MONITORING WELL SCREENED IN SHALLOW WATER-BEARING ZONE
MW-10B MONITORING WELL SCREENED IN DEEP WATER-BEARING ZONE
MW-6 DECOMMISSIONED WELL
SVE-1 AIR SPARGE/SOIL VAPOR EXTRACTION WELL PAIR
AS-1 AIR SPARGE WELL
MW-3 CONDITIONAL POINT OF COMPLIANCE FOR SHALLOW WATER-BEARING ZONE
MW-23 CONDITIONAL POINT OF COMPLIANCE FOR DEEP WATER-BEARING ZONE
SVE-6 AIR SPARGE/SOIL VAPOR EXTRACTION WELL PAIR
AS-2 SOIL VAPOR EXTRACTION WELL
MW-6 MONITORING WELL SHALLOW WATER-BEARING ZONE USED TO MONITOR NATURAL ATTENUATION
MW-2 MONITORING WELL DEEP WATER-BEARING ZONE USED TO MONITOR NATURAL ATTENUATION
SVE-12 SOIL VAPOR EXTRACTION WELL USED TO MONITOR NATURAL ATTENUATION

APPROXIMATE AREA WHERE ARSENIC AND LEAD CONCENTRATIONS IN SHALLOW WATER-BEARING ZONE GROUNDWATER EXCEED APPLICABLE CLEANUP LEVELS
APPROXIMATE AREA WHERE DRO OR ORO CONCENTRATIONS IN SHALLOW WATER-BEARING ZONE EXCEED APPLICABLE CLEANUP LEVELS
APPROXIMATE AREA WHERE DRO OR ORO CONCENTRATIONS IN SOIL EXCEED APPLICABLE CLEANUP LEVELS
APPROXIMATE AREA WHERE TCE CONCENTRATIONS IN SHALLOW WATER-BEARING ZONE GROUNDWATER EXCEED APPLICABLE CLEANUP LEVEL
APPROXIMATE AREA WHERE TCE CONCENTRATIONS IN DEEP WATER-BEARING ZONE EXCEED APPLICABLE CLEANUP LEVEL
ENGINEERED CONTROL/CAP
PROPERTY BOUNDARY

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

FARALLON CONSULTING

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

Your Challenges. Our Priority. | farallonconsulting.com

FIGURE 20

PROPOSED ENGINEERED CONTROL AREAS AND CONDITIONAL POINTS OF COMPLIANCE FOR GROUNDWATER
LAKEVIEW FACILITY
2800 104TH STREET COURT SOUTH
LAKEWOOD, WASHINGTON

FARALLON PN: 188-002

Drawn By: TPerrin | Checked By: CB | Date: 8/16/2021 | Disc Reference:

Document Path: Q:\Projects\188 Woodworth\002 Woodworth\Mapfiles\041 Report 202107\Figure-20_PointofComplianceWells.mxd

SV-9

TABLES

RESPONSE TO AUGUST 30, 2019 LETTER REGARDING FURTHER ACTION AT THE WOODWORTH & CO INC. LAKEVIEW PLANT
2800 104th Street Court South
Lakewood, Washington

Farallon PN: 188-002

Table 1
Soil Analytical Results for TPH and BTEX
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Sample Identification	Sample Depth (feet)[1]	Sample Date	Analytical Results (milligrams per kilogram)									
				Sample Extract Treated with a Sulfuric Acid/Silica Gel Cleanup Procedure			Sample Extract Not Treated Prior to Analysis						
				DRO[2]	ORO[2]	Calculated DRO+ORO[3]	DRO[2]	ORO[2]	Calculated DRO+ORO[3]	Benzene[4]	Toluene[4]	Ethylbenzene[4]	Xylenes[4]
Equipment Parking Area													
B-10	B-10-5.0-111317	5.0	11/13/2017	---	---	---	< 26	130	NA	---	---	---	---
Tack Tank Area													
B-11	B-11-5.0-111617	5.0	11/16/2017	---	---	---	< 27	< 54	NA	---	---	---	---
Equipment Storage Carport Area													
B-12	B-12-9.0-111617	9.0	11/16/2017	< 580	**11,000**	**11,290**	< 630	**12,000**	**12,315**	---	---	---	---
B-25	B25-9.0	9.0	12/5/2019	---	---	---	< 27	64	78	---	---	---	---
	B25-15.0	15.0	12/5/2019	---	---	---	< 27	< 54	<41	---	---	---	---
B-26	B26-9.0	9.0	12/5/2019	---	---	---	< 26	< 53	<40	---	---	---	---
	B26-15.0	15.0	12/5/2019	---	---	---	< 27	< 53	<40	---	---	---	---
B-27	B27-12.0	12.0	12/5/2019	---	---	---	< 27	140	154	---	---	---	---
	B27-15.0	15.0	12/5/2019	---	---	---	< 27	< 53	<40	---	---	---	---
B-28	B28-9.0	9.0	12/6/2019	---	---	---	180 N	2,000	2,180	---	---	---	---
	B28-15.0	15.0	12/6/2019	---	---	---	< 27	< 54	<41	---	---	---	---
B-29	B29-9.0	9.0	12/6/2019	---	---	---	< 27	< 54	<41	---	---	---	---
	B29-12.0	12.0	12/6/2019	---	---	---	< 27	270	284	---	---	---	---
B35	B35-9.0	9.0	12/19/2019	---	---	---	< 28	< 56	<42	---	---	---	---
Asphalt Plant Area													
B-18	B-18-3.0-111417	3.0	11/14/2017	---	---	---	< 26	62	NA	---	---	---	---
	B-18-7.5-111617	7.5	11/16/2017	---	---	---	59 N	250	NA	---	---	---	---
	B-18-10.0-111617	10.0	11/16/2017	---	---	---	660 N	730	NA	---	---	---	---
MTCA Method A Cleanup Levels for Soil[5]				**2,000**	**2,000**	**NA**	**2,000**	**2,000**	**NA**	**0.03**	**7**	**6**	**9**
MTCA Method B Cleanup Levels for Soil[6]				**NA**	**NA**	**3,699 | 3,739**	**NA**	**NA**	**3,699 | 3,739**	**NA**	**NA**	**NA**	**NA**

Table 1
Soil Analytical Results for TPH and BTEX
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Sample Identification	Sample Depth (feet)[1]	Sample Date	Analytical Results (milligrams per kilogram)									
				Sample Extract Treated with a Sulfuric Acid/Silica Gel Cleanup Procedure			Sample Extract Not Treated Prior to Analysis						
				DRO[2]	ORO[2]	Calculated DRO+ORO[3]	DRO[2]	ORO[2]	Calculated DRO+ORO[3]	Benzene[4]	Toluene[4]	Ethylbenzene[4]	Xylenes[4]
Hot-Mix Storage Area													
B-19	B-19-2.5-111417	2.5	11/14/2017	---	---	---	< 540	**6,200**	NA	---	---	---	---
	B-19-10.0-111617	10.0	11/16/2017	---	---	---	< 26	< 52	NA	---	---	---	---
B-30	B30-3.0	3.0	12/6/2019	---	---	---	< 26	< 52	NA	---	---	---	---
	B30-10.0	10.0	12/6/2019	---	---	---	< 26	< 52	NA	---	---	---	---
B-31	B31-3.0	3.0	12/6/2019	---	---	---	< 26	120	NA	---	---	---	---
	B31-10.0	10.0	12/6/2019	---	---	---	< 26	< 52	NA	---	---	---	---
B-32	B32-3.0	3.0	12/6/2019	---	---	---	< 27	< 53	NA	---	---	---	---
	B32-10.0	10.0	12/6/2019	---	---	---	< 26	< 52	NA	---	---	---	---
B-33	B33-3.0	3.0	12/6/2019	---	---	---	< 27	200	NA	---	---	---	---
	B33-10.0	10.0	12/6/2019	---	---	---	< 26	< 52	NA	---	---	---	---
B-34	B34-3.0	3.0	12/6/2019	---	---	---	49	280	NA	---	---	---	---
	B34-10.0	10.0	12/6/2019	---	---	---	< 26	< 52	NA	---	---	---	---
MTCA Method A Cleanup Levels for Soil[5]				**2,000**	**2,000**	**NA**	**2,000**	**2,000**	**NA**	**0.03**	**7**	**6**	**9**
MTCA Method B Cleanup Levels for Soil[6]				**NA**	**NA**	**3,699 | 3,739**	**NA**	**NA**	**3,699 | 3,739**	**NA**	**NA**	**NA**	**NA**

Table 1
Soil Analytical Results for TPH and BTEX
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Sample Identification	Sample Depth (feet)[1]	Sample Date	Analytical Results (milligrams per kilogram)									
				Sample Extract Treated with a Sulfuric Acid/Silica Gel Cleanup Procedure			Sample Extract Not Treated Prior to Analysis						
				DRO[2]	ORO[2]	Calculated DRO+ORO[3]	DRO[2]	ORO[2]	Calculated DRO+ORO[3]	Benzene[4]	Toluene[4]	Ethylbenzene[4]	Xylenes[4]
Former Recycled Stockpile Area													
MW-24T	MW-24T-12.5-111417	12.5	11/14/2017	200 N	800	1,000	180 N	1,100	1,280	---	---	---	---
B36	B36-5.0	5.0	12/19/2019	---	---	---	< 270	**2,300**	2,435	---	---	---	---
	B36-10.0	10.0	12/19/2019	---	---	---	< 27	170	184	---	---	---	---
	B36-13.5	13.5	12/19/2019	---	---	---	150 N	590	740	---	---	---	---
B37	B37-5.0	5.0	12/19/2019	---	---	---	< 27	110	124	---	---	---	---
	B37-10.0	10.0	12/19/2019	---	---	---	< 27	< 53	40	---	---	---	---
	B37-13.0	13.0	12/19/2019	---	---	---	< 27	< 54	41	---	---	---	---
B38	B38-5.0	5.0	12/19/2019	---	---	---	51 N	700	751	---	---	---	---
	B38-10.0	10.0	12/19/2019	---	---	---	< 35	200	218	---	---	---	---
	B38-13.0	13.0	12/19/2019	---	---	---	< 29	< 57	43	---	---	---	---
B39	B39-3.5	3.5	12/20/2019	---	---	---	< 29	220	235	---	---	---	---
B40	B40-4.0	4.0	12/20/2019	---	---	---	< 27	< 53	40	---	---	---	---
B41	B-41-5.0	5.0	1/3/2020	---	---	---	610 N	1,800	2,410	---	---	---	---
B42	B-42-5.0	5.0	1/3/2020	---	---	---	38 N	270	308	---	---	---	---
B43	B-43-5.0	5.0	1/3/2020	---	---	---	34 N	150	184	---	---	---	---
MTCA Method A Cleanup Levels for Soil[5]				**2,000**	**2,000**	**NA**	**2,000**	**2,000**	**NA**	**0.03**	**7**	**6**	**9**
MTCA Method B Cleanup Levels for Soil[6]				**NA**	**NA**	**3,699 | 3,739**	**NA**	**NA**	**3,699 | 3,739**	**NA**	**NA**	**NA**	**NA**

Table 1
Soil Analytical Results for TPH and BTEX
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

				Analytical Results (milligrams per kilogram)									
				Sample Extract Treated with a Sulfuric Acid/Silica Gel Cleanup Procedure			Sample Extract Not Treated Prior to Analysis						
Sample Location	**Sample Identification**	**Sample Depth (feet)[1]**	**Sample Date**	**DRO[2]**	**ORO[2]**	**Calculated DRO+ORO[3]**	**DRO[2]**	**ORO[2]**	**Calculated DRO+ORO[3]**	**Benzene[4]**	**Toluene[4]**	**Ethylbenzene[4]**	**Xylenes[4]**
Former Asphalt-Testing Laboratory Area													
B-13	B-13-2.5-111317	2.5	11/13/2017	---	---	---	---	---	---	< 0.00086	< 0.0043	< 0.00086	< 0.00256
	B-13-5.0-111617	5.0	11/16/2017	---	---	---	< 26	< 52	NA	---	---	---	---
	B-13-10.0-111617	10.0	11/16/2017	---	---	---	< 27	< 53	NA	< 0.00083	< 0.0041	< 0.00083	< 0.00253
	B-13-17.5-111617	17.5	11/16/2017	---	---	---	< 28	< 56	NA	< 0.00079	< 0.0039	< 0.00079	< 0.00239
B-14	B-14-2.5-111317	2.5	11/13/2017	---	---	---	< 26	< 52	NA	< 0.00093	< 0.0046	< 0.00093	< 0.00283
	B-14-10.0-111417	10.0	11/14/2017	---	---	---	< 26	< 53	NA	< 0.0010	< 0.0052	< 0.0010	< 0.0031
	B-14-17.5-111417	17.5	11/14/2017	---	---	---	< 27	< 55	NA	< 0.00090	< 0.0045	< 0.00090	< 0.0027
B-15	B-15-2.5-111317	2.5	11/13/2017	---	---	---	150	1,000	NA	< 0.00083	< 0.0041	< 0.00083	< 0.00253
	B-15-10.0-111517	10.0	11/15/2017	---	---	---	< 27	< 53	NA	< 0.00092	< 0.0046	< 0.00092	< 0.00272
	B-15-17.5-111517	17.5	11/15/2017	---	---	---	< 29	< 58	NA	< 0.00084	< 0.0042	< 0.00084	< 0.00254
B-16	B-16-3.0-111417	3.0	11/14/2017	---	---	---	< 250	**4,300**	NA	< 0.0011	< 0.0053	< 0.0011	< 0.0032
	B-16-10.0-111517	10.0	11/15/2017	---	---	---	< 27	< 54	NA	< 0.00074	< 0.0037	< 0.00074	< 0.00224
	B-16-17.5-111517	17.5	11/15/2017	---	---	---	< 28	< 56	NA	< 0.00083	< 0.0042	< 0.00083	< 0.00253
B-17	B-17-5.0-111517	5.0	11/15/2017	---	---	---	< 84	1,000	NA	< 0.00083	< 0.0041	< 0.00083	< 0.00253
	B-17-10.0-111517	10.0	11/15/2017	---	---	---	< 28	< 55	NA	< 0.00072	< 0.0036	< 0.00072	< 0.00212
	B-17-20.0-111517	20.0	11/15/2017	---	---	---	< 29	< 58	NA	< 0.00084	< 0.0042	< 0.00084	< 0.00254
MTCA Method A Cleanup Levels for Soil[5]				**2,000**	**2,000**	**NA**	**2,000**	**2,000**	**NA**	**0.03**	**7**	**6**	**9**
MTCA Method B Cleanup Levels for Soil[6]				**NA**	**NA**	**3,699 | 3,739**	**NA**	**NA**	**3,699 | 3,739**	**NA**	**NA**	**NA**	**NA**

P:\188 Woodworth Capital\188002 Woodworth Lakeview Remed\Reports\2021 Resp to ECY Op Letter\Tables\Tbls 1-9

Table 1
Soil Analytical Results for TPH and BTEX
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Sample Identification	Sample Depth (feet)[1]	Sample Date	Analytical Results (milligrams per kilogram)									
				Sample Extract Treated with a Sulfuric Acid/Silica Gel Cleanup Procedure			Sample Extract Not Treated Prior to Analysis						
				DRO[2]	ORO[2]	Calculated DRO+ORO[3]	DRO[2]	ORO[2]	Calculated DRO+ORO[3]	Benzene[4]	Toluene[4]	Ethylbenzene[4]	Xylenes[4]
B-20	B-20-2.5-111417	2.5	11/14/2017	---	---	---	---	---	---	< 0.00089	< 0.0044	< 0.00089	< 0.00269
	B-20-10.0-111517	10.0	11/15/2017	---	---	---	---	---	---	< 0.0011	< 0.0055	< 0.0011	< 0.0033
	B-20-17.5-111517	17.5	11/15/2017	---	---	---	---	---	---	< 0.00099	< 0.0049	< 0.00099	< 0.00299
B-24	B24-2.4	2.4	12/5/2019	---	---	---	< 26	550	NA	---	---	---	---
	B24-10.0	10.0	12/5/2019	---	---	---	< 27	< 53	NA	---	---	---	---
MW-36	MW-36-5.0	5.0	2/18/2021	---	---	---	< 26	< 51	NA	---	---	---	---
	MW-36-10.0	10.0	2/18/2021	---	---	---	< 26	< 52	NA	---	---	---	---
	MW-36-15.0	15.0	2/18/2021	---	---	---	180	< 56	NA	---	---	---	---
	MW-36-20.0	20.0	2/18/2021	---	---	---	< 27	< 55	NA	---	---	---	---
MTCA Method A Cleanup Levels for Soil[5]				**2,000**	**2,000**	**NA**	**2,000**	**2,000**	**NA**	**0.03**	**7**	**6**	**9**
MTCA Method B Cleanup Levels for Soil[6]				**NA**	**NA**	**3,699 | 3,739**	**NA**	**NA**	**3,699 | 3,739**	**NA**	**NA**	**NA**	**NA**

NOTES:
Results in **bold** denote concentrations exceeding applicable cleanup levels.
< denotes analyte not detected at or exceeding the laboratory reporting limit listed.
— denotes sample not analyzed.
[1]Depth in feet below ground surface.
[2]Analyzed by Northwest Method NWTPH-Dx.
[3]Analyzed by U.S. Environmental Protection Agency Method 8260C.
[4]Sum of DRO and ORO, using half the laboratory reporting limit for non-detect results.
[5]Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013.
[6]Calculated Site-specific MTCA Method B cleanup level for DRO and/or ORO in soil in the Equipment Parking Area (3,699 mg/kg) and the Former Recycled Stockpile Area (3,739 mg/kg) in accordance with Ecology Publication No. 01-09-073.

BTEX = benzene, toluene, ethylbenzene, and xylenes
DRO = total petroleum hydrocarbons (TPH) as diesel-range organics
mg/kg = milligrams per kilogram
N = hydrocarbons in the oil-range are impacting the diesel-range result
ORO = TPH as oil-range organics

Table 2
Soil Analytical Results for cPAHs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Sample Identification	Sample Depth (feet)[1]	Sample Date	Analytical Results (milligrams per kilogram)[2]							Total cPAHs TEC[3,4]
				Benzo(a)pyrene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(j,k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)Pyrene	
Equipment Parking Area											
B-10	B-10-5.0-111317	5.0	11/13/2017	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0052
Tack Tank Area											
B-11	B-11-5.0-111617	5.0	11/16/2017	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0054
Equipment Storage Carport Area											
B-12	B-12-9.0-111617	9.0	11/16/2017	0.16	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	**0.196**
B-25	B25-9.0	9.0	12/5/2019	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0054
B-26	B26-9.0	9.0	12/5/2019	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0053
B-27	B27-12.0	12.0	12/5/2019	0.082	0.042	0.068	< 0.036	0.049	< 0.036	0.080	**0.105**
	B27-15.0	15.0	12/5/2019	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0054
B-28	B28-9.0	9.0	12/6/2019	< 0.036	< 0.036	< 0.036	< 0.036	< 0.036	< 0.036	< 0.036	< 0.027
B-29	B29-9.0	9.0	12/6/2019	< 0.0072	< 0.0072	< 0.0072	< 0.0072	< 0.0072	< 0.0072	< 0.0072	< 0.0054
Asphalt Plant Area											
B-18	B-18-10.0-111617	10.0	11/16/2017	< 0.0074	0.0088	< 0.0074	< 0.0074	0.028	< 0.0074	< 0.0074	0.0063
Hot-Mix Storage Area											
B-30	B30-10.0	10.0	12/6/2019	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0052
B-32	B32-10.0	10.0	12/6/2019	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0052
B-34	B34-10.0	10.0	12/6/2019	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0052
MTCA Method A Cleanup Level for Soil[5]											**0.1**

Table 2
Soil Analytical Results for cPAHs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Sample Identification	Sample Depth (feet)[1]	Sample Date	Analytical Results (milligrams per kilogram)[2] Benzo(a)pyrene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(j,k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)Pyrene	Total cPAHs TEC[3,4]
Former Recycled Stockpile Area											
MW-24T	MW-24T-12.5-111417	12.5	11/14/2017	0.053	0.057	0.060	0.020	0.097	0.0099	0.034	0.072
Former Asphalt-Testing Laboratory Area											
B-13	B-13-5.0-111617	5.0	11/16/2017	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0069	< 0.0052
B-16	B-16-3.0-111417	3.0	11/14/2017	1.1	0.94	1.4	0.49	1.2	0.21	1.0	**1.516**
B-21	B21-3.0	3.0	12/5/2019	0.050	0.036	0.049	0.014	0.049	0.0092	0.044	0.066
B-22	B22-10.0	10.0	12/5/2019	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0071	< 0.0054
B-23	B23-3.0	3.0	12/5/2019	< 0.0069	< 0.0069	0.0078	< 0.0069	0.012	< 0.0069	0.0096	0.0063
B-24	B24-2.4	2.4	12/5/2019	0.063	0.060	0.073	0.024	0.061	0.0093	0.059	0.086
MTCA Method A Cleanup Level for Soil [5]											**0.1**

NOTES:

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

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

[1]Depth in feet below ground surface.

[2]Analyzed by U.S. Environmental Protection Agency Method 8270D/SIM.

[3]Total cPAHs derived using the total toxicity equivalency method in Section 708(8) of Chapter 173-340 of the Washington Administrative Code.

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

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

cPAHs = carcinogenic polycyclic aromatic hydrocarbons

TEC = toxic equivalent concentration

Table 3
Monitoring Well Elevation Data
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Well Identification	Water-Bearing Zone	Location	Casing Elevation (feet NAVD88)[1]	Monument Rim Elevation (feet NAVD88)[1]	Ground Elevation (feet NAVD88)[1]	Total Depth of Well (feet below top of casing)	Screen Interval (feet below ground surface)	Screen Interval (feet NAVD88)[1]	Measurement Date	Depth to Groundwater (feet below top of casing)	Groundwater Elevation (feet NAVD88)[1]
Shallow Water-Bearing Zone Monitoring Wells											
MW-1	Shallow	Miscellaneous	317.07	NA	312.99	52.95	33.9 to 48.9	264.1 to 279.1	1/6/2020	38.00	279.07
MW-3	Shallow	Former Asphalt Testing Laboratory Area	282.73	283.20	281.62	22.00	7.6 to 20.9	260.7 to 275.1	1/6/2020	10.31	272.42
									5/15/2020	10.35	272.38
MW-4	Shallow	Former Asphalt Testing Laboratory Area	284.19	284.74	283.41	24.73	10.5 to 24.0	259.5 to 273.7	1/6/2020	12.91	271.28
									5/15/2020	12.42	271.77
MW-5	Shallow	Miscellaneous	286.41	286.68	286.68	16.68	9.9 to 17.0	269.7 to 276.7	1/6/2020	8.89	277.52
MW-6	Shallow	Miscellaneous	277.80	278.38	278.38	10.88	4.5 to 11.5	266.9 to 273.9	1/6/2020	NM	—
									9/30/2020	9.15	268.65
									2/23/2021	8.31	269.49
			282.08	Casing extended 4.28 feet	278.38	15.16	4.5 to 11.5	266.9 to 273.9	4/22/2021	NM	—
MW-9	Shallow	Former Asphalt Testing Laboratory Area Arsenic and Lead Plume in Groundwater	Well Decommissioned 12/20/2019								
MW-9A	Shallow	Former Asphalt Testing Laboratory Area Arsenic and Lead Plume in Groundwater	304.05	304.39	304.39	32.0	22.0 to 32.0	272.4 to 282.4	2/23/2021	20.80	283.25
									7/22/2021	24.59	279.46
MW-9R	Shallow	Former Asphalt Testing Laboratory Area Arsenic and Lead Plume in Groundwater	281.17	281.71	281.71	25.80	16.3 to 26.3	255.4 to 265.4	1/6/2020	13.85	267.32
									6/22/2020	13.87	267.30
									9/29/2020	14.06	267.11
									12/18/2020	13.99	267.18
MW-10	Shallow	Miscellaneous	316.60	NA	314.60	41.81	32.8 to 39.8	274.8 to 281.8	1/6/2020	33.73	282.87
MW-11	Shallow	Equipment Storage Carport Area	290.55	291.16	291.16	12.11	8.5 to 15.5	278.4 to 285.4	1/6/2020	9.25	281.30
									5/15/2020	8.58	281.97
									6/10/2020	8.85	281.70
									6/22/2020	8.98	281.57
MW-12	Shallow	Arsenic and Lead Plume in Groundwater	316.73	317.30	317.30	48.15	43.7 to 48.7	268.6 to 273.6	1/6/2020	36.18	280.55
MW-13	Shallow	Equipment Parking Area	288.15	288.39	288.39	24.14	19.4 to 24.4	264.0 to 269.0	1/6/2020	18.70	269.45
									9/29/2020	18.01	270.14
									12/18/2020	18.35	269.80
MW-17A	Shallow	Miscellaneous	285.14	285.65	285.65	34.70	25.2 to 35.2	250.4 to 260.4	1/6/2020	NM	—
									5/15/2020	8.55	276.59
MW-24	Shallow	Former Recycled Stockpile Area	Well Destroyed - Under more than 20 feet of reclamation fill								
MW-26	Shallow	Former Asphalt Testing Laboratory Area	282.72	283.12	283.12	9.88	2.8 to 10.3	272.8 to 280.4	1/6/2020	8.52	274.20
MW-27	Shallow	Miscellaneous	315.39	315.79	315.79	41.75	27.2 to 42.2	273.6 to 288.6	1/6/2020	34.30	281.09
MW-30	Shallow	Arsenic and Lead Plume in Groundwater	307.08	307.62	307.62	37.65	28.2 to 38.2	269.4 to 279.4	1/6/2020	Dry	—
MW-31	Shallow	Arsenic and Lead Plume in Groundwater	328.31	328.61	328.61	55.90	46.2 to 56.2	272.4 to 282.4	1/6/2020	49.60	278.71
									6/22/2020	47.95	280.36
									9/30/2020	49.35	278.96
MW-32	Shallow	Arsenic and Lead Plume in Groundwater	316.41	316.76	316.76	44.62	35.0 to 45.0	271.8 to 281.8	1/6/2020	35.80	280.61
MW-33	Shallow	Arsenic and Lead Plume in Groundwater	333.29	332.75	332.75	50.70	40.2 to 50.2	282.6 to 292.6	1/6/2020	44.85	288.44
MW-34	Shallow	Arsenic and Lead Plume in Groundwater	333.39	332.89	332.89	50.00	39.5 to 49.5	283.4 to 293.4	1/6/2020	42.00	291.39
MW-35	Shallow	Arsenic and Lead Plume in Groundwater	328.21	328.92	328.92	60.00	45.7 to 60.7	268.2 to 283.2	1/10/2020	49.90	278.31
									9/30/2020	50.72	277.49
MW-36	Shallow	Former Asphalt Plant Area	284.51	284.14	284.14	16.50	6.5 to 16.5	267.6 to 277.6	2/23/2021	13.45	271.06

Table 3
Monitoring Well Elevation Data
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Well Identification	Water-Bearing Zone	Location	Casing Elevation (feet NAVD88)[1]	Monument Rim Elevation (feet NAVD88)[1]	Ground Elevation (feet NAVD88)[1]	Total Depth of Well (feet below top of casing)	Screen Interval (feet below ground surface)	Screen Interval (feet NAVD88)[1]	Measurement Date	Depth to Groundwater (feet below top of casing)	Groundwater Elevation (feet NAVD88)[1]
Deep Water-Bearing Zone Monitoring Wells											
MW-2	Deep	Former Asphalt Testing Laboratory Area	282.32	282.57	282.57	34.30	19.6 to 34.6	248.0 to 263.0	1/6/2020	29.53	252.79
MW-7	NA	NA	Well Destroyed in 2011- Under more than 20 feet of reclamation fill								
MW-8	NA	NA	Well Destroyed prior to 2008 - Under more than 20 feet of reclamation fill								
MW-9B	Deep	Miscellaneous	304.65	304.97	304.97	119.00	109.3 to 119.3	185.6 to 195.6	1/6/2020	43.70	260.95
									5/15/2020	57.37	247.28
									6/22/2020	59.92	244.73
									9/29/2020	60.54	244.11
									12/18/2020	59.02	245.63
			Well Decommissioned 02/10/2021								
MW-9D	Deep	Miscellaneous	303.99	304.41	304.41	119.00	109.0 to 119.0	185.4 to 195.4	2/24/2021	54.55	249.44
									7/22/2021	65.30	238.69
MW-10B	Deep	Miscellaneous	314.33	314.69	314.69	127.00	117.4 to 127.4	187.3 to 197.3	1/6/2020	59.95	254.38
MW-11B	Deep	Equipment Storage Carport Area	290.47	290.82	290.82	58.67	49.0 to 59.0	231.8 to 241.8	1/6/2020	26.85	263.62
MW-12B	Deep	Arsenic and Lead Plume in Groundwater	316.95	317.16	317.16	121.00	111.2 to 121.2	195.9 to 205.9	1/6/2020	69.97	246.98
MW-14	Deep	Former Asphalt Testing Laboratory Area	282.94	283.70	283.70	55.30	51.1 to 56.1	227.6 to 232.6	1/6/2020	29.63	253.31
MW-14C	Deep	Former Asphalt Testing Laboratory Area	283.41	283.77	283.77	77.22	67.6 to 77.6	206.2 to 216.2	1/6/2020	28.72	254.69
MW-15	Deep	Former Asphalt Testing Laboratory Area	281.79	282.08	282.08	48.24	43.5 to 48.5	233.5 to 238.5	1/6/2020	20.94	260.85
MW-16	Deep	Former Asphalt Testing Laboratory Area	Well Decommissioned 12/20/2019								
MW-16R	Deep	Former Asphalt Testing Laboratory Area	281.32	281.74	281.74	38.50	28.9 to 38.9	242.8 to 252.8	1/6/2020	29.95	251.37
									6/22/2020	27.90	253.42
									9/29/2020	30.25	251.07
									12/18/2020	29.90	251.42
MW-17	Deep	Miscellaneous	285.20	285.38	285.38	50.03	40.2 to 50.2	235.2 to 245.2	1/6/2020	NM	—
									5/15/2020	34.98	250.22
MW-18	Deep	Former Asphalt Testing Laboratory Area	281.09	281.51	281.51	59.89	50.3 to 60.3	221.2 to 231.2	1/9/2020	28.86	252.23
MW-19	Deep	Equipment Parking Area	287.88	288.13	288.13	55.78	46.0 to 56.0	232.1 to 242.1	1/6/2020	30.10	257.78
Deep Water-Bearing Zone Monitoring Wells (continued)											
MW-20	Deep	Former Asphalt Testing Laboratory Area	285.00	285.32	285.32	58.45	48.8 to 58.8	226.5 to 236.5	1/6/2020	28.74	256.26
									9/30/2020	32.11	252.89
MW-21	Deep	Former Asphalt Testing Laboratory Area	284.65	285.27	285.27	55.18	45.8 to 55.8	229.5 to 239.5	1/6/2020	NM	—
MW-22	Deep	Former Asphalt Testing Laboratory Area	282.11	282.56	282.56	54.86	45.3 to 55.3	227.2 to 237.2	1/6/2020	31.95	250.16
MW-23	Deep	Former Asphalt Testing Laboratory Area	281.37	281.66	281.66	56.50	46.8 to 56.8	224.9 to 234.9	1/6/2020	33.45	247.92
									6/22/2020	34.80	246.57
MW-25	Deep	Former Asphalt Testing Laboratory Area	282.85	283.17	283.17	35.54	20.9 to 35.9	247.3 to 262.3	1/6/2020	18.81	264.04
MW-28	Deep	Miscellaneous	315.47	315.88	315.88	58.23	48.6 to 58.6	257.2 to 267.2	1/6/2020	35.49	279.98
MW-29	Deep	Miscellaneous	308.63	309.05	309.05	69.35	59.8 to 69.8	239.3 to 249.3	1/6/2020	48.32	260.31

Table 3
Monitoring Well Elevation Data
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Well Identification	Water-Bearing Zone	Location	Casing Elevation (feet NAVD88)[1]	Monument Rim Elevation (feet NAVD88)[1]	Ground Elevation (feet NAVD88)[1]	Total Depth of Well (feet below top of casing)	Screen Interval (feet below ground surface)	Screen Interval (feet NAVD88)[1]	Measurement Date	Depth to Groundwater (feet below top of casing)	Groundwater Elevation (feet NAVD88)[1]
Air Sparge Wells											
AS-1	Deep	Former Asphalt Testing Laboratory Area	282.89	283.55	283.55	81.93	80.6 to 82.6	201.0 to 203.0	1/6/2020	30.15	252.74
AS-2	Deep		287.14	287.76	287.76	87.60	86.2 to 88.2	199.5 to 201.5	1/6/2020	30.78	256.36
AS-3	Deep		284.49	285.20	285.20	83.68	82.4 to 84.4	200.8 to 202.8	1/6/2020	28.43	256.06
AS-4	Deep		284.55	285.12	285.12	90.93	89.5 to 91.5	193.6 to 195.6	1/9/2020	27.10	257.45
AS-5	Deep		283.93	284.55	284.55	82.00	80.6 to 82.6	201.9 to 203.9	1/6/2020	NM	—
AS-6	Deep		284.84	285.55	285.55	94.00	92.7 to 94.7	190.8 to 192.8	1/6/2020	NM	—
AS-7	Deep		280.73	281.42	281.42	72.21	70.9 to 72.9	208.5 to 210.5	1/9/2020	31.04	249.69
AS-8	Deep		283.96	284.65	284.65	83.90	82.6 to 84.6	200.1 to 202.1	1/6/2020	29.28	254.68
AS-9	Deep		282.42	283.05	283.05	93.55	92.2 to 94.2	188.9 to 190.9	1/6/2020	NM	—
AS-10	Deep		280.77	281.42	281.42	113.45	112.1 to 114.1	167.3 to 169.3	1/6/2020	NM	—
Soil Vapor Extraction Wells											
SVE-1	Deep	Former Asphalt Testing Laboratory Area	283.31	~284.42	~284.42	35.25	24.4 to 36.4	248.1 to 260.1	1/6/2020	29.41	253.90
SVE-2	Deep		283.54	~283.99	~283.99	35.94	21.8 to 36.8	247.6 to 262.6	1/6/2020	28.35	255.19
SVE-3	Shallow		287.67	288.13	288.13	33.03	8.5 to 33.5	254.6 to 279.6	1/6/2020	14.81	272.86
SVE-4	Deep		284.66	285.13	285.13	34.14	23.6 to 34.6	250.5 to 261.5	1/6/2020	NM	—
SVE-5	Shallow to Deep		284.71	285.12	285.12	37.74	10.2 to 38.2	247.0 to 275.0	1/10/2020	30.02	254.69
									5/15/2020	30.41	254.30
									6/10/2020	30.85	253.86
									6/22/2020	30.98	253.73
									9/29/2020	33.59	251.12
									12/18/2020	31.79	252.92
			Well Decommissioned 02/19/2021								
SVE-6	Shallow		284.33	284.75	284.75	34.62	10.0 to 35.0	249.7 to 274.7	1/6/2020	11.71	272.62
SVE-7	Deep		285.02	285.52	285.52	34.10	22.6 to 34.6	250.9 to 262.9	1/6/2020	NM	—
SVE-8	Deep		280.98	281.53	281.53	34.10	18.7 to 34.7	246.9 to 262.9	1/6/2020	19.40	261.58
SVE-9	Deep		284.17	284.67	284.67	34.40	12.9 to 34.9	249.8 to 271.8	1/6/2020	NM	—
SVE-10	Shallow		282.53	283.06	283.06	38.45	6.0 to 39.0	244.1 to 277.1	1/6/2020	NM	—
SVE-11	Deep		280.99	281.44	281.44	47.54	22.0 to 48.0	233.4 to 259.4	1/6/2020	NM	—
SVE-12	Shallow		285.41	285.93	285.93	19.35	4.9 to 19.9	266.1 to 281.1	1/6/2020	12.66	272.75
									9/30/2020	15.03	270.38
Industrial Supply Well	Regional		NA	NA	285	187	107 to 129 167 to 187	178 to 156 118 to 98	12/4/2020	42.25	~243

NOTES:

--- denotes groundwater elevation not calculated.

[1] Feet North American Vertical Datum of 1988 (NAVD88).

Elevation converted from NGVD 1929 by adding 3.415 feet

Miscellaneous = not associated with any particular area of concern

NA = not available

NM = not measured

Table 4
Groundwater Analytical Results for TPH and BTEX
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]							
					Sample Extract Treated with a Sulfuric Acid/Silica Gel Cleanup Procedure		Sample Extract Not Treated Prior to Analysis					
					DRO[1]	ORO[1]	DRO[1]	ORO[1]	Benzene[2]	Toluene[2]	Ethylbenzene[2]	Xylenes[2]
Shallow Water-Bearing Zone Monitoring Wells												
MW-3	Shallow	MW-3-120617	12/6/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MW-5	Shallow	MW-5-120517	12/5/2017	Farallon	---	---	< 260	< 410	---	---	---	---
MW-6	Shallow	---	12/5/2017	Farallon	Well Not Sampled - Unable to locate							
	Shallow	MW-6-093020	9/30/2020	Farallon	---	---	**1,700**	**2,300**	---	---	---	---
	Shallow	MW-6	9/30/2020	BSE	---	---	**1,500**	**740**	---	---	---	---
	Shallow	MW-6-022321	2/23/2021	Farallon	---	---	470	**830**	---	---	---	---
MW-9R	Shallow	MW-9R-010720	1/7/2020	Farallon	---	---	290	**780**	---	---	---	---
	Shallow	MW-9R-092920	9/29/2020	Farallon	---	---	**630**	**1,700**	---	---	---	---
	Shallow	MW-9R	9/29/2020	BSE	---	---	470	460	---	---	---	---
	Shallow	MW-9R-121820	12/18/2020	Farallon	---	---	**540**	**1,600**	< 0.20	< 1.0	< 0.20	< 0.60
MW-9A	Shallow	MW-9A-072221	7/22/2021	Farallon	---	---	< 210	< 210	---	---	---	---
MW-11	Shallow	---	12/5/2017	Farallon	Well Not Sampled - Unable to locate							
	Shallow	MW-11-011020	1/10/2020	Farallon	---	---	**1,400**	**1,500**	---	---	---	---
	Shallow	MW-11-051520	5/15/2020	Farallon	---	---	**1,100**	**1,700**	---	---	---	---
	Shallow	MW-11	6/10/2020	BSE	---	---	< 100	< 250	---	---	---	---
	Shallow	MW-11	6/22/2020	BSE	---	---	< 100	< 250	---	---	---	---
	Shallow	---	9/29/2020	Farallon	Insufficient water in well casing to sample							
MW-13	Shallow	MW-13-120517	12/5/2017	Farallon	---	---	310	**580**	---	---	---	---
	Shallow	MW-13-010720	1/7/2020	Farallon	---	---	240	**560**	---	---	---	---
	Shallow	MW-13-092920	9/29/2020	Farallon	---	---	500	**1,300**	---	---	---	---
	Shallow	MW-13	9/29/2020	BSE	---	---	**1,800**	**1,300**	---	---	---	---
	Shallow	MW-13-121820	12/18/2020	Farallon	---	---	310	**650**	< 0.20	< 1.0	< 0.20	< 0.60
MW-24	Shallow	---	12/5/2017	Farallon	Well Destroyed - Under 20 feet of reclamation fill							
MW-26	Shallow	MW-26-120617	12/6/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MW-36	Shallow	MW-36-022321	2/23/2021	Farallon	---	---	**1,100**	560	---	---	---	---
SVE-3	Shallow	SVE-3-120517	12/5/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
SVE-5	Shallow	SVE-5-120817	12/8/2017	Farallon	---	---	330	**680**	---	---	---	---
	Shallow	SVE-5-011020	1/10/2020	Farallon	---	---	**16,000**	**2,500** M	---	---	---	---
	Shallow	SVE-5-051520	5/15/2020	Farallon	---	---	**13,000**	**2,800** M	---	---	---	---
	Shallow	SVE-5	6/10/2020	BSE	---	---	**2,100**	< 250	---	---	---	---
	Shallow	SVE-5	6/22/2020	BSE	---	---	**1,600**	< 250	---	---	---	---
	Shallow	SVE-5-092920	9/29/2020	Farallon	---	---	**1,300**	**1,800**	---	---	---	---
	Shallow	SVE-5	9/29/2020	BSE	---	---	**1,400**	480	---	---	---	---
	Shallow	SVE-5-121820	12/18/2020	Farallon	---	---	**1,400**	**1,100**	< 0.20	< 1.0	< 0.20	< 0.60
	Shallow	Well Decommissioned 02/19/2021										
SVE-6	Shallow	SVE-6-120817	12/8/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
SVE-12	Shallow	SVE-12-120817	12/8/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MTCA Method A Cleanup Level for Groundwater[3]					**500**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**

Table 4
Groundwater Analytical Results for TPH and BTEX
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]							
					Sample Extract Treated with a Sulfuric Acid/Silica Gel Cleanup Procedure		Sample Extract Not Treated Prior to Analysis					
					DRO[1]	ORO[1]	DRO[1]	ORO[1]	Benzene[2]	Toluene[2]	Ethylbenzene[2]	Xylenes[2]
Reconnaissance Groundwater Sample from Shallow Water-Bearing Zone												
MW-24T	Shallow	MW-24T-111617	11/16/2017	Farallon	< 280	< 450	**970 N**	**3,000**	---	---	---	---
B36	Shallow	B36-121919-GW	12/19/2019	Farallon	---	---	**2,700**	**3,300**	---	---	---	---
Deep Water-Bearing Zone												
MW-2	Deep	MW-2-120617	12/6/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MW-9D	Deep	MW-9D-072221	7/22/2021	Farallon	---	---	< 210	< 210	---	---	---	---
MW-10B	Deep	MW-10B-120717	12/7/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MW-11B	Deep	MW-11B-120517	12/5/2017	Farallon	---	---	< 260	< 410	---	---	---	---
MW-14	Deep	MW-14-120817	12/8/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MW-14C	Deep	MW-14C-120817	12/8/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MW-15	Deep	MW-15-120617	12/6/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MW-16	Deep	MW-16-120617	12/6/2017	Farallon	---	---	< 260	**570**[4]	< 0.20	< 1.0	< 0.20	< 0.60
	Deep	Well Decommissioned 12/20/2019										
MW-16R	Deep	MW-16R-010820	1/8/2020	Farallon	---	---	460	**580**	---	---	---	---
	Deep	MW-16R-092920	9/29/2020	Farallon	---	---	400	**1,300**	---	---	---	---
	Deep	MW-16R	9/29/2020	BSE	---	---	290	450	---	---	---	---
	Deep	MW-16R-121820	12/18/2020	Farallon	---	---	310	**630**	< 0.20	< 1.0	< 0.20	< 0.60
MW-18	Deep	MW-18-120617	12/6/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MW-19	Deep	MW-19-120517	12/5/2017	Farallon	---	---	< 250	< 410	< 0.20	< 1.0	< 0.20	< 0.60
MW-20	Deep	MW-20-120717	12/7/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MW-21	Deep	MW-21-120717	12/7/2017	Farallon	---	---	< 250	< 410	< 0.20	< 1.0	< 0.20	< 0.60
MW-23	Deep	MW-23-120717	12/7/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MW-25	Deep	MW-25-120617	12/6/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MW-28	Deep	MW-28-120717	12/7/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MW-29	Deep	MW-29-120717	12/7/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
AS-1	Deep	AS-1-120817	12/8/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
SVE-1	Deep	SVE-1-120717	12/7/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
SVE-2	Deep	SVE-2-120517	12/5/2017	Farallon	---	---	< 260	< 410	< 0.20	< 1.0	< 0.20	< 0.60
SVE-7	Deep	---	12/5/2017	Farallon	Well Not Sampled - Inaccessible due to gravel stockpile over well							
SVE-9	Deep	SVE-9-120717	12/7/2017	Farallon	---	---	< 260	< 410	---	---	---	---
Regional Water-Bearing Zone												
Industrial Well	Regional	INDUSTRIAL_WELL-120717	12/7/2017	Farallon	---	---	---	---	< 0.20	< 1.0	< 0.20	< 0.60
MTCA Method A Cleanup Level for Groundwater[3]					**500**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**

NOTES:

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

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

— denotes sample not analyzed.

[1]Analyzed by Northwest Method NWTPH-Dx.

[2]Analyzed by U.S. Environmental Protection Agency Method 8260C.

[3]Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as amended 2013.

[4]During the December 2017 groundwater monitoring and sampling event, the monument cover for monitoring well MW-16 was found to be destroyed and the internal cap/casing damaged, impacting the integrity of the monitoring well and results.

BSE = BlueStone Environmental, LLC
BTEX = benzene, toluene, ethylbenzene, and xylenes
DRO = total petroleum hydrocarbons (TPH) as diesel-range organics
Farallon = Farallon Consulting, L.L.C.
M = hydrocarbons in the diesel-range are impacting the oil-range result
N = hydrocarbons in the oil-range are impacting the diesel-range result
ORO = TPH as oil-range organics

Table 5
Groundwater Analytical Results for PAHs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Date	Sample Identification	Analytical Results (micrograms per liter)[1]																			
				Non-Carcinogenic PAHs												Carcinogenic PAHs							
				Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Naphthalenes[2]	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)Perylene	Fluoranthene	Fluorene	Phenanthrene	Pyrene	Benzo(a)Pyrene	Benzo(a)Anthracene	Benzo(b)Fluoranthene	Benzo(j,k)Fluoranthene	Chrysene	Dibenzo(a,h)Anthracene	Indeno(1,2,3-cd)Pyrene	Total cPAHs TEC[3,4]
Shallow Water-Bearing Zone																							
MW-3	Shallow	12/6/2017	MW-3-120617	<1.0	---	---	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-11	Shallow	1/10/2020	MW-11-011020	<0.11	<0.11	<0.11	<0.33	<0.54	<0.54	<0.11	<0.011	<0.11	<0.11	<0.11	<0.11	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.0083
MW-13	Shallow	1/7/2020	MW-13-010720	<0.097	<0.097	<0.097	<0.291	<0.097	<0.097	<0.097	0.027	<0.097	<0.097	<0.097	<0.097	0.055	0.055	0.043	0.019	0.052	<0.0097	0.027	0.07
	Shallow	12/18/2020	MW-13-121820	<0.095	<0.095	<0.095	<0.285	<0.095	<0.095	<0.095	<0.0095	<0.095	<0.095	<0.095	<0.095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0072
MW-9R	Shallow	12/18/2020	MW-9R-121820	<0.095	<0.095	<0.095	<0.285	<0.095	<0.095	<0.095	<0.0095	<0.095	<0.095	<0.095	<0.095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0072
MW-26	Shallow	12/6/2017	MW-26-120617	<1.0	---	---	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SVE-3	Shallow	12/5/2017	SVE-3-120517	<1.0	---	---	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SVE-5	Shallow	1/10/2020	SVE-5-011020	0.25	0.68	0.39	1.32	<0.36	<0.36	<0.073	<0.0073	<0.073	<0.15	0.081	0.29	<0.0073	<0.0073	<0.0073	<0.0073	<0.015	<0.0073	<0.0073	<0.0056
	Shallow	12/18/2020	SVE-5-121820	<0.10	<0.10	<0.10	<0.30	<0.10	<0.10	<0.10	<0.010	<0.10	<0.10	<0.10	<0.15	<0.010	<0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0078
	Shallow	Well Decommissioned 02/19/2021																					
SVE-6	Shallow	12/8/2017	SVE-6-120817	<1.3	---	---	<1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SVE-12	Shallow	12/8/2017	SVE-12-120817	<1.3	---	---	<1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Deep Water-Bearing Zone																							
MW-2	Deep	12/6/2017	MW-2-120617	<1.0	---	---	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-10B	Deep	12/7/2017	MW-10B-120717	<1.3	---	---	<1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-14	Deep	12/8/2017	MW-14-120817	<1.3	---	---	<1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-14C	Deep	12/8/2017	MW-14C-120817	<1.3	---	---	<1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-15	Deep	12/6/2017	MW-15-120617	<1.0	---	---	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-16	Deep	12/6/2017	MW-16-120617	<1.0	---	---	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Deep	Well Decommissioned 12/20/2019																					
MW-16R	Deep	12/18/2020	MW-16R-121820	<0.10	<0.10	<0.10	<0.30	<0.10	<0.10	<0.10	<0.010	<0.10	<0.10	<0.10	<0.10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0076
MW-18	Deep	12/6/2017	MW-18-120617	<1.0	---	---	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-19	Deep	12/5/2017	MW-19-120517	<1.0	---	---	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-20	Deep	12/7/2017	MW-20-120717	<1.3	---	---	<1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-21	Deep	12/7/2017	MW-21-120717	<1.3	---	---	<1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MTCA Method A Cleanup Level for Groundwater[5]							**160**	**960[6]**	**NE**	**4,800[6]**	**NE**	**640[6]**	**640[6]**	**NE**	**480[6]**								**0.1**

Table 5
Groundwater Analytical Results for PAHs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Date	Sample Identification	Analytical Results (micrograms per liter)[1]																			
				Non-Carcinogenic PAHs												Carcinogenic PAHs							
				Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Naphthalenes[2]	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)Perylene	Fluoranthene	Fluorene	Phenanthrene	Pyrene	Benzo(a)Pyrene	Benzo(a)Anthracene	Benzo(b)Fluoranthene	Benzo(j,k)Fluoranthene	Chrysene	Dibenzo(a,h)Anthracene	Indeno(1,2,3-cd)Pyrene	Total cPAHs TEC[3,4]
MW-23	Deep	12/7/2017	MW-23-120717	<1.3	---	---	<1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-25	Deep	12/6/2017	MW-25-120617	<1.0	---	---	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-28	Deep	12/7/2017	MW-28-120717	<1.3	---	---	<1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-29	Deep	12/7/2017	MW-29-120717	<1.3	---	---	<1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
AS-1	Deep	12/8/2017	AS-1-120817	<1.3	---	---	<1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SVE-1	Deep	12/7/2017	SVE-1-120717	<1.3	---	---	<1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SVE-2	Deep	12/5/2017	SVE-2-120517	<1.0	---	---	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Regional Water-Bearing Zone																							
WATER-WELL	Regional	12/7/2017	INDUSTRIAL_WELL-120717	<1.3	---	---	<1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MTCA Method A Cleanup Level for Groundwater[5]							**160**	**960**[6]	**NE**	**4,800**[6]	**NE**	**640**[6]	**640**[6]	**NE**	**480**[6]								**0.1**

NOTES:

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

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

[1]Analyzed by U.S. Environmental Protection Agency (EPA) Method 8270E/SIM. Samples with only naphthalene results were analyzed by EPA Method 8260.

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

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

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

[5]Washington 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.

[6]MTCA 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

cPAHs = carcinogenic polycyclic aromatic hydrocarbons
NE = not established
PAHs = polycyclic aromatic hydrocarbons
TEC = toxic equivalent concentration

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
Shallow Water-Bearing Zone														
MW-1	Shallow	MW1-082008	8/20/2008	Farallon	<0.20	0.32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW1-020409	2/4/2009	Farallon	<0.20	0.51	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-1-041510	4/15/2010	Farallon	<0.20	0.28	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW1-041510-GEO	4/15/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-3	Shallow	MW3-082008	8/20/2008	Farallon	<0.20	4.3	<0.20	<0.20	<0.20	<0.20	0.66	<0.20	<0.20	1.2
		MW3-020609	2/6/2009	Farallon	<0.20	3.4	<0.20	<0.20	<0.20	<0.20	0.43	<0.20	<0.20	0.71
		Dup1-020609	2/6/2009	Farallon	<0.20	3.4	<0.20	<0.20	<0.20	<0.20	0.40	<0.20	<0.20	0.69
		MW3-041410	4/14/2010	Farallon	<0.20	2.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.56
		MW3-041410-GEO	4/14/2010	GeoEngineers	<0.50	2.2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.53
		MW-3-012916	1/29/2016	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-3-120617	12/6/2017	Farallon	<0.20	1.4	<0.20	<0.20	<0.20	<0.20	0.28	<0.20	<0.20	<0.20
		MW-3-010720	1/7/2020	Farallon	<0.20	1.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MW-4	Shallow	MW4-082008	8/20/2008	Farallon	<0.20	2.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW4-020609	2/6/2009	Farallon	<0.20	2.3	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW4-041410	4/14/2010	Farallon	<0.20	1.8	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW4-041410-GEO	4/14/2010	GeoEngineers	<0.50	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-5	Shallow	MW5-081908	8/19/2008	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW5-020309	2/3/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-5-041510	4/15/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW5-041510-GEO	4/15/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16[3]**	**160[3]**	**400[3]**	**0.2**	**200**	**7.68[3]**	**5**	**1.41[3]**

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
MW-6	Shallow	MW6-081908	8/19/2008	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW6-020309	2/3/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-6-041510	4/15/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW6-041510-GEO	4/15/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-9	Shallow	MW9-082008	8/20/2008	Farallon	<0.20	2.1	<0.20	<0.20	<0.20	<0.20	0.30	<0.20	<0.20	0.41
		MW9-020309	2/3/2009	Farallon	<0.20	2.4	<0.20	<0.20	<0.20	<0.20	0.31	<0.20	<0.20	0.45
		MW-9-041510	4/15/2010	Farallon	<0.20	2.2	<0.20	<0.20	<0.20	<0.20	0.28	<0.20	<0.20	0.42
		MW9-041510-GEO	4/15/2010	GeoEngineers	<0.50	2.6	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50
		MW-9-012816	1/28/2016	Farallon	<0.20	1.7	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.22
		Well Decommissioned 12/20/2019												
MW-9R	Shallow	MW-9R-010720	1/7/2020	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MW-10	Shallow	MW10-091708	9/17/2008	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW10-020409	2/4/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-10-041510	4/15/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW10-041510-GEO	4/15/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-11	Shallow	MW11-081908	8/19/2008	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW11-020609	2/6/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW11-041310-GEO	4/13/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-12	Shallow	MW12-020609	2/6/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW12-041310-GEO	4/13/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-13	Shallow	MW13-101408	10/14/2008	Farallon	<0.20	<0.20	<0.20	<0.20	0.26	<0.20	0.58	0.73	0.41	<0.20
		MW13-020609	2/6/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.68	0.83	0.22	<0.20
		MW13-041310-GEO	4/13/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.94	1.1	<0.50	<0.50
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16[3]**	**160[3]**	**400[3]**	**0.2**	**200**	**7.68[3]**	**5**	**1.41[3]**

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
MW-17A	Shallow	MW17A-020409	2/4/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW17A-041410	4/14/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW17A-041410-GEO	4/14/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-26	Shallow	MW-26-122112	12/21/2012	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-26-120617	12/6/2017	Farallon	<0.20	0.71	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-26-010720	1/7/2020	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MW-27	Shallow	MW-27-011513	1/15/2013	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
SVE-3	Shallow	SVE-3-051112	5/11/2012	Farallon	<0.20	0.93	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**9.8**
		SVE-3-061312	6/13/2012	Farallon	<0.20	1.2	<0.20	<0.20	<0.20	<0.20	0.32	<0.20	<0.20	**12**
		SVE-3-080912	8/9/2012	Farallon	<0.20	1.4	<0.20	<0.20	<0.20	<0.20	0.27	<0.20	<0.20	**14**
		SVE-3-012916	1/29/2016	Farallon	<0.20	2.2	<0.20	<0.20	<0.20	<0.20	0.32	<0.20	<0.20	**1.9**
		SVE-3-120517	12/5/2017	Farallon	<0.20	3.5	<0.20	<0.20	<0.20	<0.20	0.80	<0.20	<0.20	**1.9**
		SVE-3-010720	1/7/2020	Farallon	<0.20	3.5	<0.20	<0.20	0.21	<0.20	1.1	<0.20	<0.20	**1.7**
SVE-6	Shallow	SVE-6-011012	1/10/2012	Farallon	<0.20	**5.4**	<0.20	<0.20	0.24	<0.20	0.66	<0.20	<0.20	**8.2**
		SVE-6-021312	2/13/2012	Farallon	<0.20	**5.3**	<0.20	<0.20	<0.20	<0.20	0.56	<0.20	<0.20	**6.3**
		SVE-6-012816	1/28/2016	Farallon	0.21	**5.2**	<0.20	<0.20	0.24	<0.20	0.81	<0.20	<0.20	0.95
		SVE-6-120817	12/8/2017	Farallon	<0.20	2.2	<0.20	<0.20	<0.20	<0.20	0.25	<0.20	<0.20	0.35
		SVE-6-010720	1/7/2020	Farallon	<0.20	4.0	<0.20	<0.20	<0.20	<0.20	0.53	<0.20	<0.20	0.42
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16**[3]	**160**[3]	**400**[3]	**0.2**	**200**	**7.68**[3]	**5**	**1.41**[3]

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
SVE-12	Shallow	SVE-12-041310	4/13/2010	Farallon	0.37	**10**	<0.20	<0.20	0.47	<0.20	4.7	<0.20	<0.20	0.32
		SVE12-041310-GEO	4/13/2010	GeoEngineers	<0.50	**15**	<0.50	<0.50	0.70	<0.50	7.0	<0.50	<0.50	<0.50
		SVE-12-110911	11/9/2011	Farallon	0.24	**11**	<0.20	<0.20	4.4	<0.20	5.1	<0.20	<0.20	**2.7**
		SVE-12-080912	8/9/2012	Farallon	0.26	**12**	<0.20	<0.20	5.9	<0.20	5.5	<0.20	<0.20	0.43
		SVE-12-061213	6/12/2013	Farallon	<0.20	**6.4**	<0.20	<0.20	4.1	<0.20	3.6	<0.20	<0.20	0.36
		SVE-12-012916	1/29/2016	Farallon	<0.20	1.7	<0.20	<0.20	1.2	<0.20	2.3	<0.20	<0.20	<0.20
		SVE-12-120817	12/8/2017	Farallon	<0.20	4.2	<0.20	<0.20	4.3	<0.20	5.8	0.48	<0.20	0.21
		SVE-12-010720	1/7/2020	Farallon	<0.20	1.7	<0.20	<0.20	0.65	<0.20	2.2	<0.20	<0.20	<0.20
		SVE-12-093020	9/30/2020	Farallon	<0.20	**12**	<0.20	<0.20	15	<0.20	18	2.9	<0.20	0.30
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16[3]**	**160[3]**	**400[3]**	**0.2**	**200**	**7.68[3]**	**5**	**1.41[3]**

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
Deep Water-Bearing Zone														
MW-2	Deep	MW2-082008	8/20/2008	Farallon	<0.20	**14**	<0.20	<0.20	<0.20	<0.20	2.1	<0.20	<0.20	**2.2**
		MW2-021209	2/12/2009	Farallon	<0.20	**14**	<0.20	<0.20	<0.20	<0.20	1.2	<0.20	<0.20	**2.0**
		Dup2-021209	2/12/2009	Farallon	<0.20	**14**	<0.20	<0.20	<0.20	<0.20	1.2	<0.20	<0.20	**1.9**
		MW2-100109	10/1/2009	Farallon	<0.20	**9.2**	<0.20	<0.20	<0.20	<0.20	0.96	<0.20	<0.20	1.4
		MW-2-041310	4/13/2010	Farallon	<0.20	**5.1**	<0.20	<0.20	<0.20	<0.20	0.57	<0.20	<0.20	1.4
		MW2-041310-GEO	4/13/2010	GeoEngineers	<0.50	**7.3**	<0.50	<0.50	<0.50	<0.50	0.85	<0.50	<0.50	**2.0**
		MW-2-110410	11/4/2010	Farallon	<0.20	**10**	<0.20	<0.20	<0.20	<0.20	0.97	<0.20	<0.20	**2.0**
		MW-2-020111	2/1/2011	Farallon	<0.20	**13**	<0.20	<0.20	0.54	<0.20	1.8	<0.20	<0.20	0.76
		MW-2-050411	5/4/2011	Farallon	<0.20	**12**	<0.20	<0.20	0.51	<0.20	1.5	<0.20	<0.20	0.58
		MW-2-080211	8/2/2011	Farallon	<0.20	**11**	<0.20	<0.20	0.45	<0.20	1.5	<0.20	<0.20	0.54
		MW-2-1108211	11/8/2011	Farallon	<0.20	**12**	<0.20	<0.20	0.32	<0.20	1.5	<0.20	<0.20	0.92
		MW-2-011012	1/10/2012	Farallon	<0.20	**11**	<0.20	<0.20	0.44	<0.20	1.4	<0.20	<0.20	0.70
		MW-2-021312	2/13/2012	Farallon	<0.20	**11**	<0.20	<0.20	0.39	<0.20	1.5	<0.20	<0.20	0.70
		MW-2	4/10/2012	Farallon	<0.20	**6.7**	<0.20	<0.20	0.34	<0.20	0.80	<0.20	<0.20	0.30
		MW-2-061213	6/12/2013	Farallon	<0.20	4.6	<0.20	<0.20	<0.20	<0.20	0.46	<0.20	<0.20	0.40
		MW-2-012816	1/28/2016	Farallon	<0.20	**7.5**	<0.20	<0.20	<0.20	<0.20	0.66	<0.20	<0.20	**2.0**
		MW-2-120617	12/6/2017	Farallon	<0.20	**12**	<0.20	<0.20	<0.20	<0.20	0.90	<0.20	<0.20	**2.0**
		MW-2-010820	1/8/2020	Farallon	<0.20	**13**	<0.20	<0.20	<0.20	<0.20	0.79	<0.20	<0.20	**1.5**
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16[3]**	**160[3]**	**400[3]**	**0.2**	**200**	**7.68[3]**	**5**	**1.41[3]**

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1] Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
MW-7	Deep	MW7-082008	8/20/2008	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW7-020309	2/3/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-7-041510	4/15/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW7-041510-GEO	4/15/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-9B	Deep	MW9B-021209	2/12/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.21
		MW-9B-041410	1/14/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW9B-041410-GEO	1/14/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		MW-9B-010720	1/7/2020	Farallon	1.1	0.21	0.58	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-9B-092920	9/29/2020	Farallon	1.3	<0.20	0.49	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		Well Decommissioned 02/10/2021												
MW-10B	Deep	MW10B-020409	2/4/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-10B-041510	4/15/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW10B-041510-GEO	4/15/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		MW-10B-120717	12/7/2017	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MW-11B	Deep	MW11B-020609	2/6/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-11B-041410	4/14/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW11B-041410-GEO	4/14/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-12B	Deep	MW12B-021209	2/12/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-12B-041510	4/15/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW12B-041510-GEO	4/15/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16[3]**	**160[3]**	**400[3]**	**0.2**	**200**	**7.68[3]**	**5**	**1.41[3]**

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
MW-14	Deep	MW-14-101308	10/13/2008	Farallon	<0.20	**24**	<0.20	<0.20	3.5	<0.20	11	0.43	<0.20	0.33
		MW-14-021209	2/12/2009	Farallon	<0.20	**22**	<0.20	<0.20	2.0	<0.20	7.5	0.33	<0.20	0.29
		MW-14-100109	10/1/2009	Farallon	<0.20	**23**	<0.20	<0.20	2.2	<0.20	7.5	0.42	<0.20	0.30
		MW-14-041310	4/13/2010	Farallon	<0.20	**22**	<0.20	<0.20	2.2	<0.20	6.7	0.36	<0.20	0.26
		MW-14-041310-GEO	4/13/2010	GeoEngineers	<0.50	**32**	<0.50	<0.50	3.2	<0.50	10	<0.50	<0.50	<0.50
		MW-14-110410	11/4/2010	Farallon	<0.20	**29**	<0.20	<0.20	3.4	<0.20	9.3	0.43	<0.20	0.60
		MW-14-110410-X	11/4/2010	Farallon	0.21	**30**	<0.20	<0.20	3.7	<0.20	10	0.43	<0.20	0.57
		MW-14-020111	2/1/2011	Farallon	<0.20	**24**	<0.20	<0.20	2.7	<0.20	6.8	0.33	<0.20	0.38
		MW-14-050411	5/4/2011	Farallon	<0.20	**30**	<0.20	<0.20	3.7	<0.20	8.8	0.41	<0.20	0.48
		MW-14-080311	8/3/2011	Farallon	<0.20	**25**	<0.20	<0.20	2.4	<0.20	6.8	0.33	<0.20	0.41
		MW-14-110811	11/8/2011	Farallon	<0.20	**26**	<0.20	<0.20	2.2	<0.20	6.0	0.30	<0.20	0.43
		MW-14-011012	1/10/2012	Farallon	<0.20	**24**	<0.20	<0.20	2.2	<0.20	5.9	0.34	<0.20	0.59
		MW-14-021312	2/13/2012	Farallon	<0.20	**11**	<0.20	<0.20	1.6	<0.20	3.4	<0.20	<0.20	<0.20
		MW-14-061213	6/12/2013	Farallon	<0.20	**10**	<0.20	<0.20	0.75	<0.20	2.3	<0.20	<0.20	**3.0**
		MW-14-012816	1/28/2016	Farallon	<0.20	**11**	<0.20	<0.20	1.3	<0.20	4.2	<0.20	<0.20	0.97
		MW-14-120817	12/8/2017	Farallon	<0.20	**12**	<0.20	<0.20	1.6	<0.20	5.1	<0.20	<0.20	0.61
		MW-14-010920	1/9/2020	Farallon	<0.20	**7.9**	<0.20	<0.20	1.6	<0.20	3.8	<0.20	<0.20	0.45
MW-14C	Deep	MW-14C-020509	2/5/2009	Farallon	<0.20	<0.20	<0.20	<0.20	0.20	<0.20	1.0	<0.20	<0.20	<0.20
		MW-14C-120817	12/8/2017	Farallon	<0.20	0.80	<0.20	<0.20	<0.20	<0.20	0.27	<0.20	<0.20	<0.20
		MW-14C-010720	1/7/2020	Farallon	<0.20	1.2	<0.20	<0.20	<0.20	<0.20	0.56	<0.20	<0.20	<0.20
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16**[3]	**160**[3]	**400**[3]	**0.2**	**200**	**7.68**[3]	**5**	**1.41**[3]

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
MW-15	Deep	MW15-101308	10/13/2008	Farallon	<0.20	2.8	0.45	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW15-020409	2/4/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-15-041210	4/12/2010	Farallon	<0.20	2.2	0.28	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW15-041210-GEO	4/12/2010	GeoEngineers	<0.50	3.3	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		MW-15-110310	11/3/2010	Farallon	<0.20	2.2	0.33	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-15-020111	2/1/2011	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-15-050411	5/4/2011	Farallon	<0.20	0.46	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-15-080211	8/2/2011	Farallon	<0.20	3.5	0.45	0.26	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-15-110911	11/9/2011	Farallon	<0.20	3.5	0.41	0.21	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-15-120617	12/6/2017	Farallon	<0.20	3.2	0.41	0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-15-011020	1/10/2020	Farallon	<0.20	3.1	0.30	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MW-16	Deep	MW16-101308	10/13/2008	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW16-020309	2/3/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.26	<0.20	<0.20	<0.20
		MW-16-041210	4/12/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW16-041210-GEO	4/12/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		MW-16-110410	11/4/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-16-020111	2/1/2011	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-16-050311	5/3/2011	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-16-080211	8/2/2011	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	<0.20	<0.20	<0.20
		MW-16-110911	11/9/2011	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.22	<0.20	<0.20	<0.20
		MW-16-120617	12/6/2017	Farallon	<0.20	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		Well Decommissioned 12/20/2019												
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16[3]**	**160[3]**	**400[3]**	**0.2**	**200**	**7.68[3]**	**5**	**1.41[3]**

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
MW-16R	Deep	MW-16R-010820	1/8/2020	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.27	<0.20	<0.20	<0.20
MW-17	Deep	MW17-101308	10/13/2008	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW17-020409	2/4/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW17-041410	4/14/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW17-041410-GEO	4/14/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-18	Deep	MW18-020509	2/5/2009	Farallon	<0.20	<0.20	<0.20	<0.20	2.6	<0.20	9.9	0.63	<0.20	<0.20
		MW18-100109	10/1/2009	Farallon	<0.20	<0.20	<0.20	<0.20	4.3	<0.20	15	0.83	<0.20	<0.20
		MW-18-041210	4/12/2010	Farallon	<0.20	<0.20	<0.20	<0.20	4.0	<0.20	12	0.75	<0.20	<0.20
		MW18-041210-GEO	4/12/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	6.0	<0.50	19	1.2	<0.50	<0.50
		MW-18-110310	11/3/2010	Farallon	<0.20	<0.20	<0.20	<0.20	2.2	<0.20	6.9	0.75	<0.20	<0.20
		MW-18-020111	2/1/2011	Farallon	<0.20	<0.20	<0.20	<0.20	2.2	<0.20	6.7	0.69	<0.20	<0.20
		MW-18-050411	5/4/2011	Farallon	<0.20	<0.20	<0.20	<0.20	0.71	<0.20	1.5	<0.20	<0.20	<0.20
		MW-18-080311	8/3/2011	Farallon	<0.20	<0.20	<0.20	<0.20	0.81	<0.20	2.6	0.56	<0.20	<0.20
		MW-18-110811	11/8/2011	Farallon	<0.20	<0.20	<0.20	<0.20	0.72	<0.20	2.3	0.48	<0.20	<0.20
		MW-18-011012	1/10/2012	Farallon	<0.20	<0.20	<0.20	<0.20	1.1	<0.20	2.8	0.59	<0.20	<0.20
		MW-18-021312	2/13/2012	Farallon	<0.20	<0.20	<0.20	<0.20	0.28	<0.20	0.78	<0.20	<0.20	<0.20
		MW-18	4/10/2012	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.47	0.30	<0.20	<0.20
		MW-18-120617	12/6/2017	Farallon	<0.20	<0.50	<0.20	<0.20	2.8	<0.20	6.9	2.5	<0.20	<0.20
		MW-18-010920	1/9/2020	Farallon	<0.20	<0.20	<0.20	<0.20	2.6	<0.20	4.4	3.0	<0.20	<0.20
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16[3]**	**160[3]**	**400[3]**	**0.2**	**200**	**7.68[3]**	**5**	**1.41[3]**

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
MW-19	Deep	MW19-020509	2/5/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-19-041210	4/12/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW19-041210-GEO	4/12/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		MW-19-110310	11/3/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-19-020111	2/1/2011	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-19-050411	5/4/2011	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-19-080311	8/3/2011	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-19-110911	11/9/2011	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-19-120517	12/5/2017	Farallon	<0.20	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16[3]**	**160[3]**	**400[3]**	**0.2**	**200**	**7.68[3]**	**5**	**1.41[3]**

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
MW-20	Deep	MW20-093009	9/30/2009	Farallon	<0.20	**33**	<0.20	<0.20	0.43	<0.20	3.5	0.42	<0.20	<0.20
		MW-20-041310	4/13/2010	Farallon	<0.20	**33**	0.21	<0.20	0.47	<0.20	3.4	0.29	<0.20	0.23
		MW20-041310-GEO	4/13/2010	GeoEngineers	<0.50	**48**	<0.50	<0.50	0.70	<0.50	5.0	<0.50	<0.50	<0.50
		MW-20-110410	11/4/2010	Farallon	0.27	**30**	<0.20	<0.20	0.36	<0.20	3.0	0.23	<0.20	0.28
		MW-20-020111	2/1/2011	Farallon	<0.20	**19**	<0.20	<0.20	0.22	<0.20	1.7	<0.20	<0.20	0.20
		MW-20-050311	5/3/2011	Farallon	<0.20	**29**	<0.20	<0.20	0.40	<0.20	2.9	<0.20	<0.20	0.29
		MW-20-080311	8/3/2011	Farallon	<0.20	**30**	<0.20	<0.20	0.46	<0.20	2.8	<0.20	<0.20	0.28
		MW-20-110811	11/8/2011	Farallon	<0.20	**24**	0.20	<0.20	0.25	<0.20	2.0	<0.20	<0.20	0.28
		MW-20-051112	5/11/2012	Farallon	<0.20	**28**	<0.20	<0.20	0.31	<0.20	2.9	<0.20	<0.20	0.38
		MW-20-061312	6/13/2012	Farallon	<0.20	**26**	<0.20	<0.20	0.36	<0.20	2.5	<0.20	<0.20	0.37
		MW-20-080912	8/9/2012	Farallon	<0.20	**22**	<0.20	<0.20	0.24	<0.20	1.9	<0.20	<0.20	0.31
		MW-20-061213	6/12/2013	Farallon	<0.20	**20**	<0.20	<0.20	<0.20	<0.20	2.0	<0.20	<0.20	0.30
		MW-20-012916	1/29/2016	Farallon	<0.20	**20**	<0.20	<0.20	<0.20	<0.20	2.1	<0.20	<0.20	0.29
		MW-20-120717	12/7/2017	Farallon	<0.20	**20**	<0.20	<0.20	<0.20	<0.20	2.1	<0.20	<0.20	0.26
		MW-20-010920	1/9/2020	Farallon	<0.20	**19**	<0.20	<0.20	<0.20	<0.20	1.9	<0.20	<0.20	<0.20
		MW-20-093020	9/30/2020	Farallon	<0.20	**17**	<0.20	<0.20	<0.20	<0.20	1.9	<0.20	<0.20	<0.20
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16[3]**	**160[3]**	**400[3]**	**0.2**	**200**	**7.68[3]**	**5**	**1.41[3]**

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
MW-21	Deep	MW21-100109	10/1/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-21-041310	4/13/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW21-041310-GEO	4/13/2010	GeoEngineers	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		MW-21-110310	11/3/2010	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-21-020111	2/1/2011	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.21	<0.20	<0.20	<0.20
		MW-21-050311	5/3/2011	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-21-080311	8/3/2011	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-21-110811	11/8/2011	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-21-120717	12/7/2017	Farallon	<0.20	0.32	<0.20	<0.20	<0.20	<0.20	0.20	<0.20	<0.20	<0.20
MW-22	Deep	MW22-100109	10/1/2009	Farallon	<0.20	**20**	<0.20	<0.20	1.6	<0.20	5.9	0.36	<0.20	1.4
		MW-22-041210	4/12/2010	Farallon	<0.20	**19**	<0.20	<0.20	1.4	<0.20	5.0	0.28	<0.20	0.60
		FD-041210	4/12/2010	Farallon	<0.20	**19**	<0.20	<0.20	1.5	<0.20	5.1	0.31	<0.20	0.55
		MW22-041210-GEO	4/12/2010	GeoEngineers	<0.50	**29**	<0.50	<0.50	2.1	<0.50	8.4	<0.50	<0.50	0.89
		Dupe1-041210-GEO	4/12/2010	GeoEngineers	<0.50	**29**	<0.50	<0.50	2.1	<0.50	8.5	<0.50	<0.50	0.90
		MW-22-110410	11/4/2010	Farallon	<0.20	**18**	<0.20	<0.20	1.2	<0.20	4.6	0.26	<0.20	0.46
		MW-22-020111	2/1/2011	Farallon	<0.20	**12**	<0.20	<0.20	0.59	<0.20	2.6	<0.20	<0.20	0.31
		MW-22-050411	5/4/2011	Farallon	<0.20	**15**	<0.20	<0.20	0.94	<0.20	3.4	<0.20	<0.20	0.37
		MW-22-080311	8/2/2011	Farallon	<0.20	**13**	<0.20	<0.20	0.61	<0.20	2.3	<0.20	<0.20	0.34
		MW-22-110811	11/8/2011	Farallon	<0.20	**14**	<0.20	<0.20	0.65	<0.20	2.5	<0.20	<0.20	0.36
		MW-22-061213	6/12/2013	Farallon	<0.20	**12**	<0.20	<0.20	0.45	<0.20	2.3	<0.20	<0.20	0.31
		MW-22-01-2320	1/23/2020	Farallon	<0.20	1.6	<0.20	<0.20	<0.20	<0.20	1.2	<0.20	<0.20	<0.20
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16**[3]	**160**[3]	**400**[3]	**0.2**	**200**	**7.68**[3]	**5**	**1.41**[3]

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
MW-23	Deep	MW23-112409	11/24/2009	Farallon	<0.20	0.57	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-23-041210	4/12/2010	Farallon	<0.20	0.74	<0.20	<0.20	<0.20	<0.20	0.30	<0.20	<0.20	<0.20
		MW23-041210-GEO	4/12/2010	GeoEngineers	<0.50	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		MW-23-110410	11/4/2010	Farallon	<0.20	0.68	<0.20	<0.20	<0.20	<0.20	0.21	<0.20	<0.20	<0.20
		MW-23-020111	2/1/2011	Farallon	<0.20	0.65	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-23-050311	5/3/2011	Farallon	<0.20	0.84	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-23-080311	8/3/2011	Farallon	<0.20	0.79	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-23-110911	11/9/2011	Farallon	<0.20	0.83	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-23-061213	6/12/2013	Farallon	<0.20	0.64	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-23-012816	1/28/2016	Farallon	<0.20	0.61	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-23-120717	12/7/2017	Farallon	<0.20	0.64	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-23-010920	1/9/2020	Farallon	<0.20	0.53	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MW-25	Deep	MW-25-080912	8/9/2012	Farallon	0.26	**5.7**	<0.20	<0.20	<0.20	<0.20	0.26	<0.20	<0.20	0.46
		MW25-092412	9/24/2012	Farallon	<0.20	3.5	<0.20	<0.20	<0.20	<0.20	0.20	<0.20	<0.20	<0.20
		MW-25-061213	6/12/2013	Farallon	<0.20	2.7	<0.20	<0.20	<0.20	<0.20	0.22	<0.20	<0.20	<0.20
		MW-25-012916	1/29/2016	Farallon	<0.20	3.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-25-120617	12/6/2017	Farallon	<0.20	3.3	<0.20	<0.20	<0.20	<0.20	0.25	<0.20	<0.20	<0.20
		MW-25-010720	1/7/2020	Farallon	<0.20	3.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MW-28	Deep	MW-28-011513	1/15/2013	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.37
		MW-28-120717	12/7/2017	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MW-29	Deep	MW-29-011513	1/15/2013	Farallon	<0.20	0.22	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		MW-29-120717	12/7/2017	Farallon	<0.20	0.31	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16[3]**	**160[3]**	**400[3]**	**0.2**	**200**	**7.68[3]**	**5**	**1.41[3]**

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
SVE-1	Deep	SVE1-093009	9/30/2009	Farallon	<0.20	0.68	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**1.6**
		SVE-1-011012	1/10/2012	Farallon	<0.20	4.0	<0.20	<0.20	1.4	<0.20	2.9	0.28	<0.20	0.95
		SVE-1-021312	2/13/2012	Farallon	<0.20	**7.0**	<0.20	<0.20	1.1	<0.20	2.5	0.25	<0.20	0.81
		SVE-1-012916	1/29/2016	Farallon	<0.20	4.7	<0.20	<0.20	0.31	<0.20	1.3	<0.20	<0.20	**2.2**
		SVE-1-120717	12/7/2017	Farallon	<0.20	2.7	<0.20	<0.20	0.24	<0.20	1.1	<0.20	<0.20	1.3
		SVE-1-010920	1/9/2020	Farallon	<0.20	2.2	<0.20	<0.20	<0.20	<0.20	0.53	<0.20	<0.20	0.95
SVE-2	Deep	SVE2-093009	9/30/2009	Farallon	<0.20	**9.7**	<0.20	<0.20	0.41	<0.20	5.2	<0.20	<0.20	0.50
		SVE2-110910	11/9/2010	Farallon	<0.20	3.4	<0.20	<0.20	<0.20	<0.20	1.3	<0.20	<0.20	0.43
		SVE-2-120517	12/5/2017	Farallon	<0.20	**6.6**	<0.20	<0.20	<0.20	<0.20	1.6	<0.20	<0.20	0.54
		SVE-2-010920	1/9/2020	Farallon	<0.40	1.5	<0.40	<0.40	<0.40	<0.40	0.69	<0.40	<0.40	<0.40
SVE-8	Deep	SVE-8-011012	1/10/2012	Farallon	<0.20	**5.3**	<0.20	<0.20	0.29	<0.20	0.80	<0.20	<0.20	1.1
		SVE-8-021312	2/13/2012	Farallon	<0.20	**5.6**	<0.20	<0.20	0.33	<0.20	0.96	<0.20	<0.20	0.40
		SVE-8	4/10/2012	Farallon	<0.20	4.6	<0.20	<0.20	0.30	<0.20	0.62	<0.20	<0.20	<0.20
		SVE-8-010720	1/7/2020	Farallon	<0.20	2.5	<0.20	<0.20	<0.20	<0.20	0.25	<0.20	<0.20	<0.20
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16[3]**	**160[3]**	**400[3]**	**0.2**	**200**	**7.68[3]**	**5**	**1.41[3]**

Table 6
Groundwater Analytical Results for Select VOCs
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Analytical Results (micrograms per liter)[1]									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroform
AS-1	Deep	AS1-093009	9/30/2009	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**1.5**
		AS-1-120817	12/8/2017	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		AS-1-010920	1/9/2020	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
AS-2	Deep	AS-2-010920	1/9/2020	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
AS-3	Deep	AS-3-010920	1/9/2020	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
AS-4	Deep	AS-4-010920	1/9/2020	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
AS-6	Deep	AS-6-012320	1/23/2020	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
AS-7	Deep	AS-7-010920	1/9/2020	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.28	0.28	<0.20	<0.20
AS-8	Deep	AS-8-012320	1/23/2020	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Regional Water-Bearing Zone														
Industrial Well	Regional	SW-082008	8/20/2008	Farallon	<0.20	0.30	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		Pumphouse-021209	2/12/2009	Farallon	<0.20	0.53	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		PUMP HOUSE - 081715	8/17/2015	Farallon	<0.20	0.27	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		INDUSTRIAL_WELL-120717	12/7/2017	Farallon	<0.20	0.39	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		IW-011020	1/10/2020	Farallon	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MTCA Cleanup Levels for Groundwater[2]					**5**	**5**	**16[3]**	**160[3]**	**400[3]**	**0.2**	**200**	**7.68[3]**	**5**	**1.41[3]**

NOTES:

Results in **bold** denote concentrations exceeding applicable cleanup levels.
< denotes analyte not detected at or exceeding the reporting limit listed.
[1]Analyzed by U.S. Environmental Protection Agency Method 8260B/8260C/8260D.
[2]Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013.
[3]MTCA Cleanup Levels and Risk Calculations, Version 3.1, Standard Method B Values for Groundwater, https://fortress.wa.gov/ecy/clarc/Reporting/ChemicalQuery.aspx

Farallon = Farallon Consulting, L.L.C.
GeoEngineers = GeoEngineers, Inc.
VOCs = volatile organic compounds

Table 7
Groundwater Analytical Results for Metals
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Well Identification	Water-Bearing Zone	Sample Identification	Sample Date	Analytical Results (micrograms per liter)[1]			
				Arsenic		Lead	
				Total	Dissolved	Total	Dissolved
Shallow Water-Bearing Zone							
MW-9	Shallow	MW9-082008	8/20/2008	—	<3.0	—	<1.0
		MW-9-012816	1/28/2016	<3.0	<3.0	<1.0	<1.0
		MW-9-120717	12/7/2017	<3.0	<3.0	<1.0	<1.0
		Well Decommissioned 12/20/2019					
MW-9R	Shallow	MW-9R-010720	1/7/2020	<3.3	<3.0	<1.1	<1.0
		MW-9R-092920	9/29/2020	<3.3	<3.0	<1.1	<1.0
MW-9A	Shallow	MW-9A-072221	7/22/2021	3.6	3.0	—	—
MW-12	Shallow	MW12-101408	10/14/2008	**11**	**8.2**	**50**	**29**
		MW12-020609	2/6/2009	**15**	**18**	**22**	6.1
		MW12-011310	1/13/2010	**9.2**	**9.3**	6.8	7.1
		MW12-041310	4/13/2010	**9.1**	**9.1**	4.5	3.5
		MW12-111910	11/19/2010	**7.7**	—	14	—
		MW12-020111	2/1/2011	**11**	—	6	—
		MW12-050311	5/3/2011	**16**	**12**	11	—
		MW12-080211	8/2/2011	**8.6**	**6.5**	**35**	**25**
		MW-12-1110211	11/10/2011	**9.5**	—	**22**	—
		MW-12-061313	6/13/2013	**8.4**	**8.4**	**17**	13
		MW-12-091214	9/12/2014	**16**	**7.1**	**59**	12
		MW-12-012716	1/27/2016	**11**	**8.6**	**21**	3.7
		MW-12-120517	12/5/2017	**6.3**	**6.9**	12	10
		MW-12-010720	1/7/2020	**12**	**7.5**	**18**	11
MW-30	Shallow	—	9/12/2014	Dry -- No Groundwater Sample Collected			
		—	10/30/2014	Dry -- No Groundwater Sample Collected			
		—	1/28/2016	Dry -- No Groundwater Sample Collected			
		—	12/5/2017	Dry -- No Groundwater Sample Collected			
		—	1/7/2020	Dry -- No Groundwater Sample Collected			
MTCA Method A Cleanup Levels[2]				**5**		**15**	

Table 7
Groundwater Analytical Results for Metals
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Well Identification	Water-Bearing Zone	Sample Identification	Sample Date	Analytical Results (micrograms per liter)[1]			
				Arsenic		Lead	
				Total	Dissolved	Total	Dissolved
MW-31	Shallow	MW-31-091214	9/12/2014	**39**	**20**	**350**	9.6
		MW-31-103014	10/30/2014	—	**19**	—	5.5
		MW-31-012716	1/27/2016	**31**	**15**	**450**	3.7
		MW-31-120517	12/5/2017	**22**	**20**	**20**	11
		MW-31-010720	1/7/2020	**43**	**21**	**500**	8.6
		MW-31-093020	9/30/2020	**30**	**27**	14	9.5
MW-32	Shallow	MW-32-091214	9/12/2014	**9.1**	<3.0	7.9	<1.0
		MW-32-012816	1/28/2016	3.2	<3.0	2.1	<1.0
		MW-32-120517	12/5/2017	<3.3	<3.0	<1.1	<1.0
		MW-32-010720	1/7/2020	<3.3	<3.0	1.5	<1.0
MW-33	Shallow	MW-33-012916	1/29/2016	<3.0	<3.0	<1.0	<1.0
		MW-33-120517	12/5/2017	<3.3	<3.0	<1.1	<1.0
MW-34	Shallow	MW-34-012916	1/29/2016	<3.0	<3.0	<1.0	<1.0
		MW-34-120617	12/6/2017	<3.0	<3.0	<1.0	<1.0
		MW-34-010920	1/9/2020	4.6	<3.0	5.8	<1.0
MW-35	Shallow	MW-35-011020	1/10/2020	**7.6**	**6.1**	2.0	<1.0
		MW-35-093020	9/30/2020	**11**	**9.7**	<1.1	<1.0
MTCA Method A Cleanup Levels[2]				**5**		**15**	

Table 7
Groundwater Analytical Results for Metals
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Well Identification	Water-Bearing Zone	Sample Identification	Sample Date	Analytical Results (micrograms per liter)[1]			
				Arsenic		Lead	
				Total	Dissolved	Total	Dissolved
Deep Water-Bearing Zone							
MW-7	Deep	MW7082008	8/20/2008	—	—	1.3	—
MW-8	Deep	MW-8	10/22/2002	—	—	8	—
MW-9B	Deep	MW-9B-010720	1/7/2020	**18**	**9.9**	<1.1	<1.0
		MW-9B-092920	9/29/2020	**12**	**6.0**	<1.1	<1.0
		Well Decommissioned 02/10/2021					
MW-9D	Deep	MW-9D-072221	7/22/2021	< 3.3	< 3.0	—	—
MW-12B	Deep	MW12B-021209	1/12/2009	<3.3	—	<1.1	—
		MW-12B-012716	1/27/2016	2.9	<3.0	1.2	<1.0
		MW-12B-120617	12/6/2017	<3.0	<3.0	1.4	<1.0
		MW-12B-010720	1/7/2020	**15**	<3.0	8.5	<1.0
MTCA Method A Cleanup Levels[2]				**5**		**15**	

NOTES:

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

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

— denotes sample not analyzed

[1]Analyzed by U.S. Environmental Protection Agency Method 200.8.

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

Table 8
pH Readings Surrounding Monitoring Well MW-9B
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

	Monitoring Well MW-9A Installation (January 4 and 5, 2021)		Monitoring Well MW-9B Redevelopment (January 18, 2021)						Installation (February 10 through 18, 2021)	
			First-Phase Purging			Second-Phase Purging				
Depth[1]	pH in Groundwater[2]	pH in Soil[3]	Gallons of Water Removed	pH in Water after Purging[2]	pH in Water after Purging[3]	Gallons of Water Removed	pH in Water after Purging[2]	pH in Water after Purging[3]	pH in Groundwater[2]	pH in Soil[3]
10	---	8.1	---	---	---	---	---	---	---	---
15	6.55/6.8[4]	---							---	---
20	---	10.0	---	---	---	---	---	---	---	---
30	---	11.0	---	---	---	---	---	---	---	11.3
32	8.24	10.8	---	---	---	---	---	---	---	---
35	---	9.5	---	---	---	---	---	---	---	---
40	---	9.2	---	---	---	---	---	---	---	---
50	---	9.2	---	---	---	---	---	---	---	---
55	8.19	---	---	---	---	---	---	---	---	---
60	---	8.9	---	---	---	---	---	---	---	---
63	---	---	5.0	12.9	12.0	---	---	---	---	---
70	---	9.0	---	---	---	---	---	---	---	---
73	---	---	5.0	12.7	11.7	---	---	---	---	---
75	7.98	---	---	---	---	20.0	7.4	7.8	---	---
80	---	7.2	---	---	---	---	---	---	---	---
83	---	---	5.0	9.3	8.9	---	---	---	---	---
90	---	7.8	---	---	---	---	---	---	---	---
93	---	---	5.0	8.4	8.2	---	---	---	---	---
100	---	7.7	---	---	---	---	---	---	---	---
102	7.57	---	---	---	---	---	---	---	---	---
103	---	---	5.0	7.8	7.7	---	---	---	---	---
110	---	8.2	---	---	---	---	---	---	---	---
113	---	---	---	---	---	---	---	---	7.6/7.3[4]	---
120	---	---	5.0	7.5	7.4				---	---

NOTES:

denotes groundwater result

denotes soil result

— denotes sample not analyzed or measured.

[1]Depth in feet below ground surface.

[2]Collected using a multimeter with flow-through cell, unless otherwise noted.

[3]Collected using a standalone pH meter.

[4]January 23-24, 2021 groundwater sample recorded in the field using standalone pH meter (first value) and laboratory-analyzed for pH by American Public Health Association Standard Method SM 4500-H B or U.S. Environmental Protection Agency Method 9045D (second value).

Table 9
Natural Attenuation and Water Quality Parameters
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

					Electron Receptors[1]				Metals	Metabolic By-Products[2]			Water Quality Parameters [3]				Available Organic Carbon
Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Dissolved Oxygen [3] (mg/l)	Nitrite[4] (mg/l)	Nitrate[4] (mg/l)	Sulfate[5] (mg/l)	Ferrous Iron[6] (mg/l)	Methane[7] (µg/l)	Ethane[7] (µg/l)	Ethene[7] (µg/l)	pH	Temperature (°Celsius)	Conductivity (mS/cm)	ORP (mV)	Total Organic Carbon[8] (mg/l)
Shallow Water-Bearing Zone																	
MW-3	Shallow	MW-3-120617	12/6/2017	Farallon	2.09	---	---	---	---	---	---	---	6.48	12.1	0.446	166.0	---
		MW-3-010720	1/7/2020	Farallon	2.73	---	---	---	---	---	---	---	6.72	11.0	0.483	152.2	---
		---	5/15/2020	Farallon	2.51	---	---	---	---	---	---	---	6.38	14.6	0.511	-97.1	---
MW-4	Shallow	---	5/15/2020	Farallon	0.29	---	---	---	---	---	---	---	6.47	13.2	1.024	-148	---
MW-5	Shallow	MW-5-120517	12/5/2017	Farallon	0.30	---	---	---	---	---	---	---	6.04	14.8	0.339	68.4	---
MW-6	Shallow	---	12/5/2017	Farallon	Well Not Sampled - Unable to locate												
		---	1/7/2020	Farallon	Well Not Sampled - Unable to locate												
		MW-6-093020	9/30/2020	Farallon	0.23	---	---	---	---	---	---	---	7.18	14.4	IE[9]	-250	
		MW-6-022321	2/23/2021	Farallon	0.43	---	---	---	---	---	---	---	7.07	9.8	0.520	-71.9	---
MW-9	Shallow	MW-9-120717	12/7/2017	Farallon	2.17	---	---	---	---	---	---	---	6.61	11.9	0.380	185.6	---
		MW-9R-010720	1/7/2020	Farallon	0.52	---	---	---	---	---	---	---	6.60	13.4	0.589	74.9	---
		MW-9R	6/22/2020	BSE	0.36	---	---	---	---	---	---	---	6.35/6.77[10]	15.66	0.569	63.1	---
		MW-9R-092920	9/29/2020	Farallon	0.34	---	---	---	---	---	---	---	6.30/6.5[11]	17.5	IE[9]	-74	---
		MW-9R-121820	12/18/2020	Farallon	0.72	---	---	---	---	---	---	---	6.56	13.5	0.432	194.5	---
		Well Decommissioned 12/20/2019															
MW-9A	Shallow	MW-9A	1/18/2021	Farallon	---	---	---	---	---	---	---	---	7.0	---	---	---	---
		MW-9A-022321	2/23/2021	Farallon	1.13	---	---	---	---	---	---	---	6.55/6.8[11]	12.5	0.449	153.7	---
		MW-9A-072221	7/22/2021	Farallon	1.21	---	---	---	---	---	---	---	6.7[12]	19.1	0.478	IE[9]	---
MW-11	Shallow	---	12/5/2017	Farallon	Well Not Sampled - Unable to locate												
		MW-11-011020	1/10/2020	Farallon	3.45	---	---	---	---	---	---	---	6.67	10.3	1.301	-81.0	---
		MW-11-051520	5/15/2020	Farallon	0.23	---	---	---	---	---	---	---	6.43	11.5	0.931	-179.8	---
		MW-11	6/10/2020	BSE	1.16	---	---	---	---	---	---	---	6.72	13.01	0.00836	83.4	---
		MW-11	6/22/2020	BSE	1.52	---	---	---	---	---	---	---	6.34	12.4	0.679	15.5	---
MW-12	Shallow	MW-12-120517	12/5/2017	Farallon	0.44	---	---	---	---	---	---	---	8.92	12.4	0.823	-326.5	---
		MW-12-010720	1/7/2020	Farallon	6.52	---	---	---	---	---	---	---	9.11	13.5	0.831	-241.7	---
MW-13	Shallow	MW-13-120517	12/5/2017	Farallon	0.92	---	---	---	---	---	---	---	7.63	15.4	0.314	-46.5	---
		MW-13-010720	1/7/2020	Farallon	6.19	---	---	---	---	---	---	---	7.43	14.9	0.259	-68.3	---
		MW-13-092920	9/29/2020	Farallon	1.96	---	---	---	---	---	---	---	6.88	17.3	IE[9]	21.7	---
		MW-13-121820	12/18/2020	Farallon	4.45	---	---	---	---	---	---	---	7.42	14.9	0.193	198	---
MW-17A	Shallow	---	5/15/2020	Farallon	0.25	---	---	---	---	---	---	---	6.58	15.6	0.592	-181.2	---
MW-26	Shallow	MW-26-120617	12/6/2017	Farallon	4.50	---	---	---	---	---	---	---	6.18	10.6	0.155	101.9	---
		MW-26-010720	1/7/2020	Farallon	6.05	---	---	---	---	---	---	---	6.45	8.9	0.176	145.3	---
MW-30	Shallow	---	12/5/2017	Farallon	Well Not Sampled - Dry												
		---	1/7/2020	Farallon	Well Not Sampled - Dry												
MW-31	Shallow	MW-31-120517	12/5/2017	Farallon	0.08	---	---	---	---	---	---	---	12.52	12.0	1.446	-400.5	---
		MW-31-010720	1/7/2020	Farallon	7.13	---	---	---	---	---	---	---	11.52	13.0	1.122	-149.8	---
		MW-31	6/22/2020	BSE	0.03	---	---	---	---	---	---	---	11.11/11.3[10]	17.70	0.734	13.6	---
		MW-31-093020	9/30/2020	Farallon	0.24	---	---	---	---	---	---	---	11.48/11.5[11]	14.9	IE[9]	-393.3	---

Table 9
Natural Attenuation and Water Quality Parameters
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

					Electron Receptors[1]				Metals	Metabolic By-Products[2]			Water Quality Parameters [3]				Available Organic Carbon
Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Dissolved Oxygen [3] (mg/l)	Nitrite[4] (mg/l)	Nitrate[4] (mg/l)	Sulfate[5] (mg/l)	Ferrous Iron[6] (mg/l)	Methane[7] (µg/l)	Ethane[7] (µg/l)	Ethene[7] (µg/l)	pH	Temperature (°Celsius)	Conductivity (mS/cm)	ORP (mV)	Total Organic Carbon[8] (mg/l)
MW-32	Shallow	MW-32-120517	12/5/2017	Farallon	7.48	---	---	---	---	---	---	---	5.79	12.3	0.191	141.0	---
		MW-32-010720	1/7/2020	Farallon	8.65	---	---	---	---	---	---	---	6.43	12.2	0.151	-14.0	---
MW-33	Shallow	MW-33-120517	12/5/2017	Farallon	7.86	---	---	---	---	---	---	---	5.88	12.7	0.158	148.8	---
		---	1/7/2020	Farallon	Well Not Sampled												
MW-34	Shallow	MW-34-120617	12/6/2017	Farallon	7.42	---	---	---	---	---	---	---	5.85	12.6	0.127	132.9	---
		MW-34-010920	1/9/2020	Farallon	7.65	---	---	---	---	---	---	---	6.28	9.0	0.189	127.5	---
MW-35	Shallow	MW-35-011020	1/10/2020	Farallon	4.05	---	---	---	---	---	---	---	6.56	9.8	0.799	-12.5	---
		MW-35-093020	9/30/2020	Farallon	0.14	---	---	---	---	---	---	---	6.02/6.4[11]	15.4	IE[9]	-115.6	---
MW-36	Shallow	MW-36-022321	2/23/2021	Farallon	1.63	---	---	---	---	---	---	---	7.40	12.5	2.519	-204.3	---
SVE-3	Shallow	SVE-3-120517	12/5/2017	Farallon	8.87	---	---	---	---	---	---	---	7.00	13.8	0.133	59.8	---
		SVE-3-010720	1/7/2020	Farallon	8.08	---	---	---	---	---	---	---	6.81	13.3	0.206	147.1	---
SVE-5	Shallow	SVE-5-120817	12/8/2017	Farallon	6.68	---	---	---	---	---	---	---	6.37	14.5	0.312	89.5	---
		SVE-5-011020	1/10/2020	Farallon	3.50	---	---	---	---	---	---	---	6.96	10.4	0.366	-20.0	---
		SVE-5-051520	5/15/2020	Farallon	5.25	---	---	---	---	---	---	---	6.54	15.7	0.359	-91.9	---
		SVE-5	6/10/2020	BSE	4.06	---	---	---	---	---	---	---	6.58	17.65	0.312	138.5	---
		SVE-5	6/22/2020	BSE	3.20	---	---	---	---	---	---	---	6.66	17.33	0.32	34.0	---
		SVE-5-092920	9/29/2020	Farallon	3.90	---	---	---	---	---	---	---	6.3	19.5	IE[9]	32.3	---
		SVE-5-121820	12/18/2020	Farallon	3.72	---	---	---	---	---	---	---	6.71	13.8	0.251	35.9	---
		Well Decommissioned 02/19/2021															
SVE-6	Shallow	SVE-6-120817	12/8/2017	Farallon	2.54	---	---	---	---	---	---	---	6.24	11.6	0.367	72.9	---
		SVE-6-010720	1/7/2020	Farallon	2.88	---	---	---	---	---	---	---	6.44	12.1	0.314	161.8	---
SVE-12	Shallow	SVE-12-120817	12/8/2017	Farallon	7.75	<0.020	0.81	21	0.0	<0.50	<0.50	<0.50	6.79	12.6	0.228	158.8	1.7
		SVE-12-010720	1/7/2020	Farallon	6.62	---	---	---	---	---	---	---	6.53	11.5	0.633	153.7	---
		SVE-12-093020	9/30/2020	Farallon	4.12	---	---	---	---	---	---	---	6.41	16	IE9	17.9	---
Deep Water-Bearing Zone																	
MW-2	Deep	MW-2-120617	12/6/2017	Farallon	3.40	0.027	0.52	16	---	< 0.50	< 0.50	< 0.50	6.65	13.9	0.310	190.6	1.1
		MW-2-010820	1/8/2020	Farallon	4.57	---	---	---	---	---	---	---	6.45	13.4	0.403	-14.0	---
MW-9B	Deep	MW-9B-120717	12/7/2017	Farallon	0.45	---	---	---	---	---	---	---	13.01	9.0	2.906	-248.2	---
		MW-9B-010720	1/7/2020	Farallon	7.85	---	---	---	---	---	---	---	12.14	11.8	3.147	-137.6	---
		---	5/15/2020	Farallon	3.15	---	---	---	---	---	---	---	12.12	16.8	3.693	-185.6	---
		MW-9B	6/22/2020	BSE	2.78	---	---	---	---	---	---	---	11.69/11.8[10]	17.06	2.261	67.2	---
		MW-9B-092920	9/29/2020	Farallon	0.22	---	---	---	---	---	---	---	11.86/11.9[11]	17.5	IE[9]	-155.6	---
		MW-9B	9/29/2020	BSE	---	---	---	---	---	---	---	---	12.2 J	---	---	---	---
		---	12/18/2020	Farallon	3.33	---	---	---	---	---	---	---	12.24	12.1	2.354	-124.1	---
		Well Decommissioned 02/10/2021															
MW-9D	Deep	MW-9D-022421	2/24/2021	Farallon	0.66	---	---	---	---	---	---	---	7.61/7.3[11]	8.2	0.375	-284.9	---
		MW-9D-072221	7/22/2021	Farallon	IE[9]	---	---	---	---	---	---	---	6.8[12]	16.6	0.335	IE[9]	---
MW-10B	Deep	MW-10B-120717	12/7/2017	Farallon	1.21	---	---	---	---	---	---	---	6.32	11.3	0.337	79.5	---
MW-11B	Deep	MW-11B-120517	12/5/2017	Farallon	8.18	---	---	---	---	---	---	---	6.84	11.3	0.165	107.3	---
MW-12B	Deep	MW-12B-120617	12/6/2017	Farallon	1.10	---	---	---	---	---	---	---	6.91	12.5	0.255	157.1	---
		MW-12B-010720	1/7/2020	Farallon	7.42	---	---	---	---	---	---	---	7.62	12.8	0.248	-91.0	---

Table 9
Natural Attenuation and Water Quality Parameters
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

					Electron Receptors[1]				Metals	Metabolic By-Products[2]			Water Quality Parameters [3]				Available Organic Carbon
Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Dissolved Oxygen [3] (mg/l)	Nitrite[4] (mg/l)	Nitrate[4] (mg/l)	Sulfate[5] (mg/l)	Ferrous Iron[6] (mg/l)	Methane[7] (µg/l)	Ethane[7] (µg/l)	Ethene[7] (µg/l)	pH	Temperature (°Celsius)	Conductivity (mS/cm)	ORP (mV)	Total Organic Carbon[8] (mg/l)
MW-14	Deep	MW-14-120817	12/8/2017	Farallon	2.29	0.056	0.23	18	0.0	< 0.50	< 0.50	< 0.50	6.84	12.3	0.351	73.2	1.1
		MW-14-010920	1/9/2020	Farallon	1.32	---	---	---	---	---	---	---	7.12	9.9	0.366	100.6	---
MW-14C	Deep	MW-14C-120817	12/8/2017	Farallon	0.44	< 0.020	< 0.050	120	0.0	4.9	< 0.50	< 0.50	7.52	11.2	0.534	39.7	1.7
		MW-14C-010720	1/7/2020	Farallon	0.54	---	---	---	---	---	---	---	7.43	12.5	0.367	68.6	---
MW-15	Deep	MW-15-120617	12/6/2017	Farallon	0.18	---	---	---	---	---	---	---	6.95	11.4	0.281	58.6	---
		MW-15-011020	1/10/2020	Farallon	2.52	---	---	---	---	---	---	---	6.88	10.9	0.466	43.7	---
MW-16	Deep	MW-16-120617	12/6/2017	Farallon	0.42	< 0.020	0.088	74	0.0	< 0.50	< 0.50	< 0.50	6.46	13.8	0.701	67.6	6.2
		Well Decommissioned 12/20/2019															
MW-16R	Deep	MW-16R-010820	1/8/2020	Farallon	0.42	---	---	---	---	---	---	---	6.61	14.1	0.816	-411.6	---
		MW-16R	6/22/2020	BSE	1.59	---	---	---	---	---	---	---	6.60/6.93[10]	16.88	0.724	37.6	---
		MW-16R-092920	9/29/2020	Farallon	0.75	---	---	---	---	---	---	---	6.49	16.9	IE[9]	-67.8	---
		MW-16R-121820	12/18/2020	Farallon	2.99	---	---	---	---	---	---	---	6.72	13.5	0.604	29.9	---
MW-17	Deep	---	5/15/2020	Farallon	1.26	---	---	---	---	---	---	---	6.69	21.4	0.621	-158.7	---
MW-18	Deep	MW-18-120617	12/6/2017	Farallon	0.70	0.076	< 0.050	40	0.0	0.90	< 0.50	< 0.50	7.61	13.2	0.420	47.6	2.7
		MW-18-010920	1/9/2020	Farallon	0.55	---	---	---	---	---	---	---	7.80	7.6	0.505	-30.9	---
MW-19	Deep	MW-19-120517	12/5/2017	Farallon	0.27	< 0.020	0.60	52	0.0	1.7	< 0.50	< 0.50	7.28	14.0	0.472	4.5	2.1
MW-20	Deep	MW-20-120717	12/7/2017	Farallon	0.44	0.074	0.10	10	0.0	0.58	< 0.50	< 0.50	6.59	12.3	0.300	69.0	1.3
		MW-20-010920	1/9/2020	Farallon	0.27	---	---	---	---	---	---	---	6.61	10.0	0.418	138.2	---
		MW-20-093020	9/30/2020	Farallon	0.50	---	---	---	---	---	---	---	6.41	14.9	IE[9]	-59.2	---
MW-21	Deep	MW-21-120717	12/7/2017	Farallon	0.14	---	---	---	---	---	---	---	7.70	11.7	0.212	94.7	---
MW-22	Deep	MW-22-012320	1/23/2020	Farallon	5.20	---	---	---	---	---	---	---	7.15	11.2	0.299	159.8	---
MW-23	Deep	MW-23-120717	12/7/2017	Farallon	0.32	< 0.020	< 0.050	38	0.0	79	< 5.0	< 5.0	6.44	11.6	0.600	71.7	3.6
		MW-23-010920	1/9/2020	Farallon	7.16	---	---	---	---	---	---	---	6.81	6.3	0.573	116.1	---
		MW-23	6/22/2020	BSE	0.18	---	---	---	---	---	---	---	6.58/7.05[10]	21.33	0.527	59.8	---
MW-25	Deep	MW-25-120617	12/6/2017	Farallon	0.28	< 0.020	< 0.050	21	0.0	440	< 50	< 50	6.19	12.3	0.397	103.3	1.9
		MW-25-010720	1/7/2020	Farallon	0.59	---	---	---	---	---	---	---	6.50	12.0	0.469	96.1	---
MW-28	Deep	MW-28-120717	12/7/2017	Farallon	0.14	0.029	< 0.050	23	0.0	630	< 75	< 75	6.46	10.5	0.425	-53.4	3.3
MW-29	Deep	MW-29-120717	12/7/2017	Farallon	1.20	---	---	---	---	---	---	---	6.55	11.1	0.335	80.8	---
AS-1	Deep	AS-1-120817	12/8/2017	Farallon	2.02	---	---	---	---	---	---	---	7.22	12.7	0.656	-10.1	---
		AS-1-010920	1/9/2020	Farallon	1.24	---	---	---	---	---	---	---	7.20	10.5	0.578	100.2	---
AS-2	Deep	AS-2-010920	1/9/2020	Farallon	3.35	---	---	---	---	---	---	---	6.65	9.1	0.110	133.3	---
AS-3	Deep	AS-3-010920	1/9/2020	Farallon	5.05	---	---	---	---	---	---	---	7.10	11.0	0.270	142.8	---
AS-4	Deep	---	12/7/2017	Farallon	Well Not Sampled - Unable to Locate												
		AS-4-010920	1/9/2020	Farallon	8.36	---	---	---	---	---	---	---	7.33	9.2	0.056	107.0	---
AS-6	Deep	AS-6-012320	1/23/2020	Farallon	5.97	---	---	---	---	---	---	---	6.55	10.6	0.159	196.5	---
AS-7	Deep	AS-7-010920	1/9/2020	Farallon	4.16	---	---	---	---	---	---	---	7.19	12.1	0.275	72.8	---
AS-8	Deep	AS-8-012320	1/23/2020	Farallon	4.47	---	---	---	---	---	---	---	7.48	11.1	0.064	99.7	---

Table 9
Natural Attenuation and Water Quality Parameters
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

					Electron Receptors[1]				Metals	Metabolic By-Products[2]			Water Quality Parameters [3]				Available Organic Carbon
Sample Location	Water-Bearing Zone	Sample Identification	Sample Date	Sampled By	Dissolved Oxygen [3] (mg/l)	Nitrite[4] (mg/l)	Nitrate[4] (mg/l)	Sulfate[5] (mg/l)	Ferrous Iron[6] (mg/l)	Methane[7] (µg/l)	Ethane[7] (µg/l)	Ethene[7] (µg/l)	pH	Temperature (°Celsius)	Conductivity (mS/cm)	ORP (mV)	Total Organic Carbon[8] (mg/l)
SVE-1	Deep	SVE-1-120717	12/7/2017	Farallon	6.75	< 0.020	0.85	20	---	< 0.50	< 0.50	< 0.50	6.55	13.5	0.278	83.3	1.2
		SVE-1-010920	1/9/2020	Farallon	8.74	---	---	---	---	---	---	---	7.04	9.4	0.323	118.8	---
SVE-2	Deep	SVE-2-120517	12/5/2017	Farallon	7.38	---	---	---	---	---	---	---	6.84	13.3	0.294	160.0	---
		SVE-2-010920	1/9/2020	Farallon	5.20	---	---	---	---	---	---	---	6.82	8.0	0.332	125.4	---
SVE-7	Deep	---	12/7/2017	Farallon	Well Not Sampled - Inaccessible due to overlying gravel stockpile												
SVE-8	Deep	SVE-8-010720	1/7/2020	Farallon	3.23	---	---	---	---	---	---	---	6.56	12.6	0.403	133.3	---
SVE-9	Deep	SVE-9-120717	12/7/2017	Farallon	6.97	---	---	---	---	---	---	---	6.46	13.4	0.368	88.1	---
SVE-10	Deep	---	12/7/2017	Farallon	Well Not Sampled - Unable to Locate												
SVE-11	Deep	---	12/7/2017	Farallon	Well Not Sampled - Inaccessible due to overlying asphalt stockpile												
Regional Water-Bearing Zone																	
Industrial Well	Regional	---	12/7/2017	Farallon	Water Quality Parameters not Measured												
		IW-011020	1/10/2020	Farallon	3.81	---	---	---	---	---	---	---	7.59	5.0	0.365	-54.6	---

NOTES:
< denotes analyte not detected at or exceeding the reporting limit listed.
— denotes sample not analyzed or measured.
[1]electron receptors denotes compounds that gain electrons and are sources of energy during biodegradation
[2]metabolic by-products denotes compounds that result from biodegradation processes
[3]Collected using a multimeter with flow-through cell.
[4]Analyzed by U.S. Environmental Protection Agency (EPA) Method 353.2.
[5]Analyzed by ASTM D516-07.
[6]Measured in the field using conventional chemistry parameters by EPA/American Public Health Association Methods.
[7]Analyzed by Gas Chromatograph/Flame Ionization Detector Headspace Method RSK 175.
[8]Analyzed by Standard Method 5310B.
[9]The specific conductance meter appeared to be malfunctioning; readings are not provided.
[10] First value for pH collected using a multimeter with flow-through cell, second value for pH analyzed in a laboratory by EPA Method 150.1.
[11]First value for pH collected using a multimeter with flow-through cell, second value for pH analyzed in a laboratory by Standard Method 4500-H B.
[12]pH analyzed in a laboratory by Standard Method 4500-H B.

BSE = BlueStone Environmental, LLC
° = degrees
Farallon = Farallon Consulting, L.L.C.
IE = internal error
µg/l = micrograms per liter
mg/l = milligrams per liter
mS/cm = milliSiemens per centimeter specific conductance units
mV = millivolts
ORP = oxidation-reduction potential

Table 10
Cleanup Technology Screening
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

General Response Action	Technology Type	Technology Process Option	Score of Evaluation Criteria: Protectiveness	Permanence	Long-Term Effectiveness	Short-Term Risk Management	Implementability	Public Concerns	Implementation Cost	Total	Rank	Retain for Consideration in Focused Feasibility Study?
No Action	None	"No Action" provides no control of exposure to contaminated soil or groundwater.	1	1	1	1	5	1	5	15	9	No
Institutional and Engineered Controls	**Legal**	**Institutional controls comprise legal documentation that includes deed restrictions (Environmental Covenant) with Site use restrictions and health advisories. Engineered controls include barriers (e.g., pavement) to limit exposure to hazardous substances that remain at a site.**	**3**	**1**	**4**	**4**	**5**	**3**	**5**	**25**	**1**	**Yes**
Treatment In-Situ	**Chemical Oxidation**	**Chemical oxidation uses oxidants that change contaminants in soil and/or groundwater into harmless by-products through chemical reactions. Typically chemical oxidants are injected into the subsurface through injection wells or trenches, or borings advanced by a direct-push drilling method.**	**3**	**4**	**3**	**3**	**3**	**2**	**2**	**20**	**5**	**Yes**
Treatment In-Situ	Enhanced Anaerobic Bioremediation	Enhanced anaerobic bioremediation of contaminated groundwater occurs by providing an electron donor to groundwater through injection of a solution to increase the population of naturally occurring microorganisms performing anaerobic bioremediation by reductive dechlorination (i.e. hydrogen release compound, molasses, or vegetable oil). Contaminants are destroyed or anaerobically degraded by gradually replacing chlorine with hydrogen atoms until the process is completed resulting in harmless end-products.	3	4	2	4	1	3	2	19	7	No
Treatment In-Situ	**Enhanced Aerobic Bioremediation**	**Enhanced aerobic bioremediation of contaminated groundwater occurs by providing an electron receptor (i.e., oxygen) to groundwater through application through injection of air, ozone, or reagent, or soil mixing of a reagent to promote biodegradation by the number of naturally occurring microorganisms performing aerobic bioremediation. Contaminants are destroyed or aerobically degraded to carbon dioxide, water, and microbial cell mass.**	**3**	**4**	**3**	**4**	**3**	**3**	**2**	**22**	**2**	**Yes**
Treatment In-Situ	Thermal Treatment	In-situ thermal technologies heat contaminated soil and groundwater to change the physical and chemical properties of contaminates into a vapor-phase for extraction.	4	4	4	2	2	2	1	19	7	No

Table 10
Cleanup Technology Screening
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

General Response Action	Technology Type	Technology Process Option	Score of Evaluation Criteria: Protectiveness	Permanence	Long-Term Effectiveness	Short-Term Risk Management	Implementability	Public Concerns	Implementation Cost	Total	Rank	Retain for Consideration in Focused Feasibility Study?
Treatment In-Situ	**Air Sparging and Soil Vapor Extraction**	**In-situ air sparging injects air into the saturated zone(s) and volatizes organic contaminants. The vapors are captured in the vadose zone by the soil vapor extraction system and discharged into the atmosphere.**	**4**	**4**	**3**	**3**	**3**	**3**	**1**	**21**	**3**	**Yes**
Excavation and Off-Site Disposal	**Physical Removal and Off-Site Disposal**	**Physical removal and off-site disposal of contaminated soil to a subtitle D landfill without pre-treatment. Temporary dewatering of the excavation beneath the water table and disposal of contaminated water at a permitted facility or sanitary sewer will be required.**	**3**	**4**	**4**	**3**	**3**	**2**	**1**	**20**	**5**	**Yes**
Treatment In-Situ	**Soil Solidification**	**Mixing of soil with Portland Cement to stabilize arsenic and lead in soil and prevent leaching of metals into groundwater. The process includes mixing of soil in-situ by large augers, and injecting soil with Portland Cement.**	**4**	**3**	**3**	**3**	**3**	**3**	**2**	**21**	**3**	**Y**

NOTES:
Bold denotes general response actions, technology types, and technology process options retained for incorporation into cleanup alternatives
Total Score denotes sum of individual scores for implementability, effectiveness, and cost.
Rank denotes position relative to other technologies based on Total Score.

Ranking Criteria
5 = Very Favorable
4 = Favorable
3 = Somewhat Favorable to Uncertain
2 = Unfavorable
1 = Very Unfavorable

Table 11
Detailed Evaluation of Cleanup Alternatives
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

	Cleanup Alternative 1: Institutional and Engineering Controls	**Cleanup Alternative 2a: In-Situ Chemical Oxidation**	**Cleanup Alternative 2b: In-Situ Chemical Oxidation**	**Cleanup Alternative 2c: Soil Solidification**	**Cleanup Alternative 3a: Source Removal, Enhanced Aerobic Degradation, and Monitored Natural Attenuation**	**Cleanup Alternative 3b: Air Sparge and Soil Vapor Extraction**	**Cleanup Alternative 3c: Source Removal**
Description	Institutional controls in the form of an Environmental Covenant to include Site use restrictions and health advisories. Engineered controls include barriers (e.g. pavement) to limit exposure to hazardous substances that remain at a site.	Direct-push injection of in-situ chemical oxidation reagent into the saturated and unsaturated soil zones to treat residual groundwater and soil contamination.	Direct-push injection of in-situ chemical oxidation reagent into the shallow and deep saturated soil zones to treat residual groundwater contamination.	Large auger in-situ soil mixing of a Portland cement mixture for solidification of soil and groundwater contamination.	Removal and disposal of soil with residual soil contamination, application of bioremediation reagents, and monitored natural attenuation of groundwater.	Operation of air sparge and soil vapor extraction system for cleanup of shallow and deep saturated soil zones for removal of groundwater contamination.	Removal and disposal of foundry fill material and concrete waste.
Applicable Site Areas	All	Former Recycled Stockpile Area, Hot Mix Storage Area, Equipment Storage Carport Area, and Former Asphalt-Testing Laboratory Area	Former Asphalt Testing Laboratory Area	Lead and Arsenic Plume in Groundwater Area	Former Recycled Stockpile Area, Hot Mix Storage Area, Equipment Storage Carport Area, and Former Asphalt-Testing Laboratory Area	Former Asphalt Testing Laboratory Area	Lead and Arsenic Plume in Groundwater Area
THRESHOLD REQUIREMENTS							
Protection of Human Health and the Environment	**Yes** - Alternative will protect human health and the environment.	**Yes** - Alternative will protect human health and the environment.	**Yes** - Alternative will protect human health and the environment.	**Yes** - Alternative will protect human health and the environment reducing contaminant toxicity and leachability in soil using soil stabilization and solidification	**Yes** - Alternative will protect human health and the environment.	**Yes** - Alternative will protect human health and the environment.	**Yes** - Alternative will protect human health and the environment.
Compliance with Cleanup Standards	**Yes** - But cleanup levels will not be met throughout the Site except over the long-term with natural attenuation processes.	**Yes** - Active remedial measure for soil and groundwater not complying with cleanup standards.	**Yes** - Active remedial measure groundwater not complying with cleanup standards.	**Yes** - Active remedial measure for soil and groundwater not complying with cleanup standards.	**Yes** - Active remedial measure for soil and groundwater not complying with cleanup standards.	**Yes** - Active remedial measure groundwater not complying with cleanup standards.	**Yes** - Active remedial measure for soil and groundwater not complying with cleanup standards.
Compliance with Applicable State and Federal Laws	**Yes** - Alternative complies with applicable laws.	**Yes** - Alternative complies with applicable laws.	**Yes** - Alternative complies with applicable laws.	**Yes** - Alternative complies with applicable laws.	**Yes** - Alternative complies with applicable laws.	**Yes** - Alternative complies with applicable laws.	**Yes** - Alternative complies with applicable laws.
Provision for Compliance Monitoring	**Yes** - Alternative includes provisions for compliance monitoring (i.e., compliance groundwater monitoring).	**Yes** - Alternative includes provisions for compliance monitoring (i.e., compliance groundwater monitoring).	**Yes** - Alternative includes provisions for compliance monitoring (i.e., compliance groundwater monitoring).	**Yes** - Alternative includes provisions for compliance monitoring (i.e., compliance groundwater monitoring).	**Yes** - Alternative includes provisions for compliance monitoring (i.e., compliance groundwater monitoring).	**Yes** - Alternative includes provisions for compliance monitoring (i.e., compliance groundwater monitoring).	**Yes** - Alternative includes provisions for compliance monitoring (i.e., compliance groundwater monitoring).
OTHER REQUIREMENTS							
Permanent to the Maximum Extent Practicable (see detail below)	**Yes** - Alternative is permanent to the maximum extent practicable.	**Yes** - Alternative is permanent to the maximum extent practicable.	**Yes** - Alternative is permanent to the maximum extent practicable.	**Yes** - Alternative is permanent and protective to the maximum extent practicable. Soil in the area of groundwater exceeding the cleanup levels for arsenic and lead levels would be stabilized to the extent practicable.	**Yes** - Alternative is permanent to the maximum extent practicable.	**Yes** - Alternative is permanent to the maximum extent practicable.	**Yes** - But while Alternative is permanent it is not considered to be practicable (see text).
Restoration Time Frame	Restoration of soil and groundwater to achieve cleanup standards at the standard points of compliance is indefinite and will be achieved through natural attenuation processes over the long-term.	**Yes** - Estimated restoration time frame from application of in-situ reagent is 2 to 5 years.	**Yes** - Estimated restoration time frame from application of in-situ reagent is 2 to 5 years.	**Yes** - Estimated restoration time frame for soil stabilization is 2- to 3-months to complete.	**Yes** - Estimated restoration time frame for removal of source material would be less than one year. Bioremediation would occur over 1 to 2 years following application of reagents. Monitored natural attenuation would occur over 3 to 5 years following bioremediation application.	**Yes** - Estimated restoration time frame is 5 to 12 years of operation of the AS/SVE system.	**Yes** - Estimated restoration time frame for removal of source material would be less than one year.

Table 11
Detailed Evaluation of Cleanup Alternatives
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

	Cleanup Alternative 1: Institutional and Engineering Controls	Cleanup Alternative 2a: In-Situ Chemical Oxidation	Cleanup Alternative 2b: In-Situ Chemical Oxidation	Cleanup Alternative 2c: Soil Solidification	Cleanup Alternative 3a: Source Removal, Enhanced Aerobic Degradation, and Monitored Natural Attenuation	Cleanup Alternative 3b: Air Sparge and Soil Vapor Extraction	Cleanup Alternative 3c: Source Removal
Evaluation Criteria for Permanence to the Maximum Extent Practicable[1]							
Protectiveness (30% weighting Factor)	Alternative will achieve overall protection by preventing direct contact with affected media = 6.	Alternative protects human health by achieving cleanup standards. = 8.	Alternative protects human health by achieving cleanup standards. = 8.	Alternative protects human health by containing soil and groundwater by soil solidification. = 7.	Alternative protects human health by achieving cleanup standards. = 8.	Alternative protects human health by achieving cleanup standards. = 8.	Alternative protects human health by achieving cleanup standards. = 9.
Permanence (20% weighting Factor)	A Restrictive Covenant will require permanent measures for future material handling (e.g., removal and disposal of affected media) to prevent exposure to subsurface affected media = 2.	Alternative will permanently reduce residual groundwater and soil contamination in-situ through destruction. = 8.	Alternative will permanently reduce residual groundwater contamination in-situ through destruction. = 8.	Alternative would be permanent to the maximum extent practicable. Residual groundwater contamination be stabilized in-situ to the extent practicable. 7.	Alternative will permanently reduce the volume of residual soil contamination with excavation of soil exceeding cleanup levels. Residual groundwater contamination will be permanently reduced in-situ through degradation. = 8.	Alternative will permanently remove residual groundwater contamination through AS and SVE. = 7.	Alternative will permanently reduce the volume of residual soil contamination with excavation of soil impacting groundwater. = 9.
Long-Term Effectiveness (20% weighting Factor)	Alternative is considered effective in that it implements controls to prevent direct contact with affected media and possible future removal if and when disturbed = 6.	Alternative provides long-term effectiveness by reducing residual soil and groundwater contamination in-situ through destruction of contaminants. = 8.	Alternative provides long-term effectiveness by reducing residual groundwater contamination in-situ through destruction of contaminants. = 8.	Alternative provides long-term effectiveness by immobilizing soils and groundwater with contaminants exceeding cleanup levels. = 6.	Alternative provides long-term effectiveness by removing soil with contaminants exceeding cleanup levels and reducing residual groundwater contamination in-situ through degradation of contaminants. = 8.	Alternative provides long-term effectiveness by removal of residual groundwater contamination through AS and SVE. = 7.	Alternative has long-term effectiveness with removal of residual soil contamination impacting groundwater. = 9.
Short-Term Risk Management (10% weighting Factor)	Alternative does not disturb affected media in the short term; no short-term risk management needed = 9.	Alternative will pose limited short-term risk during direct-push injections of substrates at potentially high pressures. = 7.	Alternative will pose limited short-term risk during direct-push injections of substrates at potentially high pressures. = 7.	Alternative disturbs affected media, presenting short-term risk to workers, and to the public during construction and off the Site transport . = 6.	Alternative disturbs affected media, presenting short-term risk to workers, proximate property owners, and during transport off-Site. = 7.	Alternative presents limited short-term risk related to operation and maintenance of existing AS/SVE system. = 9.	Alternative disturbs affected media, presenting short-term risk to workers, proximate property owners, and during transport off-Site. = 7.
	Cleanup Alternative 1: Institutional and Engineering Controls	**Cleanup Alternative 2a: In-Situ Chemical Oxidation**	**Cleanup Alternative 2b: In-Situ Chemical Oxidation**	**Cleanup Alternative 2c: Soil Solidification**	**Cleanup Alternative 3a: Source Removal, Enhanced Aerobic Degradation, and Monitored Natural Attenuation**	**Cleanup Alternative 3b: Air Sparge and Soil Vapor Extraction**	**Cleanup Alternative 3c: Source Removal**
Implementability (10% weighting Factor)	Alternative is readily implementable with controls and subsurface excavation restrictions and health advisories = 10.	Alternative requires closely spaced direct push injections into fine grain soils which could pose challenges with reagent deleivery. An Underground Injection Control permit would be required for injections. = 7.	Alternative requires closely spaced direct push injections into fine grain soils in the shallow and deep water-bearing zones which could pose challenges with reagent deleivery. An Underground Injection Control permit would be required for injections. = 6.	Alternative requires soil mixing in slopped portions of the Site posing logistical challenges. = 7.	Alternative employs disturbing and removing soil from four locations on the property and would require temporary relocation of facilities. = 5.	Alternative includes operation and maintenance of existing AS/SVE system. = 9.	Alternative employs disturbing and removal of large volumes of affected soil while readily implementable, is considered less implementable than an Alternative that does not require these measures = 3.
Public Concerns (10% weighting Factor)	Alternative leaves impacted groundwater and potentially-impacted soil in place. Site is in area zoned Industrial/Air Corridor and public access is restricted. Public exposure will not occur and limited public concern is anticipated = 8.	Alternative would pose limited public concerns regarding injection of substrates via high-pressure injection points. = 8.	Alternative would pose limited public concerns regarding injection of substrates via high-pressure injection points. = 8.	Alternative may result in short-term construction disturbance at the Site creating public concern. = 7.	Public concern likely will not be an issue. Highest potential for public concerns will be during off-site transport. = 9.	Alternative would pose limited public concerns regarding noise generated from operation of the AS/SVE system. The existing AS/SVE system is not prominent to receptors. = 9.	Alternative employs removal of impacted soil near property line and residential properties which noise, dust, and truck traffic might pose public concern. = 6.
MTCA Composite Benefit Score[1]	**6.1**	**7.8**	**7.7**	**6.7**	**7.5**	**7.9**	**7.6**
Overall Alternative Ranking	**6.1**		**7.4**			**7.7**	
Subtotal Cost - Former Recycled Stockpile Area, Hot Mix Storage Area, Equipment Storage Carport Area, and Former Asphalt-Testing Laboratory Area	**$40,680**	**$1,773,540**	-	-	**$4,024,260**	-	-
Subtotal Cost - Former Asphalt Testing Laboratory Area	**$47,160**	-	**$2,739,060**	-	-	**$1,635,840**	-
Subtotal Cost - Lead and Arsenic Plume in Groundwater Area	**$41,220**	-	-	**$4,507,667**	-	-	**$24,938,667**
Cost	**$129,060**		**$9,020,267**			**$30,598,767**	
Cost-Benefit Ratio	**$21,157**		**$1,218,955**			**$3,991,143**	

NOTES:

[1] Basis for overall Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Composite Benefit Score provided quantitatively with a "score" from 0 (least favorable) to 10 (most favorable) for each of the six evaluation criteria for Permanent to the Maximum Extent Practicable above.
MTCA Composite Benefit Scores are calculated by summing the mathematical product of the score multiplied by the indicated weighting factor for each of the six criteria. The basis for the weighting factors for the six criteria to evaluate Permanent to the Maximum Extent Practicable was provided in the Washington State Department of Ecology guidance cited in the letter text.

Table 12a
Summary of Estimated Cleanup Costs for Cleanup Alternatives 1, 2a, and 3a for TPH and cPAH Areas
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Remedial Action Task	Scope of Work	Estimated Cost: Cleanup Alternative 1: Institutional and Engineered Controls – Low Estimate	Cleanup Alternative 1 – High Estimate	Cleanup Alternative 2a: In-Situ Chemical Oxidation – Low Estimate	Cleanup Alternative 2a – High Estimate	Cleanup Alternative 3a: Source Removal, Enhanced Aerobic Degradation, and Monitored Natural Attenuation – Low Estimate	Cleanup Alternative 3a – High Estimate
Project Management	Ongoing project management throughout the cleanup action (assumes 8 percent of the total estimated cost)	$1,893	$3,013	$45,213	$131,373	$246,413	$298,093
Institutional and Engineered Controls	Applicable to Cleanup Alternative 1, institutional controls will be in the form of an Environmental Covenant recorded on the property deed that will include Site use restrictions and health advisories. Engineered controls will be in the form of a soil cap to limit exposure to hazardous substances that remain at the Site. Included estimated cost is 1/3 of estimated total cost for implementing institutional controls for the entire Site.	$6,667	$6,667	$0	$0	$0	$0
Chemical Oxidation	Applicable to Cleanup Alternative 2a, includes engineering design, construction management, potential multiple chemical oxidant injection events, and collection of confirmational soil and groundwater samples. The low estimate assumes one injection with three performance groundwater monitoring events. The high estimate assumes three injections with nine performance groundwater monitoring events. Both estimates assume four quarters of confirmation groundwater monitoring events.	$0	$0	$553,000	$1,629,000	$0	$0
Excavation and Off-Site Disposal	Applicable to Cleanup Alternative 3a, includes engineering design, construction management, excavation, transport, and disposal of impacted material off the Site, application of biostimulant in backfill or to existing wells, and groundwater monitoring. The low estimate assumes no performance groundwater monitoring events and four quarters of confirmation groundwater monitoring. The high estimate assumes eight performance groundwater monitoring events, four quarterly confirmation groundwater monitoring events, and a 20 percent construction contingency.	$0	$0	$0	$0	$3,068,000	$3,713,000
Closure Report	Applicable to Cleanup Alternatives 2 and 3, summarizing the completed cleanup action and requesting issuance of a No Further Action (NFA) determination from the Washington State Department of Ecology (Ecology). Included estimated cost is 1/3 of estimated total cost for the Site Closure Report.	$0	$0	$6,667	$6,667	$6,667	$6,667
Compliance Groundwater Monitoring	Applicable to Cleanup Alternative 1, long-term groundwater monitoring of contaminant concentrations at points of compliance monitoring wells. The low estimate assumes 3 groundwater monitoring events 18 months apart over the period of 4.5 years following receipt of an NFA determination for the Site from Ecology, and preparation of one report to document groundwater monitoring results. The high estimate assumes 10 groundwater monitoring events 18 months apart over the period of 15 years following receipt of an NFA determination for the Site from Ecology, and preparation of three reports to document groundwater monitoring results. Included estimated cost is 1/3 of estimated total cost for the Site Compliance Groundwater Monitoring.	$7,000	$21,000	$0	$0	$0	$0
Interactions with Ecology and 5-Year Review	Interactions with Ecology and, in case of Cleanup Alternative 1, a 5-year project review following receipt of an NFA determination for the Site from Ecology.	$6,000	$6,000	$1,500	$2,500	$1,500	$2,500
Remediation System and Monitoring Well Decommissioning	Decommissioning the monitoring well network in accordance with Chapter 173-160 of the Washington Administrative Code for well abandonment following receipt of an NFA determination for the Site from Ecology. Costs for decommissioning wells in the area of total petroleum hydrocarbon and carcinogenic polycyclic aromatic hydrocarbon impacts, including monitoring wells MW-6, MW-11, MW-11B, MW-14, MW-14C, MW-20, and MW-36.	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
ESTIMATED CLEANUP ACTION TOTAL COST (SUBTOTAL)		**$25,560**	**$40,680**	**$610,380**	**$1,773,540**	**$3,326,580**	**$4,024,260**
ESTIMATED CLEANUP ACTION TOTAL COST		**$25,560** **Low Estimate**	**$40,680** **High Estimate**	**$610,380** **Low Estimate**	**$1,773,540** **High Estimate**	**$3,326,580** **Low Estimate**	**$4,024,260** **High Estimate**

Table 12b
Summary of Estimated Cleanup Costs for Cleanup Alternatives 1 , 2b, and 3b for TCE Areas
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

Remedial Action Task	Scope of Work	Estimated Cost: Cleanup Alternative 1: Institutional and Engineered Controls		Cleanup Alternative 2b: In-Situ Chemical Oxidation		Cleanup Alternative 3b: Air Sparge and Soil Vapor Extraction	
		Low Estimate	High Estimate	Low Estimate	High Estimate	Low Estimate	High Estimate
Project Management	Ongoing project management throughout the cleanup action (assumes 8 percent of the total estimated cost).	$2,373	$3,493	$102,813	$202,893	$55,093	$121,173
Institutional and Engineered Controls	Applicable to Cleanup Alternative 1, institutional controls will be in the form of an Environmental Covenant recorded on the property deed that will include Site-use restrictions and health advisories. Engineered controls will be in the form of a soil cap to limit exposure to hazardous substances that remain at the Site. Included estimated cost is 1/3 of estimated total cost for implementing institutional controls for the entire Site.	$6,667	$6,667	$0	$0	$0	$0
Chemical Oxidation	Applicable to Cleanup Alternative 2b, includes engineering design, construction management, potential multiple chemical oxidant injection events, and collection of confirmational groundwater samples. The low estimate assumes one injection with three performance groundwater monitoring events. The high estimate assumes two injections with nine performance groundwater monitoring events. Both estimates assume four quarters of confirmation groundwater monitoring events.	$0	$0	$1,267,000	$2,517,000	$0	$0
Air Sparge/Soil Vapor Extraction	Applicable to Cleanup Alternative 3b, includes engineering design, construction management, construction of air sparge/soil vapor extraction system upgrades, operation and maintenance, and groundwater monitoring. The low estimate assumes 70 months of operation with one replacement of the compressor and blower. The high estimate assumes 152 months of operation with three replacements of the compressor and blower, and an ozone injection contingency.	$0	$0	$0	$0	$666,000	$1,486,000
Closure Report	Applicable to Cleanup Alternatives 2 and 3, summarizing the completed cleanup action and requesting issuance of a No Further Action (NFA) determination from the Washington State Department of Ecology (Ecology). Included estimated cost is 1/3 of estimated total cost for the Site Closure Report.	$0	$0	$6,667	$6,667	$6,667	$6,667
Compliance Groundwater Monitoring	Applicable to Cleanup Alternative 1, long-term groundwater monitoring of contaminant concentrations at points of compliance monitoring wells. The low estimate assumes 3 groundwater monitoring events 18 months apart over the period of 4.5 years following receipt of an NFA determination for the Site from Ecology, and preparation of one report to document groundwater monitoring results. The high estimate assumes 10 groundwater monitoring events 18 months apart over the period of 15 years following receipt of an NFA determination for the Site from Ecology, and preparation of three reports to document groundwater monitoring results. Included estimated cost is 1/3 of estimated total cost for the Site Compliance Groundwater Monitoring.	$7,000	$21,000	$0	$0	$0	$0
Interactions with Ecology and 5-Year Review	Interactions with Ecology and, in case of Cleanup Alternatives 1 and 3, 5-year project reviews.	$6,000	$6,000	$1,500	$2,500	$6,000	$12,000
Remediation System and Monitoring Well Decommissioning	Decommissioning the air sparge/soil vapor extraction system, and monitoring well network in accordance with Washington Administrative Code 173-160 for well abandonment following the receipt of NFA determination for the Site from Ecology. Costs for decommissioning wells in the TCE [trichloroethene] Area, including monitoring wells MW-1 through MW-5, MW 9R, MW-10B, MW-11, MW-13, MW-14, MW-14C, MW-15, MW16R, MW-17A, MW-18 through MW-29; SVE wells SVE-1 through SVE-4, and SVE-6 through SVE-12; and AS wells AS-1 through AS-10.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
ESTIMATED CLEANUP ACTION TOTAL COST (SUBTOTAL)		**$32,040**	**$47,160**	**$1,387,980**	**$2,739,060**	**$743,760**	**$1,635,840**
ESTIMATED CLEANUP ACTION TOTAL COST		**$32,040 Low Estimate**	**$47,160 High Estimate**	**$1,387,980 Low Estimate**	**$2,739,060 High Estimate**	**$743,760 Low Estimate**	**$1,635,840 High Estimate**

Table 12c
Summary of Estimated Cleanup Costs for Cleanup Alternatives 1, 2C, and 3c for Lead and Arsenic Areas
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002

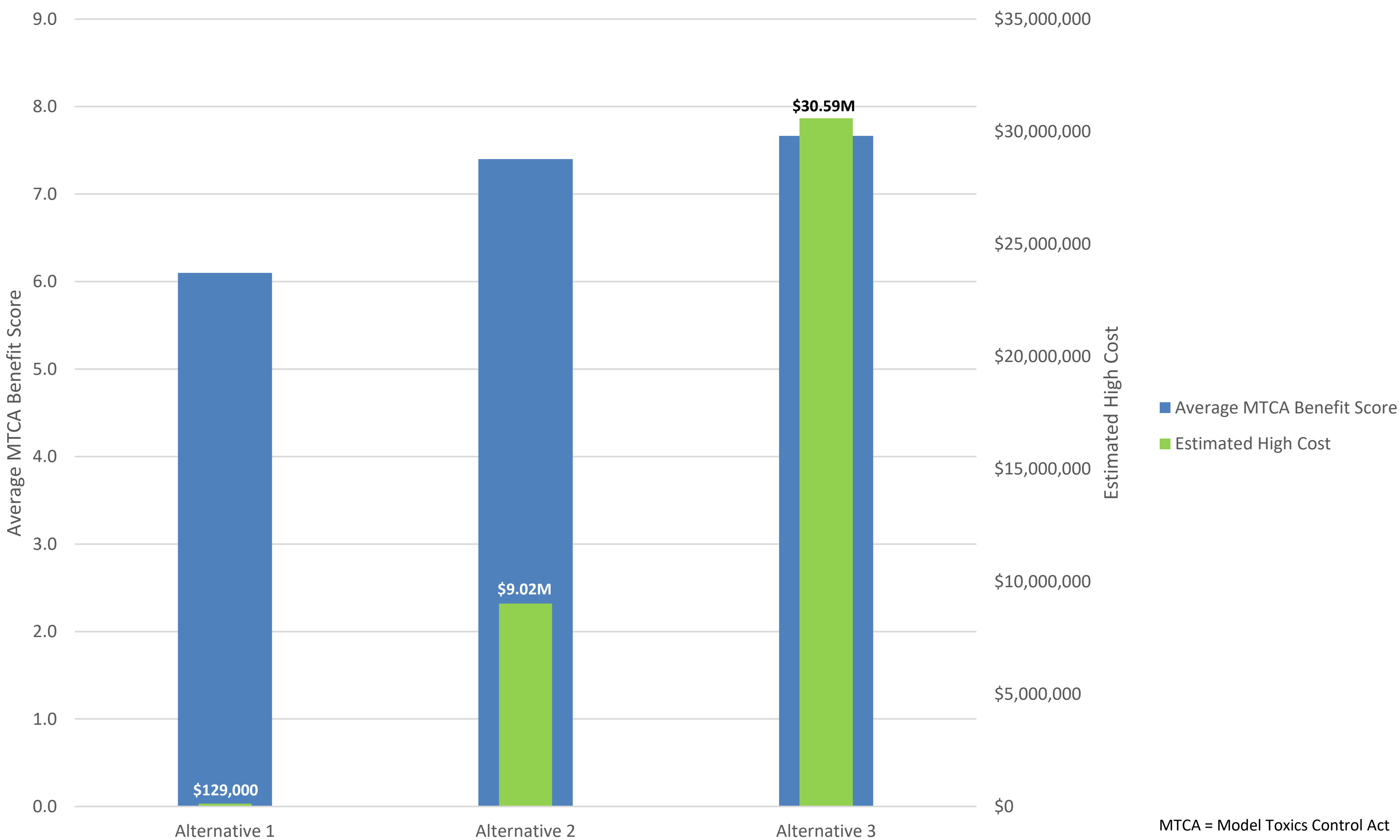
Remedial Action Task	Scope of Work	Estimated Cost					
		Cleanup Alternative 1: Institutional Controls		Cleanup Alternative 2: Soil Solidification		Cleanup Alternative 3: Excavation and Off-Site Disposal	
		Low Estimate	High Estimate	Low Estimate	High Estimate	Low Estimate	High Estimate
Project Management	Ongoing project management throughout the cleanup action (assumes 8 percent of the total estimated cost)	$1,933	$3,053	$276,000	$334,000	$1,538,000	$1,847,000
Institutional and Engineered Controls	Applicable to Cleanup Alternative 1, institutional controls will be in the form of an Environmental Covenant recorded on the property deed that will include Site use restrictions and health advisories. Engineered controls will be in the form of a soil cap to limit exposure to hazardous substances that remain at the Site. Included estimated cost is 1/3 of estimated total cost for implementing institutional controls for the entire Site.	$6,667	$6,667	$0	$0	$0	$0
Soil Solidification	Applicable to Cleanup Alternative 2c, includes engineering design, construction management, implementation of large auger soil mixing, removal and transport of excess soil cuttings, installation of three new groundwater monitoring wells, and groundwater monitoring. The low estimate assumes no performance groundwater monitoring events and four quarters of confirmation groundwater monitoring events. The high estimate assumes eight performance groundwater monitoring events, four quarters of confirmation groundwater monitoring events, and a 20 percent construction contingency.	$0	$0	$3,443,000	$4,160,000	$0	$0
Excavation and Off-Site Disposal	Applicable to Cleanup Alternative 3c, includes engineering design, construction management, excavation, transport, and disposal of foundry fill material and concrete waste off the Site, and groundwater monitoring. The low estimate assumes no performance groundwater monitoring events and four quarters of confirmation groundwater monitoring events. The high estimate assumes eight performance groundwater monitoring events, four quarters of confirmation groundwater monitoring events, and a 20 percent construction contingency.	$0	$0	$0	$0	$19,217,000	$23,078,000
Closure Report	Applicable to Cleanup Alternatives 2 and 3, summarizing the completed cleanup action and requesting issuance of a No Further Action (NFA) determination from the Washington State Department of Ecology (Ecology). Included estimated cost is 1/3 of estimated total cost for the Site Closure Report.	$0	$0	$6,667	$6,667	$6,667	$6,667
Compliance Groundwater Monitoring	Applicable to Cleanup Alternative 1, long-term groundwater monitoring of contaminant concentrations at points of compliance monitoring wells. The low estimate assumes three groundwater monitoring events 18 months apart over the period of 4.5 years following receipt of an NFA determination for the Site from Ecology, and preparation of one report to document groundwater monitoring results. The high estimate assumes 10 groundwater monitoring events 18 months apart over the period of 15 years following receipt of an NFA determination for the Site from Ecology, and preparation of three reports to document groundwater monitoring results. Included estimated cost is 1/3 of estimated total cost for the Site Compliance Groundwater Monitoring.	$7,000	$21,000	$0	$0	$0	$0
Interactions with Ecology and 5-Year Review	Interactions with Ecology and, in case of Cleanup Alternative 1, a 5-year project review following receipt of an NFA determination for the Site from Ecology.	$6,000	$6,000	$1,500	$2,500	$1,500	$2,500
Monitoring Well Decommissioning	Decommissioning nine monitoring wells associated with the Arsenic and Lead Plume in Groundwater Area in accordance with Chapter 173-160 of the Washington Administrative Code for well abandonment following receipt of an NFA determination for the Site from Ecology. Costs for decommissioning wells in the Arsenic and Lead Plume in Groundwater Area, including monitoring wells MW-9A, MW-9D, MW-9R, MW-12, MW-12B, and MW-30 through MW-35.	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500
ESTIMATED CLEANUP ACTION TOTAL COST (SUBTOTAL)		**$26,100**	**$41,220**	**$3,731,667**	**$4,507,667**	**$20,767,667**	**$24,938,667**
ESTIMATED CLEANUP ACTION TOTAL COST		**$26,100** Low Estimate	**$41,220** High Estimate	**$3,731,667** Low Estimate	**$4,507,667** High Estimate	**$20,767,667** Low Estimate	**$24,938,667** High Estimate

CHART

RESPONSE TO AUGUST 30, 2019 LETTER REGARDING FURTHER ACTION AT THE WOODWORTH & CO INC. LAKEVIEW PLANT
2800 104th Street Court South
Lakewood, Washington

Farallon PN: 188-002

Chart 1
Disproportionate Cost Analysis Results
Lakeview Facility
Lakewood, Washington
Farallon PN: 188-002



MTCA = Model Toxics Control Act

ATTACHMENT A
LABORATORY ANALYTICAL REPORTS

RESPONSE TO AUGUST 30, 2019 LETTER REGARDING FURTHER ACTION AT THE WOODWORTH & CO INC. LAKEVIEW PLANT
2800 104th Street Court South
Lakewood, Washington

Farallon PN: 188-002

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

December 16, 2019

Brani Jurista
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 1912-048

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on December 6, 2019.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: December 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

Case Narrative

Samples were collected on December 5, 2019 and received by the laboratory on December 6, 2019. They were maintained at the laboratory at a temperature of 2^oC to 6^oC.

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 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B24-2.4**					
Laboratory ID:	12-048-05					
Diesel Range Organics	**ND**	26	NWTPH-Dx	12-10-19	12-10-19	
Lube Oil	**550**	51	NWTPH-Dx	12-10-19	12-10-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*87*	*50-150*				
Client ID:	**B24-10.0**					
Laboratory ID:	12-048-08					
Diesel Range Organics	**ND**	27	NWTPH-Dx	12-10-19	12-10-19	
Lube Oil Range Organics	**ND**	53	NWTPH-Dx	12-10-19	12-10-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*89*	*50-150*				
Client ID:	**B25-9.0**					
Laboratory ID:	12-048-12					
Diesel Range Organics	**ND**	27	NWTPH-Dx	12-10-19	12-10-19	
Lube Oil	**64**	53	NWTPH-Dx	12-10-19	12-10-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*73*	*50-150*				
Client ID:	**B25-15.0**					
Laboratory ID:	12-048-13					
Diesel Range Organics	**ND**	27	NWTPH-Dx	12-10-19	12-10-19	
Lube Oil Range Organics	**ND**	54	NWTPH-Dx	12-10-19	12-10-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*80*	*50-150*				
Client ID:	**B26-9.0**					
Laboratory ID:	12-048-14					
Diesel Range Organics	**ND**	26	NWTPH-Dx	12-10-19	12-10-19	
Lube Oil Range Organics	**ND**	53	NWTPH-Dx	12-10-19	12-10-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*82*	*50-150*				
Client ID:	**B26-15.0**					
Laboratory ID:	12-048-15					
Diesel Range Organics	**ND**	27	NWTPH-Dx	12-10-19	12-10-19	
Lube Oil Range Organics	**ND**	53	NWTPH-Dx	12-10-19	12-10-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*81*	*50-150*				

Date of Report: December 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B27-12.0**					
Laboratory ID:	12-048-16					
Diesel Range Organics	**ND**	27	NWTPH-Dx	12-10-19	12-10-19	
Lube Oil	**140**	54	NWTPH-Dx	12-10-19	12-10-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*74*	*50-150*				
Client ID:	**B27-15.0**					
Laboratory ID:	12-048-17					
Diesel Range Organics	**ND**	27	NWTPH-Dx	12-10-19	12-10-19	
Lube Oil Range Organics	**ND**	53	NWTPH-Dx	12-10-19	12-10-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*76*	*50-150*				

Date of Report: December 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1210S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	12-10-19	12-10-19	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	12-10-19	12-10-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*90*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-048-12										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Lube Oil	**59.7**	**56.9**	NA	NA		NA		NA	5	NA	
Surrogate:											
o-Terphenyl						*73*	*84*	*50-150*			

Date of Report: December 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B21-3.0**					
Laboratory ID:	12-048-01					
Naphthalene	**ND**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
2-Methylnaphthalene	**ND**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
1-Methylnaphthalene	**ND**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Acenaphthylene	**ND**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Acenaphthene	**ND**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Fluorene	**ND**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Phenanthrene	**0.037**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Anthracene	**0.0077**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Fluoranthene	**0.066**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Pyrene	**0.064**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo[a]anthracene	**0.036**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Chrysene	**0.049**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo[b]fluoranthene	**0.049**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo(j,k)fluoranthene	**0.014**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo[a]pyrene	**0.050**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Indeno(1,2,3-c,d)pyrene	**0.044**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Dibenz[a,h]anthracene	**0.0092**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo[g,h,i]perylene	**0.052**	0.0076	EPA 8270E/SIM	12-10-19	12-13-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*99*	*40 - 111*				
Pyrene-d10	*99*	*40 - 110*				
Terphenyl-d14	*86*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B23-3.0**					
Laboratory ID:	12-048-03					
Naphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
2-Methylnaphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
1-Methylnaphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Acenaphthylene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Acenaphthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Fluorene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Phenanthrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Anthracene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Fluoranthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Pyrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo[a]anthracene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Chrysene	**0.012**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo[b]fluoranthene	**0.0078**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo(j,k)fluoranthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo[a]pyrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Indeno(1,2,3-c,d)pyrene	**0.0096**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Dibenz[a,h]anthracene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo[g,h,i]perylene	**0.025**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*88*	*40 - 111*				
Pyrene-d10	*89*	*40 - 110*				
Terphenyl-d14	*79*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B24-2.4**					
Laboratory ID:	12-048-05					
Naphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
2-Methylnaphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
1-Methylnaphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Acenaphthylene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Acenaphthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Fluorene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Phenanthrene	**0.078**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Anthracene	**0.022**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Fluoranthene	**0.13**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Pyrene	**0.12**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo[a]anthracene	**0.060**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Chrysene	**0.061**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo[b]fluoranthene	**0.073**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo(j,k)fluoranthene	**0.024**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo[a]pyrene	**0.063**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Indeno(1,2,3-c,d)pyrene	**0.059**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Dibenz[a,h]anthracene	**0.0093**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Benzo[g,h,i]perylene	**0.068**	0.0069	EPA 8270E/SIM	12-10-19	12-13-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*94*	*40 - 111*				
Pyrene-d10	*90*	*40 - 110*				
Terphenyl-d14	*83*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B22-10.0**					
Laboratory ID:	12-048-06					
Naphthalene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
2-Methylnaphthalene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
1-Methylnaphthalene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Acenaphthylene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Acenaphthene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Fluorene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Phenanthrene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Anthracene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Fluoranthene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Pyrene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[a]anthracene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Chrysene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[b]fluoranthene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo(j,k)fluoranthene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[a]pyrene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Dibenz[a,h]anthracene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[g,h,i]perylene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*100*	*40 - 111*				
Pyrene-d10	*88*	*40 - 110*				
Terphenyl-d14	*93*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B25-9.0**					
Laboratory ID:	12-048-12					
Naphthalene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
2-Methylnaphthalene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
1-Methylnaphthalene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Acenaphthylene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Acenaphthene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Fluorene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Phenanthrene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Anthracene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Fluoranthene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Pyrene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo[a]anthracene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Chrysene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo[b]fluoranthene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo(j,k)fluoranthene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo[a]pyrene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Dibenz[a,h]anthracene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo[g,h,i]perylene	**ND**	0.0071	EPA 8270E/SIM	12-10-19	12-12-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*99*	*40 - 111*				
Pyrene-d10	*93*	*40 - 110*				
Terphenyl-d14	*95*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B26-9.0**					
Laboratory ID:	12-048-14					
Naphthalene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
2-Methylnaphthalene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
1-Methylnaphthalene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Acenaphthylene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Acenaphthene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Fluorene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Phenanthrene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Anthracene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Fluoranthene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Pyrene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[a]anthracene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Chrysene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[b]fluoranthene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo(j,k)fluoranthene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[a]pyrene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Dibenz[a,h]anthracene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[g,h,i]perylene	**ND**	0.0070	EPA 8270E/SIM	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*100*	*40 - 111*				
Pyrene-d10	*98*	*40 - 110*				
Terphenyl-d14	*96*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B27-12.0**					
Laboratory ID:	12-048-16					
Naphthalene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
2-Methylnaphthalene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
1-Methylnaphthalene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Acenaphthylene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Acenaphthene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Fluorene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Phenanthrene	**0.036**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Anthracene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Fluoranthene	**0.042**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Pyrene	**0.072**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo[a]anthracene	**0.042**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Chrysene	**0.049**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo[b]fluoranthene	**0.068**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo(j,k)fluoranthene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo[a]pyrene	**0.082**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Indeno(1,2,3-c,d)pyrene	**0.080**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Dibenz[a,h]anthracene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo[g,h,i]perylene	**0.11**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*84*	*40 - 111*				
Pyrene-d10	*86*	*40 - 110*				
Terphenyl-d14	*83*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1210S1					
Naphthalene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Acenaphthylene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Acenaphthene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Fluorene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Phenanthrene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Anthracene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Fluoranthene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Pyrene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Chrysene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Benzo[g,h,i]perylene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*75*	*40 - 111*				
Pyrene-d10	*87*	*40 - 110*				
Terphenyl-d14	*81*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	12-064-07										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	**0.165**	**0.156**	0.167	0.167	ND	99	93	44 - 111	6	21	
Acenaphthylene	**0.160**	**0.143**	0.167	0.167	ND	96	86	47 - 122	11	24	
Acenaphthene	**0.157**	**0.139**	0.167	0.167	ND	94	83	46 - 122	12	24	
Fluorene	**0.177**	**0.158**	0.167	0.167	ND	106	95	53 - 118	11	23	
Phenanthrene	**0.176**	**0.156**	0.167	0.167	ND	105	93	41 - 124	12	24	
Anthracene	**0.185**	**0.163**	0.167	0.167	ND	111	98	53 - 119	13	21	
Fluoranthene	**0.192**	**0.169**	0.167	0.167	ND	115	101	39 - 135	13	32	
Pyrene	**0.185**	**0.154**	0.167	0.167	ND	111	92	39 - 134	18	34	
Benzo[a]anthracene	**0.187**	**0.169**	0.167	0.167	ND	112	101	53 - 131	10	23	
Chrysene	**0.171**	**0.148**	0.167	0.167	ND	102	89	46 - 126	14	24	
Benzo[b]fluoranthene	**0.173**	**0.156**	0.167	0.167	ND	104	93	45 - 127	10	25	
Benzo(j,k)fluoranthene	**0.171**	**0.147**	0.167	0.167	ND	102	88	52 - 122	15	21	
Benzo[a]pyrene	**0.170**	**0.151**	0.167	0.167	ND	102	90	51 - 126	12	24	
Indeno(1,2,3-c,d)pyrene	**0.179**	**0.151**	0.167	0.167	ND	107	90	48 - 127	17	23	
Dibenz[a,h]anthracene	**0.175**	**0.148**	0.167	0.167	ND	105	89	51 - 124	17	22	
Benzo[g,h,i]perylene	**0.181**	**0.150**	0.167	0.167	ND	108	90	50 - 120	19	22	
Surrogate:											
2-Fluorobiphenyl						*104*	*93*	*40 - 111*			
Pyrene-d10						*107*	*92*	*40 - 110*			
Terphenyl-d14						*103*	*92*	*45 - 122*			

Date of Report: December 16, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048
Project: 188-002

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
B21-3.0	12-048-01	**12**	12-10-19
B23-3.0	12-048-03	**4**	12-10-19
B24-2.4	12-048-05	**3**	12-10-19
B22-10.0	12-048-06	**6**	12-10-19
B24-10.0	12-048-08	**6**	12-10-19
B25-9.0	12-048-12	**6**	12-10-19
B25-15.0	12-048-13	**8**	12-10-19
B26-9.0	12-048-14	**5**	12-10-19
B26-15.0	12-048-15	**6**	12-10-19
B27-12.0	12-048-16	**8**	12-10-19
B27-15.0	12-048-17	**6**	12-10-19

OnSite
Environmental Inc.

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

Page 1 of 2

Laboratory Number: 12-048

Company: FARALLON
Project Number: 188-002
Project Name: LAKEVIEW FACILITY
Project Manager: BRANI JURISTA
Sampled by: Ken Scott

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ________ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
1	B21-3.0	12/5/19	900	S	1									X													X
2	B22-3.0		1000	S	1																						
3	B23-3.0		1022	S	1									X													X
4	B21-10.0		1105	S	1																						
5	B24-2.4		1120	S	1				X					X													X
6	B22-10.0		1200	S	1									X													X
7	B23-10.0		1218	S	1																						
8	B24-10.0		1238	S	1				X																		X
9	B25-3.0		1255	S	1																						
10	B26-3.0		1315	S	1																						

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	12/5/19	1800
Received	[illegible]	OSE	12/6/19	1100
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
~~Hold samples, will call w/ analysis.~~ KL 12-9
X - added 12-9 KL (SA)

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

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

Page 2 of 2

Company: FARALLON
Project Number: 188-002
Project Name: LAKeview FAcility
Project Manager: BrAni JuristA
Sampled by: Ken Scott

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ______ (other)

Laboratory Number: 12-048

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
11	B27-3.0	12/5/19	1345	S	1																						
12	B25-9.0		1435	S	1				X					X													X
13	B25-15.0		1445	S	1				X																		
14	B26-9.0		1500	S	1				X					X													
15	B26-15.0		1510	S	1				X																		
16	B27-12.0		1530	S	1				X					X													
17	B27-15.0		1540	S	1				X																		
18	B28-3.0		1555	S	1																						

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	12/5/19	1800
Received	[signature]	OSE	12/6/19	1110
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
See page #1 comments

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

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

December 18, 2019

Brani Jurista
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
      Laboratory Reference No. 1912-048B

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on December 6, 2019.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: December 18, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048B
Project: 188-002

Case Narrative

Samples were collected on December 5, 2019 and received by the laboratory on December 6, 2019. They were maintained at the laboratory at a temperature of $2^{o}C$ to $6^{o}C$.

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 18, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048B
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B27-15.0**					
Laboratory ID:	12-048-17					
Naphthalene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
2-Methylnaphthalene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
1-Methylnaphthalene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Acenaphthylene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Acenaphthene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Fluorene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Phenanthrene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Anthracene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Fluoranthene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Pyrene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Benzo[a]anthracene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Chrysene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Benzo[b]fluoranthene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Benzo(j,k)fluoranthene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Benzo[a]pyrene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Dibenz[a,h]anthracene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Benzo[g,h,i]perylene	**ND**	0.0071	EPA 8270E/SIM	12-17-19	12-17-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*91*	*40 - 111*				
Pyrene-d10	*94*	*40 - 110*				
Terphenyl-d14	*105*	*45 - 122*				

Date of Report: December 18, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048B
Project: 188-002

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1217S2					
Naphthalene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Acenaphthylene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Acenaphthene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Fluorene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Phenanthrene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Anthracene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Fluoranthene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Pyrene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Chrysene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Benzo[g,h,i]perylene	**ND**	0.0067	EPA 8270E/SIM	12-17-19	12-17-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*103*	*40 - 111*				
Pyrene-d10	*78*	*40 - 110*				
Terphenyl-d14	*103*	*45 - 122*				

Date of Report: December 18, 2019
Samples Submitted: December 6, 2019
Laboratory Reference: 1912-048B
Project: 188-002

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	12-154-02										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	**0.0841**	**0.0776**	0.0833	0.0833	ND	101	93	44 - 111	8	21	
Acenaphthylene	**0.0858**	**0.0838**	0.0833	0.0833	ND	103	101	47 - 122	2	24	
Acenaphthene	**0.0845**	**0.0818**	0.0833	0.0833	ND	101	98	46 - 122	3	24	
Fluorene	**0.0826**	**0.0780**	0.0833	0.0833	ND	99	94	53 - 118	6	23	
Phenanthrene	**0.0802**	**0.0763**	0.0833	0.0833	ND	96	92	41 - 124	5	24	
Anthracene	**0.0887**	**0.0850**	0.0833	0.0833	ND	106	102	53 - 119	4	21	
Fluoranthene	**0.0934**	**0.0900**	0.0833	0.0833	ND	112	108	39 - 135	4	32	
Pyrene	**0.0929**	**0.0893**	0.0833	0.0833	ND	112	107	39 - 134	4	34	
Benzo[a]anthracene	**0.0922**	**0.0849**	0.0833	0.0833	ND	111	102	53 - 131	8	23	
Chrysene	**0.0907**	**0.0831**	0.0833	0.0833	ND	109	100	46 - 126	9	24	
Benzo[b]fluoranthene	**0.0911**	**0.0839**	0.0833	0.0833	ND	109	101	45 - 127	8	25	
Benzo(j,k)fluoranthene	**0.0949**	**0.0864**	0.0833	0.0833	ND	114	104	52 - 122	9	21	
Benzo[a]pyrene	**0.0906**	**0.0832**	0.0833	0.0833	ND	109	100	51 - 126	9	24	
Indeno(1,2,3-c,d)pyrene	**0.0907**	**0.0810**	0.0833	0.0833	ND	109	97	48 - 127	11	23	
Dibenz[a,h]anthracene	**0.0881**	**0.0822**	0.0833	0.0833	ND	106	99	51 - 124	7	22	
Benzo[g,h,i]perylene	**0.0877**	**0.0791**	0.0833	0.0833	ND	105	95	50 - 120	10	22	
Surrogate:											
2-Fluorobiphenyl						*106*	*92*	*40 - 111*			
Pyrene-d10						*97*	*90*	*40 - 110*			
Terphenyl-d14						*105*	*98*	*45 - 122*			

OnSite Environmental Inc.

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

Page 1 of 2

Laboratory Number: 12-048

Company: FARALLON
Project Number: 188-002
Project Name: LAKeview FAcility
Project Manager: BrANi JoristA
Sampled by: Ken Scott

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ________ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
1	B21-3.0	12/5/19	900	S	1									X													X
2	B22-3.0		1000	S	1																						
3	B23-3.0		1022	S	1									X													X
4	B21-10.0		1105	S	1																						
5	B24-2.4		1120	S	1				X					X													X
6	B22-10.0		1200	S	1									X													X
7	B23-10.0		1218	S	1																						
8	B24-10.0		1238	S	1				X																		X
9	B25-3.0		1255	S	1																						
10	B26-3.0		1315	S	1																						

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	12/5/19	1800
Received	[signature]	OSE	12/6/19	1100
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
~~Hold samples, will call w/ analysis.~~ KL 12-9
X - added 12-9 KL (STA)
(X) Added 12/16/19. DB (STA)

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

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

Laboratory Number: 12-048

Company: FARALLON
Project Number: 188-002
Project Name: LAKeview Facility
Project Manager: BrANi JuristA
Sampled by: Ken Scott

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ________ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
11	B27-3.0	12/5/19	1345	S	1																						
12	B25-9.0		1435	S	1				X					X													X
13	B25-15.0		1445	S	1				X																		
14	B26-9.0		1500	S	1				X					X													
15	B26-15.0		1510	S	1				X																		
16	B27-12.0		1530	S	1				X					X													
17	B27-15.0		1540	S	1				X					X													
18	B28-3.0		1555	S	1																						

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	12/5/19	1800
Received		OSE	12/6/19	11W
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
See page #1 comments

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

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

December 16, 2019

Brani Jurista
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 1912-064

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on December 9, 2019.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: December 16, 2019
Samples Submitted: December 9, 2019
Laboratory Reference: 1912-064
Project: 188-002

Case Narrative

Samples were collected on December 6, 2019 and received by the laboratory on December 9, 2019. They were maintained at the laboratory at a temperature of 2^oC to 6^oC.

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 16, 2019
Samples Submitted: December 9, 2019
Laboratory Reference: 1912-064
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B28-9.0**					
Laboratory ID:	12-064-01					
Diesel Range Organics	**180**	54	NWTPH-Dx	12-10-19	12-12-19	N
Lube Oil	**2000**	110	NWTPH-Dx	12-10-19	12-12-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*98*	*50-150*				
Client ID:	**B28-15.0**					
Laboratory ID:	12-064-02					
Diesel Range Organics	**ND**	27	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil Range Organics	**ND**	54	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*59*	*50-150*				
Client ID:	**B29-9.0**					
Laboratory ID:	12-064-04					
Diesel Range Organics	**ND**	27	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil Range Organics	**ND**	54	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*71*	*50-150*				
Client ID:	**B29-12.0**					
Laboratory ID:	12-064-05					
Diesel Range Organics	**ND**	27	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil	**270**	54	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*82*	*50-150*				
Client ID:	**B30-3.0**					
Laboratory ID:	12-064-06					
Diesel Range Organics	**ND**	26	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil Range Organics	**ND**	52	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*63*	*50-150*				
Client ID:	**B30-10.0**					
Laboratory ID:	12-064-07					
Diesel Range Organics	**ND**	26	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil Range Organics	**ND**	52	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*77*	*50-150*				

Date of Report: December 16, 2019
Samples Submitted: December 9, 2019
Laboratory Reference: 1912-064
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B31-3.0**					
Laboratory ID:	12-064-08					
Diesel Range Organics	**ND**	26	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil	**120**	52	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*83*	*50-150*				
Client ID:	**B31-10.0**					
Laboratory ID:	12-064-09					
Diesel Range Organics	**ND**	26	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil Range Organics	**ND**	52	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*85*	*50-150*				
Client ID:	**B32-3.0**					
Laboratory ID:	12-064-10					
Diesel Range Organics	**ND**	27	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil Range Organics	**ND**	53	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*71*	*50-150*				
Client ID:	**B32-10.0**					
Laboratory ID:	12-064-11					
Diesel Range Organics	**ND**	26	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil Range Organics	**ND**	52	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*80*	*50-150*				
Client ID:	**B33-3.0**					
Laboratory ID:	12-064-12					
Diesel Range Organics	**ND**	27	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil	**200**	53	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*70*	*50-150*				
Client ID:	**B33-10.0**					
Laboratory ID:	12-064-13					
Diesel Range Organics	**ND**	26	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil Range Organics	**ND**	52	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*76*	*50-150*				

Date of Report: December 16, 2019
Samples Submitted: December 9, 2019
Laboratory Reference: 1912-064
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B34-3.0**					
Laboratory ID:	12-064-14					
Diesel Range Organics	**49**	26	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil	**280**	52	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*78*	*50-150*				
Client ID:	**B34-10.0**					
Laboratory ID:	12-064-15					
Diesel Range Organics	**ND**	26	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil Range Organics	**ND**	52	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*70*	*50-150*				

Date of Report: December 16, 2019
Samples Submitted: December 9, 2019
Laboratory Reference: 1912-064
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1210S2					
Diesel Range Organics	**ND**	25	NWTPH-Dx	12-10-19	12-11-19	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*92*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-064-01										
	ORIG	DUP									
Diesel Range Organics	**168**	**115**	NA	NA		NA		NA	37	NA	N
Lube Oil	**1810**	**1490**	NA	NA		NA		NA	19	NA	
Surrogate:											
o-Terphenyl						*98*	*85*	*50-150*			
Laboratory ID:	12-064-02										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*59*	*75*	*50-150*			

Date of Report: December 16, 2019
Samples Submitted: December 9, 2019
Laboratory Reference: 1912-064
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B28-9.0**					
Laboratory ID:	12-064-01					
Naphthalene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
2-Methylnaphthalene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
1-Methylnaphthalene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Acenaphthylene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Acenaphthene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Fluorene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Phenanthrene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Anthracene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Fluoranthene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Pyrene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo[a]anthracene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Chrysene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo[b]fluoranthene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo(j,k)fluoranthene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo[a]pyrene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Indeno(1,2,3-c,d)pyrene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Dibenz[a,h]anthracene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Benzo[g,h,i]perylene	**ND**	0.036	EPA 8270E/SIM	12-10-19	12-12-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*78*	*40 - 111*				
Pyrene-d10	*81*	*40 - 110*				
Terphenyl-d14	*71*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 9, 2019
Laboratory Reference: 1912-064
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B29-9.0**					
Laboratory ID:	12-064-04					
Naphthalene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
2-Methylnaphthalene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
1-Methylnaphthalene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Acenaphthylene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Acenaphthene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Fluorene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Phenanthrene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Anthracene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Fluoranthene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Pyrene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[a]anthracene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Chrysene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[b]fluoranthene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo(j,k)fluoranthene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[a]pyrene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Dibenz[a,h]anthracene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[g,h,i]perylene	**ND**	0.0072	EPA 8270E/SIM	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*104*	*40 - 111*				
Pyrene-d10	*94*	*40 - 110*				
Terphenyl-d14	*95*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 9, 2019
Laboratory Reference: 1912-064
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B30-10.0**					
Laboratory ID:	12-064-07					
Naphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
2-Methylnaphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
1-Methylnaphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Acenaphthylene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Acenaphthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Fluorene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Phenanthrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Anthracene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Fluoranthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Pyrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[a]anthracene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Chrysene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[b]fluoranthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo(j,k)fluoranthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[a]pyrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Dibenz[a,h]anthracene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[g,h,i]perylene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*101*	*40 - 111*				
Pyrene-d10	*100*	*40 - 110*				
Terphenyl-d14	*98*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 9, 2019
Laboratory Reference: 1912-064
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B32-10.0**					
Laboratory ID:	12-064-11					
Naphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
2-Methylnaphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
1-Methylnaphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Acenaphthylene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Acenaphthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Fluorene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Phenanthrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Anthracene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Fluoranthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Pyrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[a]anthracene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Chrysene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[b]fluoranthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo(j,k)fluoranthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[a]pyrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Dibenz[a,h]anthracene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[g,h,i]perylene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*104*	*40 - 111*				
Pyrene-d10	*96*	*40 - 110*				
Terphenyl-d14	*99*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 9, 2019
Laboratory Reference: 1912-064
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B34-10.0**					
Laboratory ID:	12-064-15					
Naphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
2-Methylnaphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
1-Methylnaphthalene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Acenaphthylene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Acenaphthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Fluorene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Phenanthrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Anthracene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Fluoranthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Pyrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[a]anthracene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Chrysene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[b]fluoranthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo(j,k)fluoranthene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[a]pyrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Dibenz[a,h]anthracene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Benzo[g,h,i]perylene	**ND**	0.0069	EPA 8270E/SIM	12-10-19	12-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*97*	*40 - 111*				
Pyrene-d10	*87*	*40 - 110*				
Terphenyl-d14	*93*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 9, 2019
Laboratory Reference: 1912-064
Project: 188-002

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1210S1					
Naphthalene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Acenaphthylene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Acenaphthene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Fluorene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Phenanthrene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Anthracene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Fluoranthene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Pyrene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Chrysene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Benzo[g,h,i]perylene	**ND**	0.0067	EPA 8270E/SIM	12-10-19	12-10-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*75*	*40 - 111*				
Pyrene-d10	*87*	*40 - 110*				
Terphenyl-d14	*81*	*45 - 122*				

Date of Report: December 16, 2019
Samples Submitted: December 9, 2019
Laboratory Reference: 1912-064
Project: 188-002

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	12-064-07										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	**0.165**	**0.156**	0.167	0.167	ND	99	93	44 - 111	6	21	
Acenaphthylene	**0.160**	**0.143**	0.167	0.167	ND	96	86	47 - 122	11	24	
Acenaphthene	**0.157**	**0.139**	0.167	0.167	ND	94	83	46 - 122	12	24	
Fluorene	**0.177**	**0.158**	0.167	0.167	ND	106	95	53 - 118	11	23	
Phenanthrene	**0.176**	**0.156**	0.167	0.167	ND	105	93	41 - 124	12	24	
Anthracene	**0.185**	**0.163**	0.167	0.167	ND	111	98	53 - 119	13	21	
Fluoranthene	**0.192**	**0.169**	0.167	0.167	ND	115	101	39 - 135	13	32	
Pyrene	**0.185**	**0.154**	0.167	0.167	ND	111	92	39 - 134	18	34	
Benzo[a]anthracene	**0.187**	**0.169**	0.167	0.167	ND	112	101	53 - 131	10	23	
Chrysene	**0.171**	**0.148**	0.167	0.167	ND	102	89	46 - 126	14	24	
Benzo[b]fluoranthene	**0.173**	**0.156**	0.167	0.167	ND	104	93	45 - 127	10	25	
Benzo(j,k)fluoranthene	**0.171**	**0.147**	0.167	0.167	ND	102	88	52 - 122	15	21	
Benzo[a]pyrene	**0.170**	**0.151**	0.167	0.167	ND	102	90	51 - 126	12	24	
Indeno(1,2,3-c,d)pyrene	**0.179**	**0.151**	0.167	0.167	ND	107	90	48 - 127	17	23	
Dibenz[a,h]anthracene	**0.175**	**0.148**	0.167	0.167	ND	105	89	51 - 124	17	22	
Benzo[g,h,i]perylene	**0.181**	**0.150**	0.167	0.167	ND	108	90	50 - 120	19	22	
Surrogate:											
2-Fluorobiphenyl						*104*	*93*	*40 - 111*			
Pyrene-d10						*107*	*92*	*40 - 110*			
Terphenyl-d14						*103*	*92*	*45 - 122*			

Date of Report: December 16, 2019
Samples Submitted: December 9, 2019
Laboratory Reference: 1912-064
Project: 188-002

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
B28-9.0	12-064-01	**8**	12-10-19
B28-15.0	12-064-02	**8**	12-10-19
B29-9.0	12-064-04	**8**	12-10-19
B29-12.0	12-064-05	**7**	12-10-19
B30-3.0	12-064-06	**4**	12-10-19
B30-10.0	12-064-07	**4**	12-10-19
B31-3.0	12-064-08	**4**	12-10-19
B31-10.0	12-064-09	**3**	12-10-19
B32-3.0	12-064-10	**6**	12-10-19
B32-10.0	12-064-11	**4**	12-10-19
B33-3.0	12-064-12	**6**	12-10-19
B33-10.0	12-064-13	**4**	12-10-19
B34-3.0	12-064-14	**4**	12-10-19
B34-10.0	12-064-15	**3**	12-10-19

OnSite Environmental Inc.

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

Page 1 of 2

Company: FARALLON
Project Number: 188-002
Project Name: LAKEVIEW FACILITY
Project Manager: BRANI JURISTA
Sampled by: Ken Scott

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ______ (other)

Laboratory Number: 12-064

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
1	B28-9.0	12/6/19	845	S	1				X					X													X
2	B28-15.0		855	S	1				↓																		↓
3	B29-3.0		917	S	1																						
4	B29-9.0		1000	S	1				X					X													X
5	B29-12.0		1010	S	1																						
6	B30-3.0		1018	S	1																						
7	B30-10.0		1100	S	1									X													
8	B31-3.0		1108	S	1																						
9	B31-10.0		1140	S	1																						
10	B32-3.0		1200	S	1																						

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	12/6/19	1615
Received	[signature]	OSE	12/9/19	1110
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
~~Hold samples, will call w/ analysis~~ × Added 12/9/19 MW

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

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

Page 2 of 2

Laboratory Number: 12-064

Company: FARALLON
Project Number: 188-002
Project Name: LAKEVIEW FACILITY
Project Manager: BRANI JURISTA
Sampled by: Ken Scott

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ________ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
11	B32-10.0	12/6/19	1210	S	1				X					X													X
12	B33-3.0		1220	S	1																						
13	B33-10.0		1240	S	1																						
14	B34-3.0		1310	S	1																						
15	B34-10.0		1355	S	1									X													

KS

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	12/6/19	1615
Received	[illegible]	OSE	12/9/18	1110
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
See comments page #1

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

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

January 13, 2020

Brani Jurista
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 2001-026

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on January 3, 2020.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: January 13, 2020
Samples Submitted: January 3, 2020
Laboratory Reference: 2001-026
Project: 188-002

Case Narrative

Samples were collected on January 3, 2020 and received by the laboratory on January 3, 2020. They were maintained at the laboratory at a temperature of $2^{o}C$ to $6^{o}C$.

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: January 13, 2020
Samples Submitted: January 3, 2020
Laboratory Reference: 2001-026
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B-41-5.0**					
Laboratory ID:	01-026-01					
Diesel Fuel #2	**610**	280	NWTPH-Dx	1-6-20	1-10-20	N
Lube Oil	**1800**	570	NWTPH-Dx	1-6-20	1-10-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	---	*50-150*				S
Client ID:	**B-42-5.0**					
Laboratory ID:	01-026-02					
Diesel Range Organics	**38**	27	NWTPH-Dx	1-6-20	1-7-20	N
Lube Oil	**270**	55	NWTPH-Dx	1-6-20	1-7-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*77*	*50-150*				
Client ID:	**B-43-5.0**					
Laboratory ID:	01-026-03					
Diesel Range Organics	**34**	27	NWTPH-Dx	1-6-20	1-7-20	N
Lube Oil	**150**	54	NWTPH-Dx	1-6-20	1-7-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*69*	*50-150*				

Date of Report: January 13, 2020
Samples Submitted: January 3, 2020
Laboratory Reference: 2001-026
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0106S4					
Diesel Range Organics	**ND**	25	NWTPH-Dx	1-6-20	1-7-20	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	1-6-20	1-7-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*64*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-026-02										
	ORIG	DUP									
Diesel Range Organics	**34.8**	**33.9**	NA	NA		NA		NA	3	NA	N
Lube Oil	**246**	**221**	NA	NA		NA		NA	11	NA	
Surrogate:											
o-Terphenyl						*77*	*57*	*50-150*			

Date of Report: January 13, 2020
Samples Submitted: January 3, 2020
Laboratory Reference: 2001-026
Project: 188-002

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
B-41-5.0	01-026-01	**12**	1-6-20
B-42-5.0	01-026-02	**8**	1-6-20
B-43-5.0	01-026-03	**8**	1-6-20

OnSite Environmental Inc.

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

Laboratory Number: 01-026

Company: Farallon
Project Number: 188-002
Project Name: Woodworth
Project Manager: Brani Jurister
Sampled by: M. Gehring

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ________ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	B-41-5.0	1/3/20	1230	S	1				X														
2	B-42-5.0	1/3/20	1240	S	1				X														
3	B-43-5.0	1/3/20	1247	S	1				X														

NG

	Signature	Company	Date	Time
Relinquished	Megan Gurr	Farallon	1/3/20	1500
Received	Yusuf Pehlivan	Farallon	1/3/20	1500
Relinquished	Yusuf Pehlivan	Farallon	1/3/20	1720
Received	[signature]	OSE	1/3/20	1720
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

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

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

January 14, 2020

Brani Jurista
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 2001-077

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on January 8, 2020.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

Case Narrative

Samples were collected on January 7, 2020 and received by the laboratory on January 8, 2020. They were maintained at the laboratory at a temperature of 2^{o}C to 6^{o}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: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13-010720**					
Laboratory ID:	01-077-02					
Diesel Range Organics	**0.24**	0.22	NWTPH-Dx	1-9-20	1-9-20	
Lube Oil Range Organics	**0.56**	0.22	NWTPH-Dx	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***100***	***50-150***				
Client ID:	**MW-9R-010720**					
Laboratory ID:	01-077-06					
Diesel Range Organics	**0.29**	0.20	NWTPH-Dx	1-9-20	1-9-20	
Lube Oil Range Organics	**0.78**	0.20	NWTPH-Dx	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***99***	***50-150***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0109W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	1-9-20	1-9-20	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***99***	***50-150***				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB0109W1										
	ORIG	DUP									
Diesel Fuel #2	**0.456**	**0.400**	NA	NA		NA		NA	13	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						***104***	***97***	***50-150***			

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-12-010720**					
Laboratory ID:	01-077-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	0.65	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	2.2	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	1.7	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-12-010720**					
Laboratory ID:	01-077-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***102***	***75-127***				
Toluene-d8	***106***	***80-127***				
4-Bromofluorobenzene	***87***	***78-125***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-3-010720**					
Laboratory ID:	01-077-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	1.2	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-3-010720**					
Laboratory ID:	01-077-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***99***	***75-127***				
Toluene-d8	***105***	***80-127***				
4-Bromofluorobenzene	***88***	***78-125***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-6-010720**					
Laboratory ID:	01-077-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	0.42	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	0.53	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	4.0	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-6-010720**					
Laboratory ID:	01-077-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***101***	***75-127***				
Toluene-d8	***107***	***80-127***				
4-Bromofluorobenzene	***90***	***78-125***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9R-010720**					
Laboratory ID:	01-077-06					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9R-010720**					
Laboratory ID:	01-077-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***102***	***75-127***				
Toluene-d8	***107***	***80-127***				
4-Bromofluorobenzene	***88***	***78-125***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9B-010720**					
Laboratory ID:	01-077-07					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	0.58	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	0.21	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9B-010720**					
Laboratory ID:	01-077-07					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	1.1	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***99***	***75-127***				
Toluene-d8	***105***	***80-127***				
4-Bromofluorobenzene	***87***	***78-125***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-26-010720**					
Laboratory ID:	01-077-09					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-26-010720**					
Laboratory ID:	01-077-09					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***100***	***75-127***				
Toluene-d8	***107***	***80-127***				
4-Bromofluorobenzene	***87***	***78-125***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-3-010720**					
Laboratory ID:	01-077-10					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	0.21	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	1.7	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	1.1	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	3.5	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-3-010720**					
Laboratory ID:	01-077-10					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***100***	***75-127***				
Toluene-d8	***107***	***80-127***				
4-Bromofluorobenzene	***89***	***78-125***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-25-010720**					
Laboratory ID:	01-077-12					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	3.5	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-25-010720**					
Laboratory ID:	01-077-12					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***98***	***75-127***				
Toluene-d8	***105***	***80-127***				
4-Bromofluorobenzene	***88***	***78-125***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-8-010720**					
Laboratory ID:	01-077-13					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	0.25	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	2.5	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-8-010720**					
Laboratory ID:	01-077-13					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***98***	***75-127***				
Toluene-d8	***104***	***80-127***				
4-Bromofluorobenzene	***87***	***78-125***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-14C-010720**					
Laboratory ID:	01-077-16					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	0.56	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	1.2	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-14C-010720**					
Laboratory ID:	01-077-16					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	0.23	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***100***	***75-127***				
Toluene-d8	***106***	***80-127***				
4-Bromofluorobenzene	***86***	***78-125***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

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:	MB0109W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0109W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***102***	***75-127***				
Toluene-d8	***106***	***80-127***				
4-Bromofluorobenzene	***88***	***78-125***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0109W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**9.69**	**10.2**	10.0	10.0	97	102	63-130	5	17	
Benzene	**9.73**	**10.1**	10.0	10.0	97	101	76-125	4	19	
Trichloroethene	**10.6**	**11.0**	10.0	10.0	106	110	76-121	4	18	
Toluene	**10.2**	**10.4**	10.0	10.0	102	104	80-124	2	18	
Chlorobenzene	**9.74**	**10.1**	10.0	10.0	97	101	75-120	4	19	
Surrogate:										
Dibromofluoromethane					***102***	***103***	***75-127***			
Toluene-d8					***108***	***110***	***80-127***			
4-Bromofluorobenzene					***89***	***90***	***78-125***			

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13-010720**					
Laboratory ID:	01-077-02					
Naphthalene	**ND**	0.097	EPA 8270E/SIM	1-10-20	1-10-20	
2-Methylnaphthalene	**ND**	0.097	EPA 8270E/SIM	1-10-20	1-10-20	
1-Methylnaphthalene	**ND**	0.097	EPA 8270E/SIM	1-10-20	1-10-20	
Acenaphthylene	**ND**	0.097	EPA 8270E/SIM	1-10-20	1-10-20	
Acenaphthene	**ND**	0.097	EPA 8270E/SIM	1-10-20	1-10-20	
Fluorene	**ND**	0.097	EPA 8270E/SIM	1-10-20	1-10-20	
Phenanthrene	**ND**	0.097	EPA 8270E/SIM	1-10-20	1-10-20	
Anthracene	**ND**	0.097	EPA 8270E/SIM	1-10-20	1-10-20	
Fluoranthene	**ND**	0.097	EPA 8270E/SIM	1-10-20	1-10-20	
Pyrene	**ND**	0.097	EPA 8270E/SIM	1-10-20	1-10-20	
Benzo[a]anthracene	**0.055**	0.0097	EPA 8270E/SIM	1-10-20	1-10-20	
Chrysene	**0.052**	0.0097	EPA 8270E/SIM	1-10-20	1-10-20	
Benzo[b]fluoranthene	**0.043**	0.0097	EPA 8270E/SIM	1-10-20	1-10-20	
Benzo(j,k)fluoranthene	**0.019**	0.0097	EPA 8270E/SIM	1-10-20	1-10-20	
Benzo[a]pyrene	**0.055**	0.0097	EPA 8270E/SIM	1-10-20	1-10-20	
Indeno(1,2,3-c,d)pyrene	**0.027**	0.0097	EPA 8270E/SIM	1-10-20	1-10-20	
Dibenz[a,h]anthracene	**ND**	0.0097	EPA 8270E/SIM	1-10-20	1-10-20	
Benzo[g,h,i]perylene	**0.027**	0.0097	EPA 8270E/SIM	1-10-20	1-10-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***66***	***27 - 106***				
Pyrene-d10	***78***	***35 - 98***				
Terphenyl-d14	***78***	***41 - 129***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0110W1					
Naphthalene	**ND**	0.10	EPA 8270E/SIM	1-10-20	1-10-20	
2-Methylnaphthalene	**ND**	0.10	EPA 8270E/SIM	1-10-20	1-10-20	
1-Methylnaphthalene	**ND**	0.10	EPA 8270E/SIM	1-10-20	1-10-20	
Acenaphthylene	**ND**	0.10	EPA 8270E/SIM	1-10-20	1-10-20	
Acenaphthene	**ND**	0.10	EPA 8270E/SIM	1-10-20	1-10-20	
Fluorene	**ND**	0.10	EPA 8270E/SIM	1-10-20	1-10-20	
Phenanthrene	**ND**	0.10	EPA 8270E/SIM	1-10-20	1-10-20	
Anthracene	**ND**	0.10	EPA 8270E/SIM	1-10-20	1-10-20	
Fluoranthene	**ND**	0.10	EPA 8270E/SIM	1-10-20	1-10-20	
Pyrene	**ND**	0.10	EPA 8270E/SIM	1-10-20	1-10-20	
Benzo[a]anthracene	**ND**	0.010	EPA 8270E/SIM	1-10-20	1-10-20	
Chrysene	**ND**	0.010	EPA 8270E/SIM	1-10-20	1-10-20	
Benzo[b]fluoranthene	**ND**	0.010	EPA 8270E/SIM	1-10-20	1-10-20	
Benzo(j,k)fluoranthene	**ND**	0.010	EPA 8270E/SIM	1-10-20	1-10-20	
Benzo[a]pyrene	**ND**	0.010	EPA 8270E/SIM	1-10-20	1-10-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.010	EPA 8270E/SIM	1-10-20	1-10-20	
Dibenz[a,h]anthracene	**ND**	0.010	EPA 8270E/SIM	1-10-20	1-10-20	
Benzo[g,h,i]perylene	**ND**	0.010	EPA 8270E/SIM	1-10-20	1-10-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***72***	***27 - 106***				
Pyrene-d10	***97***	***35 - 98***				
Terphenyl-d14	***99***	***41 - 129***				

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0110W1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.335**	**0.360**	0.500	0.500	67	72	36 - 99	7	40	
Acenaphthylene	**0.372**	**0.389**	0.500	0.500	74	78	45 - 113	4	32	
Acenaphthene	**0.379**	**0.386**	0.500	0.500	76	77	43 - 119	2	33	
Fluorene	**0.416**	**0.422**	0.500	0.500	83	84	48 - 114	1	30	
Phenanthrene	**0.430**	**0.422**	0.500	0.500	86	84	49 - 113	2	24	
Anthracene	**0.436**	**0.440**	0.500	0.500	87	88	50 - 113	1	25	
Fluoranthene	**0.493**	**0.465**	0.500	0.500	99	93	57 - 118	6	22	
Pyrene	**0.475**	**0.429**	0.500	0.500	95	86	56 - 128	10	32	
Benzo[a]anthracene	**0.498**	**0.474**	0.500	0.500	100	95	59 - 127	5	24	
Chrysene	**0.471**	**0.451**	0.500	0.500	94	90	57 - 122	4	24	
Benzo[b]fluoranthene	**0.488**	**0.451**	0.500	0.500	98	90	58 - 123	8	26	
Benzo(j,k)fluoranthene	**0.499**	**0.481**	0.500	0.500	100	96	60 - 123	4	22	
Benzo[a]pyrene	**0.475**	**0.451**	0.500	0.500	95	90	54 - 121	5	24	
Indeno(1,2,3-c,d)pyrene	**0.492**	**0.466**	0.500	0.500	98	93	55 - 125	5	26	
Dibenz[a,h]anthracene	**0.477**	**0.453**	0.500	0.500	95	91	57 - 127	5	25	
Benzo[g,h,i]perylene	**0.473**	**0.451**	0.500	0.500	95	90	54 - 122	5	25	
Surrogate:										
2-Fluorobiphenyl					***75***	***70***	***27 - 106***			
Pyrene-d10					***90***	***84***	***35 - 98***			
Terphenyl-d14					***109***	***94***	***41 - 129***			

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

TOTAL METALS
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9R-010720**					
Laboratory ID:	01-077-06					
Arsenic	**ND**	3.3	EPA 200.8	1-9-20	1-9-20	
Lead	**ND**	1.1	EPA 200.8	1-9-20	1-9-20	
Client ID:	**MW-9B-010720**					
Laboratory ID:	01-077-07					
Arsenic	**18**	3.3	EPA 200.8	1-9-20	1-9-20	
Lead	**ND**	1.1	EPA 200.8	1-9-20	1-9-20	
Client ID:	**MW-12-010720**					
Laboratory ID:	01-077-08					
Arsenic	**12**	3.3	EPA 200.8	1-9-20	1-9-20	
Lead	**18**	1.1	EPA 200.8	1-9-20	1-9-20	
Client ID:	**MW-12B-010720**					
Laboratory ID:	01-077-11					
Arsenic	**15**	3.3	EPA 200.8	1-9-20	1-9-20	
Lead	**8.5**	1.1	EPA 200.8	1-9-20	1-9-20	
Client ID:	**MW-32-010720**					
Laboratory ID:	01-077-14					
Arsenic	**ND**	3.3	EPA 200.8	1-9-20	1-9-20	
Lead	**1.5**	1.1	EPA 200.8	1-9-20	1-9-20	
Client ID:	**MW-31-010720**					
Laboratory ID:	01-077-15					
Arsenic	**43**	17	EPA 200.8	1-9-20	1-9-20	
Lead	**500**	5.6	EPA 200.8	1-9-20	1-9-20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

TOTAL METALS
EPA 200.8
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0109WM1					
Arsenic	**ND**	3.3	EPA 200.8	1-9-20	1-9-20	
Lead	**ND**	1.1	EPA 200.8	1-9-20	1-9-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-214-01										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**1.71**	**1.72**	NA	NA		NA		NA	0	20	
MATRIX SPIKES											
Laboratory ID:	12-214-01										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**117**	**122**	111	111	ND	**106**	**110**	75-125	4	20	
Lead	**119**	**123**	111	111	1.71	**106**	**109**	75-125	3	20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

DISSOLVED METALS
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9R-010720**					
Laboratory ID:	01-077-06					
Arsenic	**ND**	3.0	EPA 200.8		1-9-20	
Lead	**ND**	1.0	EPA 200.8		1-9-20	
Client ID:	**MW-9B-010720**					
Laboratory ID:	01-077-07					
Arsenic	**9.9**	3.0	EPA 200.8		1-9-20	
Lead	**ND**	1.0	EPA 200.8		1-9-20	
Client ID:	**MW-12-010720**					
Laboratory ID:	01-077-08					
Arsenic	**7.5**	3.0	EPA 200.8		1-9-20	
Lead	**11**	1.0	EPA 200.8		1-9-20	
Client ID:	**MW-12B-010720**					
Laboratory ID:	01-077-11					
Arsenic	**ND**	3.0	EPA 200.8		1-9-20	
Lead	**ND**	1.0	EPA 200.8		1-9-20	
Client ID:	**MW-32-010720**					
Laboratory ID:	01-077-14					
Arsenic	**ND**	3.0	EPA 200.8		1-9-20	
Lead	**ND**	1.0	EPA 200.8		1-9-20	
Client ID:	**MW-31-010720**					
Laboratory ID:	01-077-15					
Arsenic	**21**	3.0	EPA 200.8		1-9-20	
Lead	**8.6**	1.0	EPA 200.8		1-9-20	

Date of Report: January 14, 2020
Samples Submitted: January 8, 2020
Laboratory Reference: 2001-077
Project: 188-002

DISSOLVED METALS
EPA 200.8
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0108F1					
Arsenic	**ND**	3.0	EPA 200.8	1-8-20	1-9-20	
Lead	**ND**	1.0	EPA 200.8	1-8-20	1-9-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-077-08										
	ORIG	DUP									
Arsenic	**7.46**	**8.96**	NA	NA		NA		NA	18	20	
Lead	**10.5**	**11.2**	NA	NA		NA		NA	6	20	
MATRIX SPIKES											
Laboratory ID:	01-077-08										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**92.6**	**93.6**	80.0	80.0	7.46	**106**	**108**	75-125	1	20	
Lead	**80.4**	**82.8**	80.0	80.0	10.5	**87**	**90**	75-125	3	20	

OnSite Environmental Inc.

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

Page 1 of 2

Laboratory Number: 01-077

Company: FARALLON
Project Number: 188-002
Project Name: LAKEVIEW FACILITY
Project Manager: BRANI JURISTA
Sampled by: Ken Scott + Megan Gehrung

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ______ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Total Arsenic + LEAD	Dissolved Arsenic + LEAD			% Moisture
1	SVE-12-010720	1/7/20	900	W	3						X																
2	MW-13-010720		918	W	4				X					X													
3	MW-3-010720		938	W	3						X																
4	MW-11-010720		1005	W	4				~~X~~ NO 3B					~~X~~ NO D3													
5	SVE-6-010720		1017	W	3						X																
6	MW-9R-010720		1106	W	7				X		X												X	X			
7	MW-9B-010720		1140	W	5						X												X	X			
8	MW-12-010720		1230	W	2																		X	X			
9	MW-26-010720		1230	W	3						X																
10	SVE-3-010720		1330	W	3						X																

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	1/7/20	1800
Received	[illegible]	OSE	1/8/20	1400
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
All Dissolved metal samples were field filtered.

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

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

Laboratory Number: 01-077

Company: FARALLON
Project Number: 188-002
Project Name: LAKEVIEW FACILITY
Project Manager: BRANI JURISTA
Sampled by: Ken Scott + Megan Gehring

Turnaround Request (in working days) (Check One)

- [ ] Same Day
- [ ] 1 Day
- [ ] 2 Days
- [ ] 3 Days
- [x] Standard (7 Days)
- [ ] ________ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Total Arsenic + LEAD	Dissolved Arsenic + lead		% Moisture
11	MW-12B-010720	1/7/20	1345	W	2																		X	X		
12	MW-25-010720		1410	W	3						X															
13	SVE-8-010720		1445	W	3						X															
14	MW-32-010720		1450	W	2																		X	X		
15	MW-31-010720		1530	W	2																		X	X		
16	MW-14C-010720		1540	W	3						X															

KS

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	1/7/20	1800
Received	Rachel Lesslie	OSE	1/8/20	1400
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

See page #1 comments.

Data Package: Standard ☐ Level III ☐ Level IV ☐

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

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

January 17, 2020

Brani Jurista
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 2001-093

Dear Brani:

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

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: January 17, 2020
Samples Submitted: January 9, 2020
Laboratory Reference: 2001-093
Project: 188-002

Case Narrative

Samples were collected on January 8, 2020 and received by the laboratory on January 9, 2020. They were maintained at the laboratory at a temperature of 2^oC to 6^oC.

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: January 17, 2020
Samples Submitted: January 9, 2020
Laboratory Reference: 2001-093
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-16R-010820**					
Laboratory ID:	01-093-02					
Diesel Range Organics	**0.46**	0.22	NWTPH-Dx	1-10-20	1-10-20	
Lube Oil Range Organics	**0.58**	0.22	NWTPH-Dx	1-10-20	1-10-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***90***	***50-150***				

Date of Report: January 17, 2020
Samples Submitted: January 9, 2020
Laboratory Reference: 2001-093
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0110W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	1-10-20	1-10-20	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	1-10-20	1-10-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***91***	***50-150***				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-104-01										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						***90***	***87***	***50-150***			

Date of Report: January 17, 2020
Samples Submitted: January 9, 2020
Laboratory Reference: 2001-093
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-2-010820**					
Laboratory ID:	01-093-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	1.5	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	0.79	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	13	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 17, 2020
Samples Submitted: January 9, 2020
Laboratory Reference: 2001-093
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-2-010820**					
Laboratory ID:	01-093-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***99***	***75-127***				
Toluene-d8	***106***	***80-127***				
4-Bromofluorobenzene	***87***	***78-125***				

Date of Report: January 17, 2020
Samples Submitted: January 9, 2020
Laboratory Reference: 2001-093
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-16R-010820**					
Laboratory ID:	01-093-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	0.27	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 17, 2020
Samples Submitted: January 9, 2020
Laboratory Reference: 2001-093
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-16R-010820**					
Laboratory ID:	01-093-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***99***	***75-127***				
Toluene-d8	***106***	***80-127***				
4-Bromofluorobenzene	***90***	***78-125***				

Date of Report: January 17, 2020
Samples Submitted: January 9, 2020
Laboratory Reference: 2001-093
Project: 188-002

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:	MB0109W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloromethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromomethane	ND	2.0	EPA 8260D	1-9-20	1-9-20	
Chloroethane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Iodomethane	ND	4.5	EPA 8260D	1-9-20	1-9-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chloroform	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Trichloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromomethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-9-20	1-9-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-9-20	1-9-20	

Date of Report: January 17, 2020
Samples Submitted: January 9, 2020
Laboratory Reference: 2001-093
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0109W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Bromoform	ND	1.0	EPA 8260D	1-9-20	1-9-20	
Bromobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-9-20	1-9-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-9-20	1-9-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-9-20	1-9-20	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***102***	***75-127***				
Toluene-d8	***106***	***80-127***				
4-Bromofluorobenzene	***88***	***78-125***				

Date of Report: January 17, 2020
Samples Submitted: January 9, 2020
Laboratory Reference: 2001-093
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0109W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**9.69**	**10.2**	10.0	10.0	97	102	63-130	5	17	
Benzene	**9.73**	**10.1**	10.0	10.0	97	101	76-125	4	19	
Trichloroethene	**10.6**	**11.0**	10.0	10.0	106	110	76-121	4	18	
Toluene	**10.2**	**10.4**	10.0	10.0	102	104	80-124	2	18	
Chlorobenzene	**9.74**	**10.1**	10.0	10.0	97	101	75-120	4	19	
Surrogate:										
Dibromofluoromethane					***102***	***103***	***75-127***			
Toluene-d8					***108***	***110***	***80-127***			
4-Bromofluorobenzene					***89***	***90***	***78-125***			

OnSite Environmental Inc.

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

Page 1 of 1

Company: FARALLON
Project Number: 188-002
Project Name: LAKeview FAcility
Project Manager: BrANi JuristA
Sampled by: Ken Scott

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ________ (other)

Laboratory Number: 01-093

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
1	MW-2-010820	1/8/20	1215	W	~~7~~ 3						X																
2	MW-16R-010820	↓	1450	W	~~3~~ 7				X		X																

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	1/8/20	1815
Received	[illegible]	OSE	1/9/20	1200
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

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

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

January 20, 2020

Brani Jurista
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 2001-108

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on January 10, 2020.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

Case Narrative

Samples were collected on January 9, 2020 and received by the laboratory on January 10, 2020. They were maintained at the laboratory at a temperature of 2^oC to 6^oC.

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 8260D Analysis.

Some MTCA Method A cleanup levels are non-achievable for sample SVE-2-010920 due to the necessary dilution of the sample.

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: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-14-010920**					
Laboratory ID:	01-108-01					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	1.6	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	0.45	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	3.8	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	7.9	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-14-010920**					
Laboratory ID:	01-108-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*75-127*				
Toluene-d8	*109*	*80-127*				
4-Bromofluorobenzene	*89*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**AS-2-010920**					
Laboratory ID:	01-108-03					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**AS-2-010920**					
Laboratory ID:	01-108-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*103*	*75-127*				
Toluene-d8	*107*	*80-127*				
4-Bromofluorobenzene	*88*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-23-010920**					
Laboratory ID:	01-108-04					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	0.53	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-23-010920**					
Laboratory ID:	01-108-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*75-127*				
Toluene-d8	*109*	*80-127*				
4-Bromofluorobenzene	*90*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**AS-4-010920**					
Laboratory ID:	01-108-05					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**AS-4-010920**					
Laboratory ID:	01-108-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*75-127*				
Toluene-d8	*109*	*80-127*				
4-Bromofluorobenzene	*89*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-1-010920**					
Laboratory ID:	01-108-06					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	0.95	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	0.53	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	2.2	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-1-010920**					
Laboratory ID:	01-108-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*75-127*				
Toluene-d8	*108*	*80-127*				
4-Bromofluorobenzene	*89*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**AS-3-010920**					
Laboratory ID:	01-108-07					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**AS-3-010920**					
Laboratory ID:	01-108-07					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*75-127*				
Toluene-d8	*110*	*80-127*				
4-Bromofluorobenzene	*89*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-2-010920**					
Laboratory ID:	01-108-08					
Dichlorodifluoromethane	ND	0.70	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	2.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	2.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	2.6	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	2.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Chloroform	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	0.69	0.40	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	1.5	0.40	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-2-010920**					
Laboratory ID:	01-108-08					
1,1,2-Trichloroethane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	2.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.40	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	2.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*75-127*				
Toluene-d8	*110*	*80-127*				
4-Bromofluorobenzene	*91*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-20-010920**					
Laboratory ID:	01-108-09					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	1.9	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	19	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-20-010920**					
Laboratory ID:	01-108-09					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*75-127*				
Toluene-d8	*108*	*80-127*				
4-Bromofluorobenzene	*89*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-18-010920**					
Laboratory ID:	01-108-10					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	2.6	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	3.0	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	4.4	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-18-010920**					
Laboratory ID:	01-108-10					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*75-127*				
Toluene-d8	*108*	*80-127*				
4-Bromofluorobenzene	*91*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**AS-7-010920**					
Laboratory ID:	01-108-11					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	0.28	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	0.28	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**AS-7-010920**					
Laboratory ID:	01-108-11					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*75-127*				
Toluene-d8	*108*	*80-127*				
4-Bromofluorobenzene	*91*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**AS-1-010920**					
Laboratory ID:	01-108-12					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**AS-1-010920**					
Laboratory ID:	01-108-12					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*75-127*				
Toluene-d8	*105*	*80-127*				
4-Bromofluorobenzene	*88*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

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:	MB0114W1					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0114W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*103*	*75-127*				
Toluene-d8	*108*	*80-127*				
4-Bromofluorobenzene	*90*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0114W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**9.87**	**9.68**	10.0	10.0	99	97	63-130	2	17	
Benzene	**10.2**	**10.1**	10.0	10.0	102	101	76-125	1	19	
Trichloroethene	**11.2**	**11.2**	10.0	10.0	112	112	76-121	0	18	
Toluene	**10.8**	**10.7**	10.0	10.0	108	107	80-124	1	18	
Chlorobenzene	**10.6**	**10.3**	10.0	10.0	106	103	75-120	3	19	
Surrogate:										
Dibromofluoromethane					*101*	*101*	*75-127*			
Toluene-d8					*108*	*108*	*80-127*			
4-Bromofluorobenzene					*92*	*92*	*78-125*			

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

TOTAL METALS
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-34-010920**					
Laboratory ID:	01-108-02					
Arsenic	**4.6**	3.3	EPA 200.8	1-15-20	1-15-20	
Lead	**5.8**	1.1	EPA 200.8	1-15-20	1-15-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

TOTAL METALS
EPA 200.8
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0114WM1					
Arsenic	**ND**	3.3	EPA 200.8	1-15-20	1-15-20	
Lead	**ND**	1.1	EPA 200.8	1-15-20	1-15-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-122-06										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	01-122-06										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**113**	**120**	111	111	ND	**102**	**108**	75-125	6	20	
Lead	**107**	**111**	111	111	ND	**96**	**100**	75-125	4	20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

DISSOLVED METALS
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-34-010920**					
Laboratory ID:	01-108-02					
Arsenic	**ND**	3.0	EPA 200.8		1-14-20	
Lead	**ND**	1.0	EPA 200.8		1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-108
Project: 188-002

DISSOLVED METALS
EPA 200.8
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0110F1					
Arsenic	**ND**	3.0	EPA 200.8	1-10-20	1-14-20	
Lead	**ND**	1.0	EPA 200.8	1-10-20	1-14-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-108-02										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	01-108-02										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**77.4**	**77.0**	80.0	80.0	ND	**97**	**96**	75-125	1	20	
Lead	**75.6**	**75.0**	80.0	80.0	ND	**95**	**94**	75-125	1	20	

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical ____________.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

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

Page 1 of 2

Company: FARALLON
Project Number: 188-002
Project Name: LAKEVIEW FACILITY
Project Manager: BRANi JURISTA
Sampled by: Ken Scott + Megan Gehring

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ________ (other)

Laboratory Number: 01-108

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Total Arsenic + lead	Dissolved Arsenic + lead			% Moisture
1	MW-14-010920	1/9/20	910	W	3						X																
2	MW-34-010920		935	W	2																		X	X			
3	AS-2-010920		1028	W	3						X																
4	MW-23-010920		1030	W	3						X																
5	AS-4-010920		1115	W	3						X																
6	SVE-1-010920		1120	W	3						X																
7	AS-3-010920		1205	W	3						X																
8	SVE-2-010920		1210	W	3						X																
9	MW-20-010920		1368	W	3						X																
10	MW-18-010920		1400	W	3						X																

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	1/9/20	1815
Received	[signature]	OSE	1/10/20	1130
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

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

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

Laboratory Number: 01-108

Company: FARALLON
Project Number: 188-002
Project Name: LAKeview FAcility
Project Manager: BrAni Jurist
Sampled by: Ken Scott + Megan cehring

Turnaround Request (in working days) (Check One)
- ☐ Same Day ☐ 1 Day
- ☐ 2 Days ☐ 3 Days
- ☒ Standard (7 Days)
- ☐ ________ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
11	AS-7-010920	1/9/20	1520	W	3						X																
12	AS-1-010920	↓	1546	W	3						X																

KS

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	1/9/20	1815
Received	[signature]	OSE	1/10/20	1130
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

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

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

January 20, 2020

Brani Jurista
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 2001-120

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on January 10, 2020.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

Case Narrative

Samples were collected on January 10, 2020 and received by the laboratory on January 10, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11-011020**					
Laboratory ID:	01-120-01					
Diesel Range Organics	**1.4**	0.20	NWTPH-Dx	1-13-20	1-13-20	
Lube Oil Range Organics	**1.5**	0.20	NWTPH-Dx	1-13-20	1-13-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*91*	*50-150*				

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-5-011020**					
Laboratory ID:	01-120-05					
Diesel Fuel #2	**16**	0.20	NWTPH-Dx	1-13-20	1-13-20	
Lube Oil Range Organics	**2.5**	0.20	NWTPH-Dx	1-13-20	1-13-20	N1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*122*	*50-150*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0113W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	1-13-20	1-13-20	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	1-13-20	1-13-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*94*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB0113W1										
	ORIG	DUP									
Diesel Fuel #2	**0.434**	**0.418**	NA	NA		NA		NA	4	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*91*	*89*	*50-150*			

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IW-011020**					
Laboratory ID:	01-120-03					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IW-011020**					
Laboratory ID:	01-120-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*75-127*				
Toluene-d8	*107*	*80-127*				
4-Bromofluorobenzene	*91*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-15-011020**					
Laboratory ID:	01-120-04					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	0.30	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	3.1	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-15-011020**					
Laboratory ID:	01-120-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*75-127*				
Toluene-d8	*110*	*80-127*				
4-Bromofluorobenzene	*89*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

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:	MB0114W1					
Dichlorodifluoromethane	ND	0.35	EPA 8260D	1-14-20	1-14-20	
Chloromethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Vinyl Chloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroethane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Iodomethane	ND	1.3	EPA 8260D	1-14-20	1-14-20	
Methylene Chloride	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chloroform	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Trichloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromomethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromodichloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	1-14-20	1-14-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	1-14-20	1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0114W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Tetrachloroethene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Dibromochloromethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Chlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Bromoform	ND	1.0	EPA 8260D	1-14-20	1-14-20	
Bromobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	1-14-20	1-14-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	1-14-20	1-14-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	1-14-20	1-14-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*103*	*75-127*				
Toluene-d8	*108*	*80-127*				
4-Bromofluorobenzene	*90*	*78-125*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0114W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**9.87**	**9.68**	10.0	10.0	99	97	63-130	2	17	
Benzene	**10.2**	**10.1**	10.0	10.0	102	101	76-125	1	19	
Trichloroethene	**11.2**	**11.2**	10.0	10.0	112	112	76-121	0	18	
Toluene	**10.8**	**10.7**	10.0	10.0	108	107	80-124	1	18	
Chlorobenzene	**10.6**	**10.3**	10.0	10.0	106	103	75-120	3	19	
Surrogate:										
Dibromofluoromethane					*101*	*101*	*75-127*			
Toluene-d8					*108*	*108*	*80-127*			
4-Bromofluorobenzene					*92*	*92*	*78-125*			

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11-011020**					
Laboratory ID:	01-120-01					
Naphthalene	**ND**	0.11	EPA 8270E/SIM	1-15-20	1-15-20	
2-Methylnaphthalene	**ND**	0.11	EPA 8270E/SIM	1-15-20	1-15-20	
1-Methylnaphthalene	**ND**	0.11	EPA 8270E/SIM	1-15-20	1-15-20	
Acenaphthylene	**ND**	0.54	EPA 8270E/SIM	1-15-20	1-16-20	
Acenaphthene	**ND**	0.54	EPA 8270E/SIM	1-15-20	1-16-20	
Fluorene	**ND**	0.11	EPA 8270E/SIM	1-15-20	1-15-20	
Phenanthrene	**ND**	0.11	EPA 8270E/SIM	1-15-20	1-15-20	
Anthracene	**ND**	0.11	EPA 8270E/SIM	1-15-20	1-15-20	
Fluoranthene	**ND**	0.11	EPA 8270E/SIM	1-15-20	1-15-20	
Pyrene	**ND**	0.11	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo[a]anthracene	**ND**	0.011	EPA 8270E/SIM	1-15-20	1-15-20	
Chrysene	**ND**	0.011	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo[b]fluoranthene	**ND**	0.011	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo(j,k)fluoranthene	**ND**	0.011	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo[a]pyrene	**ND**	0.011	EPA 8270E/SIM	1-15-20	1-15-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.011	EPA 8270E/SIM	1-15-20	1-15-20	
Dibenz[a,h]anthracene	**ND**	0.011	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo[g,h,i]perylene	**ND**	0.011	EPA 8270E/SIM	1-15-20	1-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*64*	*27 - 106*				
Pyrene-d10	*77*	*35 - 98*				
Terphenyl-d14	*90*	*41 - 129*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-5-011020**					
Laboratory ID:	01-120-05					
Naphthalene	**0.25**	0.073	EPA 8270E/SIM	1-15-20	1-15-20	
2-Methylnaphthalene	**0.39**	0.073	EPA 8270E/SIM	1-15-20	1-15-20	
1-Methylnaphthalene	**0.68**	0.073	EPA 8270E/SIM	1-15-20	1-15-20	
Acenaphthylene	**ND**	0.36	EPA 8270E/SIM	1-15-20	1-16-20	
Acenaphthene	**ND**	0.36	EPA 8270E/SIM	1-15-20	1-16-20	
Fluorene	**ND**	0.15	EPA 8270E/SIM	1-15-20	1-15-20	U1
Phenanthrene	**0.081**	0.073	EPA 8270E/SIM	1-15-20	1-15-20	
Anthracene	**ND**	0.073	EPA 8270E/SIM	1-15-20	1-15-20	
Fluoranthene	**ND**	0.073	EPA 8270E/SIM	1-15-20	1-15-20	
Pyrene	**0.29**	0.073	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo[a]anthracene	**ND**	0.0073	EPA 8270E/SIM	1-15-20	1-15-20	
Chrysene	**ND**	0.015	EPA 8270E/SIM	1-15-20	1-15-20	U1
Benzo[b]fluoranthene	**ND**	0.0073	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo(j,k)fluoranthene	**ND**	0.0073	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo[a]pyrene	**ND**	0.0073	EPA 8270E/SIM	1-15-20	1-15-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0073	EPA 8270E/SIM	1-15-20	1-15-20	
Dibenz[a,h]anthracene	**ND**	0.0073	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo[g,h,i]perylene	**ND**	0.0073	EPA 8270E/SIM	1-15-20	1-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*56*	*27 - 106*				
Pyrene-d10	*79*	*35 - 98*				
Terphenyl-d14	*84*	*41 - 129*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0115W2					
Naphthalene	**ND**	0.10	EPA 8270E/SIM	1-15-20	1-15-20	
2-Methylnaphthalene	**ND**	0.10	EPA 8270E/SIM	1-15-20	1-15-20	
1-Methylnaphthalene	**ND**	0.10	EPA 8270E/SIM	1-15-20	1-15-20	
Acenaphthylene	**ND**	0.10	EPA 8270E/SIM	1-15-20	1-15-20	
Acenaphthene	**ND**	0.10	EPA 8270E/SIM	1-15-20	1-15-20	
Fluorene	**ND**	0.10	EPA 8270E/SIM	1-15-20	1-15-20	
Phenanthrene	**ND**	0.10	EPA 8270E/SIM	1-15-20	1-15-20	
Anthracene	**ND**	0.10	EPA 8270E/SIM	1-15-20	1-15-20	
Fluoranthene	**ND**	0.10	EPA 8270E/SIM	1-15-20	1-15-20	
Pyrene	**ND**	0.10	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo[a]anthracene	**ND**	0.010	EPA 8270E/SIM	1-15-20	1-15-20	
Chrysene	**ND**	0.010	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo[b]fluoranthene	**ND**	0.010	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo(j,k)fluoranthene	**ND**	0.010	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo[a]pyrene	**ND**	0.010	EPA 8270E/SIM	1-15-20	1-15-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.010	EPA 8270E/SIM	1-15-20	1-15-20	
Dibenz[a,h]anthracene	**ND**	0.010	EPA 8270E/SIM	1-15-20	1-15-20	
Benzo[g,h,i]perylene	**ND**	0.010	EPA 8270E/SIM	1-15-20	1-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*64*	*27 - 106*				
Pyrene-d10	*90*	*35 - 98*				
Terphenyl-d14	*95*	*41 - 129*				

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0115W2									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.294**	**0.280**	0.500	0.500	59	56	36 - 99	5	40	
Acenaphthylene	**0.389**	**0.383**	0.500	0.500	78	77	45 - 113	2	32	
Acenaphthene	**0.388**	**0.376**	0.500	0.500	78	75	43 - 119	3	33	
Fluorene	**0.411**	**0.387**	0.500	0.500	82	77	48 - 114	6	30	
Phenanthrene	**0.423**	**0.410**	0.500	0.500	85	82	49 - 113	3	24	
Anthracene	**0.434**	**0.427**	0.500	0.500	87	85	50 - 113	2	25	
Fluoranthene	**0.485**	**0.477**	0.500	0.500	97	95	57 - 118	2	22	
Pyrene	**0.440**	**0.419**	0.500	0.500	88	84	56 - 128	5	32	
Benzo[a]anthracene	**0.484**	**0.478**	0.500	0.500	97	96	59 - 127	1	24	
Chrysene	**0.457**	**0.450**	0.500	0.500	91	90	57 - 122	2	24	
Benzo[b]fluoranthene	**0.458**	**0.463**	0.500	0.500	92	93	58 - 123	1	26	
Benzo(j,k)fluoranthene	**0.472**	**0.464**	0.500	0.500	94	93	60 - 123	2	22	
Benzo[a]pyrene	**0.440**	**0.433**	0.500	0.500	88	87	54 - 121	2	24	
Indeno(1,2,3-c,d)pyrene	**0.411**	**0.416**	0.500	0.500	82	83	55 - 125	1	26	
Dibenz[a,h]anthracene	**0.421**	**0.424**	0.500	0.500	84	85	57 - 127	1	25	
Benzo[g,h,i]perylene	**0.433**	**0.434**	0.500	0.500	87	87	54 - 122	0	25	
Surrogate:										
2-Fluorobiphenyl					*58*	*60*	*27 - 106*			
Pyrene-d10					*88*	*85*	*35 - 98*			
Terphenyl-d14					*88*	*92*	*41 - 129*			

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

TOTAL METALS
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-35-011020**					
Laboratory ID:	01-120-02					
Arsenic	**7.6**	3.3	EPA 200.8	1-15-20	1-15-20	
Lead	**2.0**	1.1	EPA 200.8	1-15-20	1-15-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

TOTAL METALS
EPA 200.8
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0114WM1					
Arsenic	**ND**	3.3	EPA 200.8	1-15-20	1-15-20	
Lead	**ND**	1.1	EPA 200.8	1-15-20	1-15-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-122-06										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	01-122-06										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**113**	**120**	111	111	ND	**102**	**108**	75-125	6	20	
Lead	**107**	**111**	111	111	ND	**96**	**100**	75-125	4	20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

DISSOLVED METALS
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-35-011020**					
Laboratory ID:	01-120-02					
Arsenic	**6.1**	3.0	EPA 200.8		1-14-20	
Lead	**ND**	1.0	EPA 200.8		1-14-20	

Date of Report: January 20, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-120
Project: 188-002

DISSOLVED METALS
EPA 200.8
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0110F1					
Arsenic	**ND**	3.0	EPA 200.8	1-10-20	1-14-20	
Lead	**ND**	1.0	EPA 200.8	1-10-20	1-14-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-108-02										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	01-108-02										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**77.4**	**77.0**	80.0	80.0	ND	**97**	**96**	75-125	1	20	
Lead	**75.6**	**75.0**	80.0	80.0	ND	**95**	**94**	75-125	1	20	

OnSite Environmental Inc.

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

Page 1 of 1

Company: FARALLON
Project Number: 188-002
Project Name: LAKEVIEW FACILITY
Project Manager: BRANI JURISTA
Sampled by: KEN SCOTT

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ________ (other)

Laboratory Number: 01-120

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Total Arsenic + lead	Dissolved Arsenic + lead			% Moisture
1	MW-11-011020	1/10/20	850	W	4				X					X													
2	MW-35-011020	↓	1037	W	2																		X	X			
3	IW-011020	↓	1125	W	3						X																
4	MW-15-011020	↓	1215	W	3						X																
5	SVE-5-011020	↓	1235	W	4				X					X													

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	1/10/20	328
Received	Megan Cai	Farallon	1/10/20	328
Relinquished	Megan Cai	Farallon	1/10/20	328
Received	[illegible]	OSE	1/10/20	1528
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
Dissolved samples filtered in field.

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

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

May 27, 2020

Brani Jurista
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 2005-128

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on May 18, 2020.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: May 27, 2020
Samples Submitted: May 18, 2020
Laboratory Reference: 2005-128
Project: 188-002

Case Narrative

Samples were collected on May 15, 2020 and received by the laboratory on May 18, 2020. They were maintained at the laboratory at a temperature of 2^oC to 6^oC.

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

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

Date of Report: May 27, 2020
Samples Submitted: May 18, 2020
Laboratory Reference: 2005-128
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11-051520**					
Laboratory ID:	05-128-01					
Diesel Range Organics	**1.1**	0.24	NWTPH-Dx	5-21-20	5-21-20	
Lube Oil Range Organics	**1.7**	0.24	NWTPH-Dx	5-21-20	5-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*88*	*50-150*				
Client ID:	**SVE-5-051520**					
Laboratory ID:	05-128-02					
Diesel Fuel #2	**13**	0.21	NWTPH-Dx	5-26-20	5-26-20	
Lube Oil Range Organics	**2.8**	0.21	NWTPH-Dx	5-26-20	5-26-20	N1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*139*	*50-150*				

Date of Report: May 27, 2020
Samples Submitted: May 18, 2020
Laboratory Reference: 2005-128
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0521W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	5-21-20	5-21-20	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	5-21-20	5-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*100*	*50-150*				
Laboratory ID:	MB0526W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	5-26-20	5-26-20	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	5-26-20	5-26-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*86*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB0521W1										
	ORIG	DUP									
Diesel Fuel #2	**0.508**	**0.481**	NA	NA		NA		NA	5	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*102*	*102*	*50-150*			
Laboratory ID:	SB0526W1										
	ORIG	DUP									
Diesel Fuel #2	**0.424**	**0.424**	NA	NA		NA		NA	0	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*101*	*105*	*50-150*			

OnSite Environmental Inc.

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

Laboratory Number: 05-128

Company: Farallon
Project Number: 188-002
Project Name: LakeView facility
Project Manager: Brani Jurista
Sampled by: Ryan Ostrom

Turnaround Request (in working days)
(Check One)
- [ ] Same Day
- [ ] 1 Day
- [ ] 2 Days
- [ ] 3 Days
- [x] Standard (7 Days)
- [ ] ______ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
1	MW-11-051520	5/15/20	1003	W	2				X																		
2	SVE-5-051520	↓	1100	↓	↓				X																		

RU

	Signature	Company	Date	Time
Relinquished	Ryan Ostrom	Farallon	5/18/20	0700
Received	Van	Spdy	5/18/20	1320
Relinquished	Van	Spdy	5/18/20	1415
Received	[illegible]	OSE	5/18/20	1415
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

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

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

October 8, 2020

Brani Jurista
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 2009-314

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on September 29, 2020.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: October 8, 2020
Samples Submitted: September 29, 2020
Laboratory Reference: 2009-314
Project: 188-002

Case Narrative

Samples were collected on September 29, 2020 and received by the laboratory on September 29, 2020. They were maintained at the laboratory at a temperature of 2^oC to 6^oC.

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: October 8, 2020
Samples Submitted: September 29, 2020
Laboratory Reference: 2009-314
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13-092920**					
Laboratory ID:	09-314-01					
Diesel Range Organics	**0.50**	0.13	NWTPH-Dx	9-30-20	9-30-20	
Lube Oil Range Organics	**1.3**	0.21	NWTPH-Dx	9-30-20	9-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*100*	*50-150*				
Client ID:	**SVE-5-092920**					
Laboratory ID:	09-314-02					
Diesel Range Organics	**1.3**	0.14	NWTPH-Dx	9-30-20	9-30-20	
Lube Oil Range Organics	**1.8**	0.22	NWTPH-Dx	9-30-20	9-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*88*	*50-150*				
Client ID:	**MW-16R-092920**					
Laboratory ID:	09-314-03					
Diesel Range Organics	**0.40**	0.13	NWTPH-Dx	9-30-20	9-30-20	
Lube Oil Range Organics	**1.3**	0.21	NWTPH-Dx	9-30-20	9-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*101*	*50-150*				
Client ID:	**MW-9R-092920**					
Laboratory ID:	09-314-04					
Diesel Range Organics	**0.63**	0.13	NWTPH-Dx	9-30-20	9-30-20	
Lube Oil Range Organics	**1.7**	0.21	NWTPH-Dx	9-30-20	9-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*96*	*50-150*				

Date of Report: October 8, 2020
Samples Submitted: September 29, 2020
Laboratory Reference: 2009-314
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0930W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	9-30-20	9-30-20	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	9-30-20	9-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*110*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB0930W1										
	ORIG	DUP									
Diesel Fuel #2	**0.589**	**0.524**	NA	NA		NA		NA	12	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*128*	*114*	*50-150*			

Date of Report: October 8, 2020
Samples Submitted: September 29, 2020
Laboratory Reference: 2009-314
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9B-092920**					
Laboratory ID:	09-314-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Chloromethane	ND	1.0	EPA 8260D	9-30-20	9-30-20	
Vinyl Chloride	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Bromomethane	ND	0.48	EPA 8260D	9-30-20	9-30-20	
Chloroethane	ND	1.0	EPA 8260D	9-30-20	9-30-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Iodomethane	ND	3.1	EPA 8260D	9-30-20	9-30-20	
Methylene Chloride	ND	1.0	EPA 8260D	9-30-20	9-30-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
(cis) 1,2-Dichloroethene	0.49	0.20	EPA 8260D	9-30-20	9-30-20	
Bromochloromethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Chloroform	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Trichloroethene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Dibromomethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Bromodichloromethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	9-30-20	9-30-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	9-30-20	9-30-20	

Date of Report: October 8, 2020
Samples Submitted: September 29, 2020
Laboratory Reference: 2009-314
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9B-092920**					
Laboratory ID:	09-314-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Tetrachloroethene	1.3	0.20	EPA 8260D	9-30-20	9-30-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Dibromochloromethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Chlorobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Bromoform	ND	1.0	EPA 8260D	9-30-20	9-30-20	
Bromobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	9-30-20	9-30-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	9-30-20	9-30-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*75-127*				
Toluene-d8	*101*	*80-127*				
4-Bromofluorobenzene	*99*	*78-125*				

Date of Report: October 8, 2020
Samples Submitted: September 29, 2020
Laboratory Reference: 2009-314
Project: 188-002

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:	MB0930W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Chloromethane	ND	1.0	EPA 8260D	9-30-20	9-30-20	
Vinyl Chloride	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Bromomethane	ND	0.48	EPA 8260D	9-30-20	9-30-20	
Chloroethane	ND	1.0	EPA 8260D	9-30-20	9-30-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Iodomethane	ND	3.1	EPA 8260D	9-30-20	9-30-20	
Methylene Chloride	ND	1.0	EPA 8260D	9-30-20	9-30-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Bromochloromethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Chloroform	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Trichloroethene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Dibromomethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Bromodichloromethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	9-30-20	9-30-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	9-30-20	9-30-20	

Date of Report: October 8, 2020
Samples Submitted: September 29, 2020
Laboratory Reference: 2009-314
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0930W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Tetrachloroethene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Dibromochloromethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Chlorobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Bromoform	ND	1.0	EPA 8260D	9-30-20	9-30-20	
Bromobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-30-20	9-30-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	9-30-20	9-30-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	9-30-20	9-30-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	9-30-20	9-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*75-127*				
Toluene-d8	*105*	*80-127*				
4-Bromofluorobenzene	*102*	*78-125*				

Date of Report: October 8, 2020
Samples Submitted: September 29, 2020
Laboratory Reference: 2009-314
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0930W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**10.7**	**9.99**	10.0	10.0	107	100	65-126	7	19	
Benzene	**10.6**	**10.3**	10.0	10.0	106	103	71-119	3	16	
Trichloroethene	**10.4**	**10.2**	10.0	10.0	104	102	82-123	2	18	
Toluene	**10.1**	**9.79**	10.0	10.0	101	98	77-119	3	18	
Chlorobenzene	**10.1**	**9.94**	10.0	10.0	101	99	80-120	2	17	
Surrogate:										
Dibromofluoromethane					*108*	*104*	*75-127*			
Toluene-d8					*107*	*104*	*80-127*			
4-Bromofluorobenzene					*105*	*102*	*78-125*			

Date of Report: October 8, 2020
Samples Submitted: September 29, 2020
Laboratory Reference: 2009-314
Project: 188-002

TOTAL METALS
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9R-092920**					
Laboratory ID:	09-314-04					
Arsenic	**ND**	3.3	EPA 200.8	10-1-20	10-1-20	
Lead	**ND**	1.1	EPA 200.8	10-1-20	10-1-20	

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9B-092920**					
Laboratory ID:	09-314-05					
Arsenic	**12**	3.3	EPA 200.8	10-1-20	10-2-20	
Lead	**ND**	1.1	EPA 200.8	10-1-20	10-2-20	

Date of Report: October 8, 2020
Samples Submitted: September 29, 2020
Laboratory Reference: 2009-314
Project: 188-002

TOTAL METALS
EPA 200.8
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1001WM2					
Arsenic	**ND**	3.3	EPA 200.8	10-1-20	10-1-20	
Lead	**ND**	1.1	EPA 200.8	10-1-20	10-1-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-252-08										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**1.13**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	09-252-08										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**121**	**125**	111	111	ND	**109**	**112**	75-125	3	20	
Lead	**116**	**119**	111	111	1.13	**104**	**106**	75-125	2	20	

Date of Report: October 8, 2020
Samples Submitted: September 29, 2020
Laboratory Reference: 2009-314
Project: 188-002

DISSOLVED METALS
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9R-092920**					
Laboratory ID:	09-314-04					
Arsenic	**ND**	3.0	EPA 200.8	9-30-20	10-1-20	
Lead	**ND**	1.0	EPA 200.8	9-30-20	10-1-20	

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9B-092920**					
Laboratory ID:	09-314-05					
Arsenic	**6.0**	3.0	EPA 200.8	9-30-20	10-1-20	
Lead	**ND**	1.0	EPA 200.8	9-30-20	10-1-20	

Date of Report: October 8, 2020
Samples Submitted: September 29, 2020
Laboratory Reference: 2009-314
Project: 188-002

DISSOLVED METALS
EPA 200.8
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0930F1					
Arsenic	**ND**	3.0	EPA 200.8	9-30-20	10-1-20	
Lead	**ND**	1.0	EPA 200.8	9-30-20	10-1-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-314-04										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	09-314-04										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**85.2**	**82.6**	80.0	80.0	ND	**107**	**103**	75-125	3	20	
Lead	**70.2**	**71.0**	80.0	80.0	ND	**88**	**89**	75-125	1	20	

Date of Report: October 8, 2020
Samples Submitted: September 29, 2020
Laboratory Reference: 2009-314
Project: 188-002

pH
SM 4500-H B

Matrix: Water
Units: pH (@ 25ºC)

Analyte	Result	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9R-092920**				
Laboratory ID:	09-314-04				
pH	**6.5**	SM 4500-H B	9-30-20	9-30-20	
Client ID:	**MW-9B-092920**				
Laboratory ID:	09-314-05				
pH	**11.9**	SM 4500-H B	9-30-20	9-30-20	

OnSite Environmental Inc.

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

Page 1 of 1

Laboratory Number: 09-314

Company: Favallon Consulting
Project Number: 188-002
Project Name: Lakeview Facility
Project Manager: Brani Jurista
Sampled by: Lisa Thompson

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ______ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	As, Pb (total, dissolved)	pH			% Moisture
1	MW-13-092920	9/29/20	0930	W	2				X																		
2	SVE-5-092920	9/29/20	1105	W	2				X																		
3	MW-16R-092920	9/29/20	1245	W	2				X																		
4	MW-9R-092920	9/29/20	1330	W	5				X														X	X			
5	MW-9B-092920	9/29/20	1635	W	6						X												X	X			

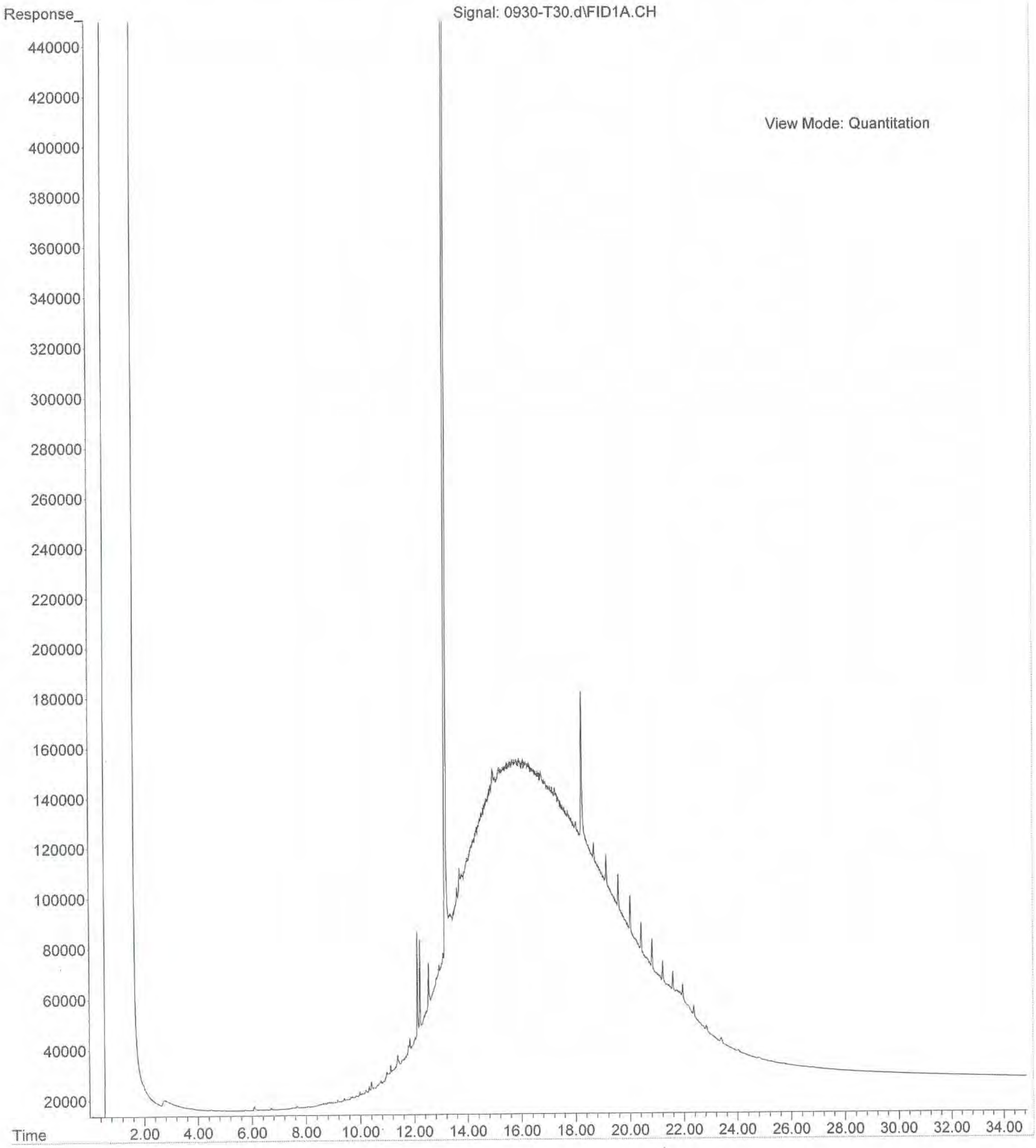
	Signature	Company	Date	Time
Relinquished	[signature]	Favallon	9/29/20	1830
Received	[signature]	OSE	9/29/20	1830
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
lab filter

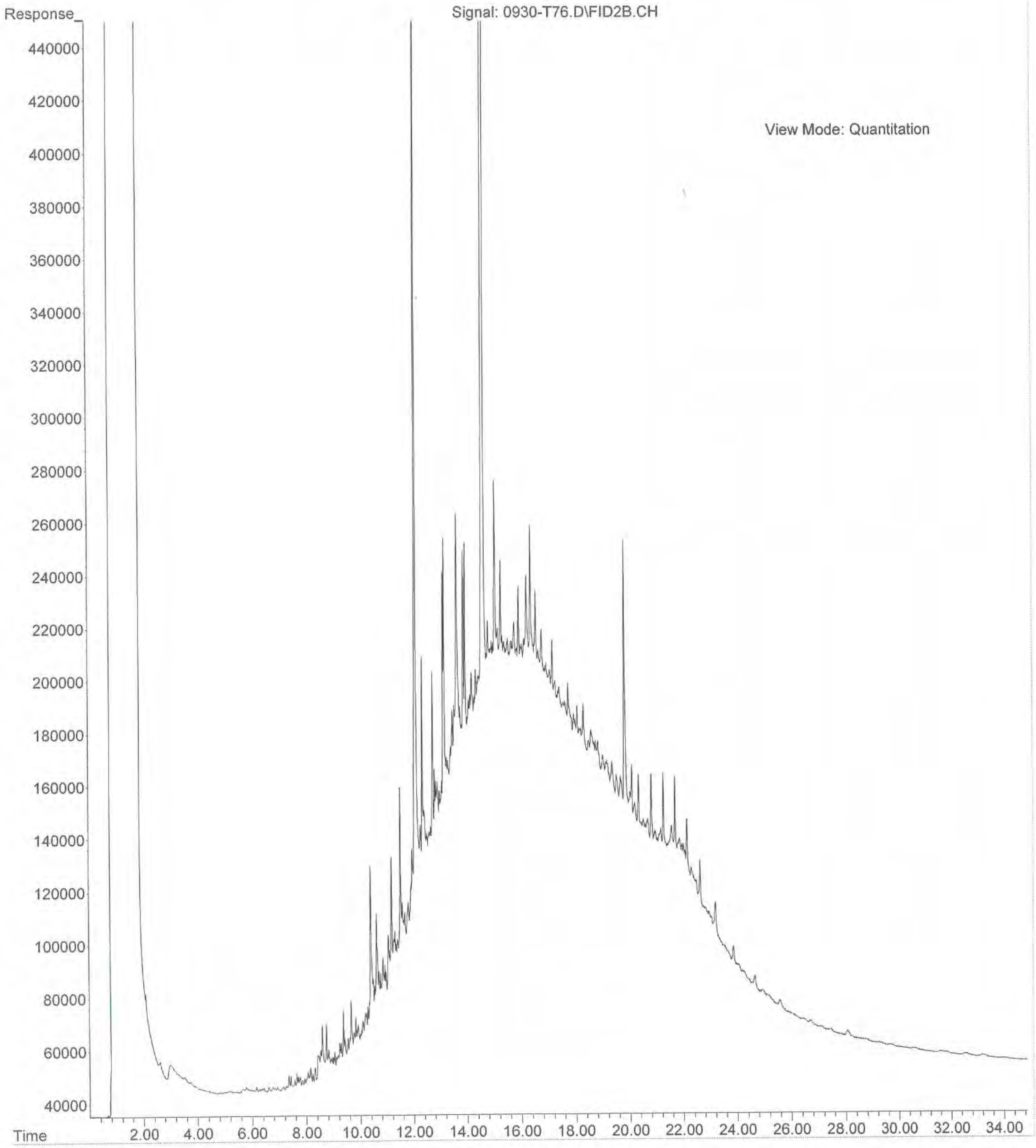
Data Package: Standard ☐ Level III ☐ Level IV ☐

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

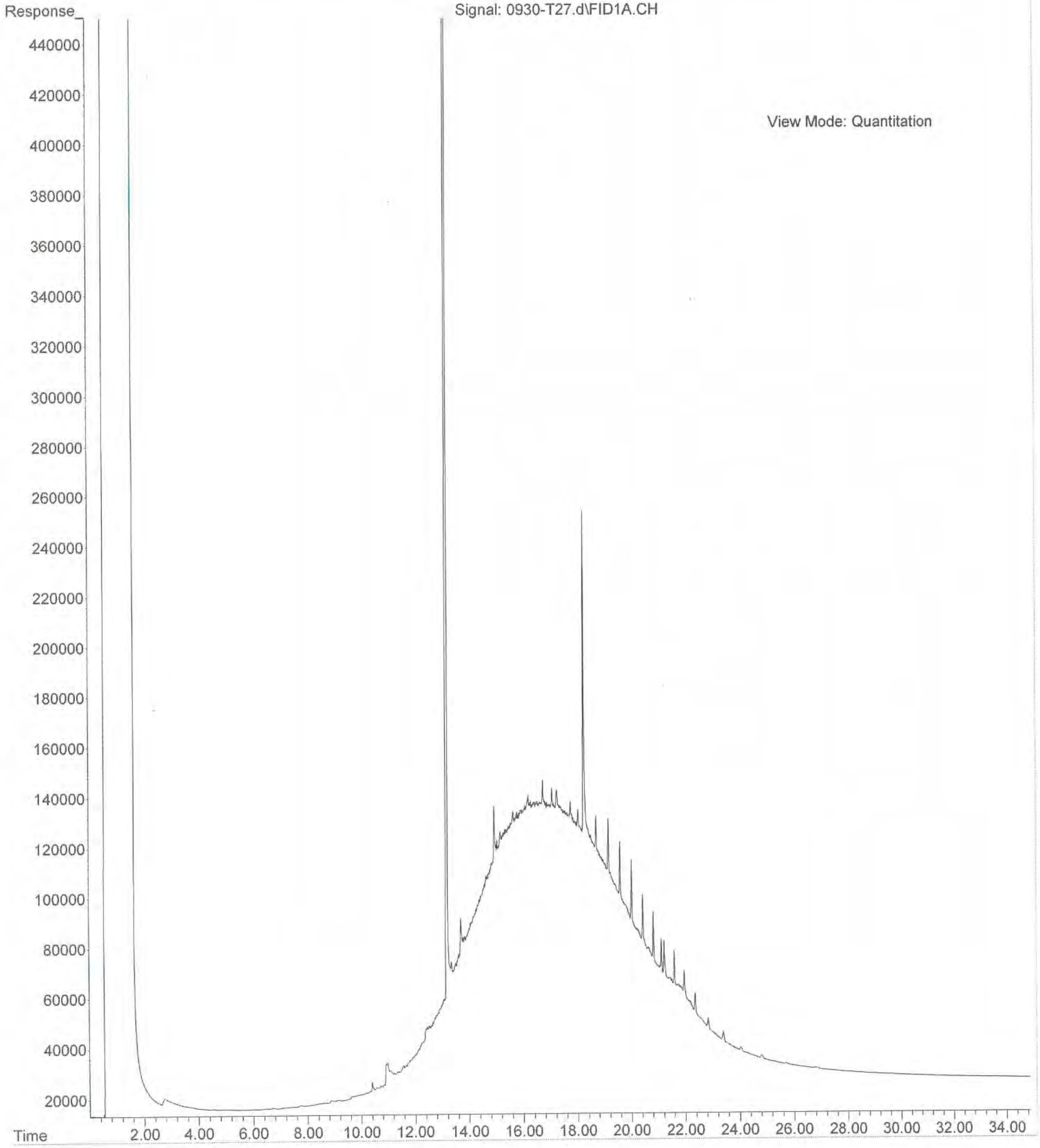
```
File        :X:\DIESELS\TERI\DATA\T200930\0930-T30.d
Operator    : JT
Acquired    : 01 Oct 2020   4:18     using AcqMethod T200106F.M
Instrument :   Teri
Sample Name: 09-314-01
Misc Info  :
Vial Number: 30
```



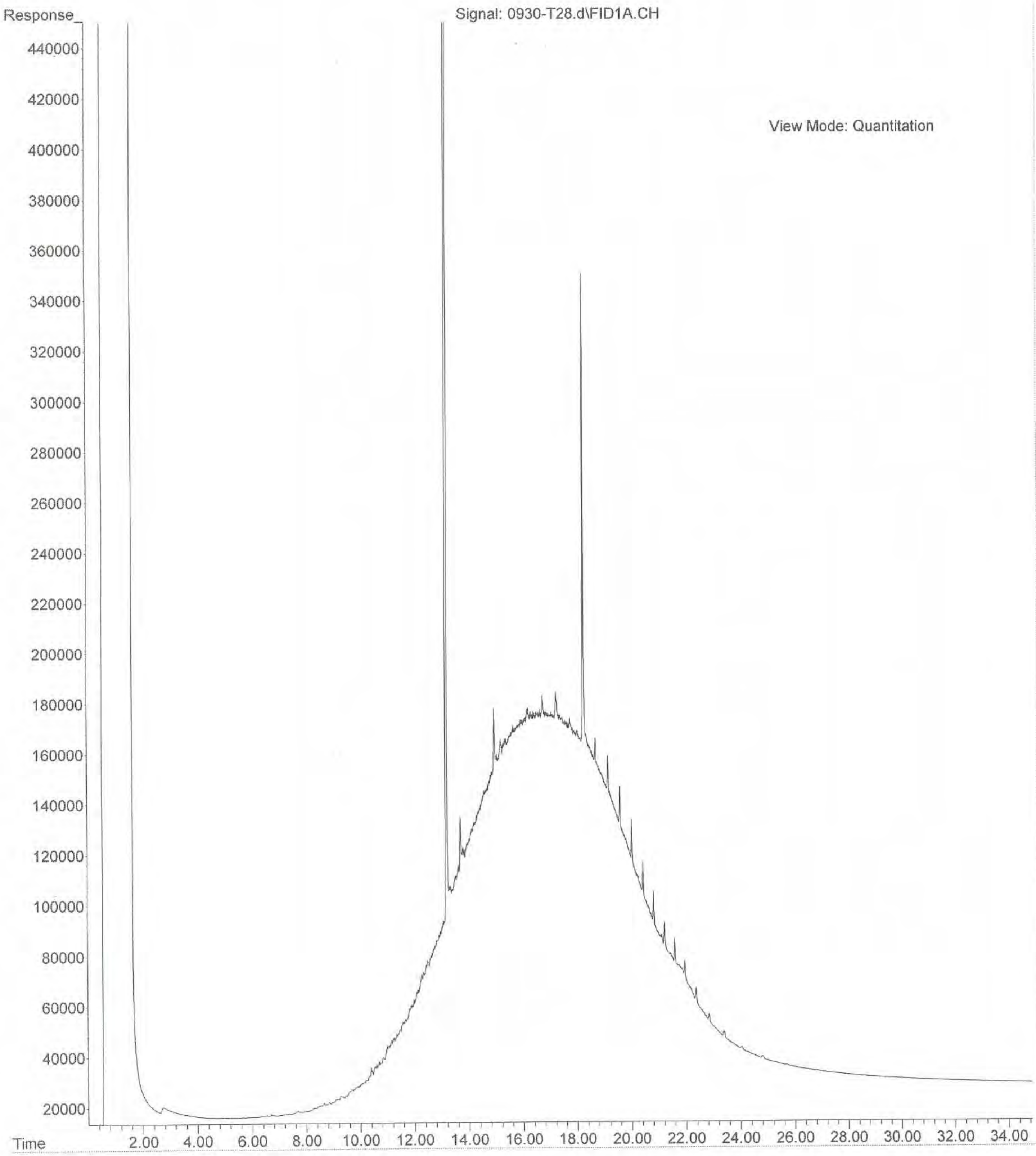
```
File        :X:\DIESELS\TERI\DATA\T200930.SEC\0930-T76.D
Operator    : JT
Acquired    : 01 Oct 2020   1:28     using AcqMethod T200106F.M
Instrument :   Teri
Sample Name: 09-314-02
Misc Info  :
Vial Number: 76
```



File   :X:\DIESELS\TERI\DATA\T200930\0930-T27.d
Operator   : JT
Acquired   : 01 Oct 2020   2:10   using AcqMethod T200106F.M
Instrument :   Teri
Sample Name: 09-314-03
Misc Info :
Vial Number: 27



```
File        :X:\DIESELS\TERI\DATA\T200930\0930-T28.d
Operator    : JT
Acquired    : 01 Oct 2020   2:53      using AcqMethod T200106F.M
Instrument :   Teri
Sample Name: 09-314-04
Misc Info  :
Vial Number: 28
```



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

October 8, 2020

Brani Jurista
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 2009-333

Dear Brani:

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

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

Case Narrative

Samples were collected on September 30, 2020 and received by the laboratory on September 30, 2020. They were maintained at the laboratory at a temperature of 2^oC to 6^oC.

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: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-6-093020**					
Laboratory ID:	09-333-01					
Diesel Range Organics	**1.7**	0.22	NWTPH-Dx	10-1-20	10-2-20	
Lube Oil Range Organics	**2.3**	0.22	NWTPH-Dx	10-1-20	10-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*85*	*50-150*				

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1001W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	10-1-20	10-2-20	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	10-1-20	10-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*102*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB1001W1										
	ORIG	DUP									
Diesel Fuel #2	**0.455**	**0.443**	NA	NA		NA		NA	3	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*88*	*85*	*50-150*			

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-20-093020**					
Laboratory ID:	09-333-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Chloromethane	ND	1.0	EPA 8260D	10-1-20	10-1-20	
Vinyl Chloride	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Bromomethane	ND	0.29	EPA 8260D	10-1-20	10-1-20	
Chloroethane	ND	1.0	EPA 8260D	10-1-20	10-1-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Iodomethane	ND	2.1	EPA 8260D	10-1-20	10-1-20	
Methylene Chloride	ND	1.0	EPA 8260D	10-1-20	10-1-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Bromochloromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Chloroform	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1,1-Trichloroethane	1.9	0.20	EPA 8260D	10-1-20	10-1-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Trichloroethene	17	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Dibromomethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Bromodichloromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	10-1-20	10-1-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-1-20	10-1-20	

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-20-093020**					
Laboratory ID:	09-333-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Tetrachloroethene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Dibromochloromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Chlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Bromoform	ND	1.0	EPA 8260D	10-1-20	10-1-20	
Bromobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	10-1-20	10-1-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	10-1-20	10-1-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*75-127*				
Toluene-d8	*103*	*80-127*				
4-Bromofluorobenzene	*101*	*78-125*				

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-12-093020**					
Laboratory ID:	09-333-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Chloromethane	ND	1.0	EPA 8260D	10-1-20	10-1-20	
Vinyl Chloride	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Bromomethane	ND	0.29	EPA 8260D	10-1-20	10-1-20	
Chloroethane	ND	1.0	EPA 8260D	10-1-20	10-1-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1-Dichloroethene	15	0.20	EPA 8260D	10-1-20	10-1-20	
Iodomethane	ND	2.1	EPA 8260D	10-1-20	10-1-20	
Methylene Chloride	ND	1.0	EPA 8260D	10-1-20	10-1-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1-Dichloroethane	2.9	0.20	EPA 8260D	10-1-20	10-1-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Bromochloromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Chloroform	0.30	0.20	EPA 8260D	10-1-20	10-1-20	
1,1,1-Trichloroethane	18	0.20	EPA 8260D	10-1-20	10-1-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Trichloroethene	12	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Dibromomethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Bromodichloromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	10-1-20	10-1-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-1-20	10-1-20	

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

VOLATILE ORGANICS EPA 8260D
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-12-093020**					
Laboratory ID:	09-333-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Tetrachloroethene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Dibromochloromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Chlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Bromoform	ND	1.0	EPA 8260D	10-1-20	10-1-20	
Bromobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	10-1-20	10-1-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	10-1-20	10-1-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*75-127*				
Toluene-d8	*102*	*80-127*				
4-Bromofluorobenzene	*100*	*78-125*				

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

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:	MB1001W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Chloromethane	ND	1.0	EPA 8260D	10-1-20	10-1-20	
Vinyl Chloride	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Bromomethane	ND	0.29	EPA 8260D	10-1-20	10-1-20	
Chloroethane	ND	1.0	EPA 8260D	10-1-20	10-1-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Iodomethane	ND	2.1	EPA 8260D	10-1-20	10-1-20	
Methylene Chloride	ND	1.0	EPA 8260D	10-1-20	10-1-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Bromochloromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Chloroform	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Trichloroethene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Dibromomethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Bromodichloromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	10-1-20	10-1-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-1-20	10-1-20	

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1001W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Tetrachloroethene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Dibromochloromethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Chlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Bromoform	ND	1.0	EPA 8260D	10-1-20	10-1-20	
Bromobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	10-1-20	10-1-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	10-1-20	10-1-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	10-1-20	10-1-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	10-1-20	10-1-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*75-127*				
Toluene-d8	*103*	*80-127*				
4-Bromofluorobenzene	*102*	*78-125*				

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	09-321-03										
	MS	MSD	MS	MSD		MS	MSD				
1,1-Dichloroethene	**10.4**	**10.5**	10.0	10.0	ND	104	105	68-122	1	15	
Benzene	**10.3**	**10.5**	10.0	10.0	ND	103	105	70-121	2	16	
Trichloroethene	**10.2**	**10.4**	10.0	10.0	ND	102	104	80-121	2	17	
Toluene	**9.76**	**9.85**	10.0	10.0	ND	98	99	78-117	1	19	
Chlorobenzene	**9.77**	**9.84**	10.0	10.0	ND	98	98	80-120	1	16	
Surrogate:											
Dibromofluoromethane						*106*	*107*	*75-127*			
Toluene-d8						*106*	*106*	*80-127*			
4-Bromofluorobenzene						*103*	*105*	*78-125*			

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

TOTAL METALS
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-31-093020**					
Laboratory ID:	09-333-02					
Arsenic	**30**	3.3	EPA 200.8	10-1-20	10-1-20	
Lead	**14**	1.1	EPA 200.8	10-1-20	10-1-20	

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-35-093020**					
Laboratory ID:	09-333-03					
Arsenic	**11**	3.3	EPA 200.8	10-1-20	10-1-20	
Lead	**ND**	1.1	EPA 200.8	10-1-20	10-1-20	

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

TOTAL METALS
EPA 200.8
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1001WM2					
Arsenic	**ND**	3.3	EPA 200.8	10-1-20	10-1-20	
Lead	**ND**	1.1	EPA 200.8	10-1-20	10-1-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-252-08										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**1.13**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	09-252-08										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**121**	**125**	111	111	ND	**109**	**112**	75-125	3	20	
Lead	**116**	**119**	111	111	1.13	**104**	**106**	75-125	2	20	

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

DISSOLVED METALS
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-31-093020**					
Laboratory ID:	09-333-02					
Arsenic	**27**	3.0	EPA 200.8	9-30-20	10-1-20	
Lead	**9.5**	1.0	EPA 200.8	9-30-20	10-1-20	

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-35-093020**					
Laboratory ID:	09-333-03					
Arsenic	**9.7**	3.0	EPA 200.8	9-30-20	10-1-20	
Lead	**ND**	1.0	EPA 200.8	9-30-20	10-1-20	

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

DISSOLVED METALS
EPA 200.8
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0930F1					
Arsenic	**ND**	3.0	EPA 200.8	9-30-20	10-1-20	
Lead	**ND**	1.0	EPA 200.8	9-30-20	10-1-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-314-04										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	09-314-04										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**85.2**	**82.6**	80.0	80.0	ND	**107**	**103**	75-125	3	20	
Lead	**70.2**	**71.0**	80.0	80.0	ND	**88**	**89**	75-125	1	20	

Date of Report: October 8, 2020
Samples Submitted: September 30, 2020
Laboratory Reference: 2009-333
Project: 188-002

pH
SM 4500-H B

Matrix: Water
Units: pH (@ 25ºC)

Analyte	Result	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-31-093020**				
Laboratory ID:	09-333-02				
pH	**11.5**	SM 4500-H B	10-1-20	10-1-20	

Analyte	Result	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-35-093020**				
Laboratory ID:	09-333-03				
pH	**6.4**	SM 4500-H B	10-1-20	10-1-20	

OnSite Environmental Inc.

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

Chain of Custody

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

Laboratory Number: 09-333

Company: Favallon
Project Number: 188-002
Project Name: Lakeview Facility
Project Manager: Brani Jurista
Sampled by: Lisa Thompson

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ ________ (other)

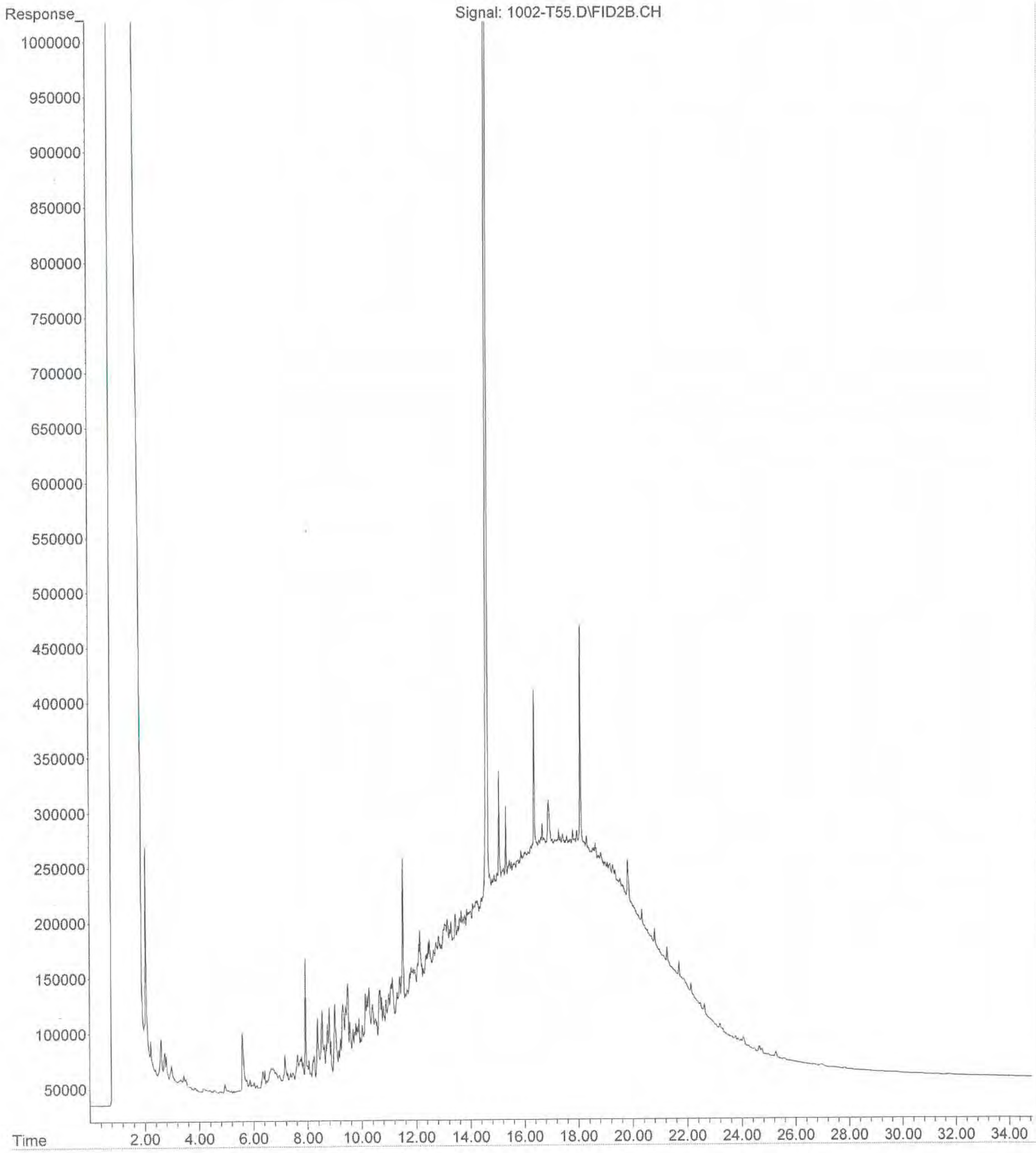
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	As, Pb (total, dissolved)	pH			% Moisture
1	MW-6-093020	9/30/20	0850	W	2				X																		
2	MW-31-093020	9/30/20	1045	W	3																		X	X			
3	MW-35-093020	9/30/20	1215	W	3																		X	X			
4	MW-20-093020	9/30/20	1403	W	3						X																
5	SVE-12-093020	9/30/20	1435	W	3						X																

	Signature	Company	Date	Time
Relinquished	[signature]	Favallon	9/30/20	1705
Received	[signature]	OSE	9/30/20	1705
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
Lab Filtered

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

File   :X:\DIESELS\TERI\DATA\T201002.SEC\1002-T55.D
Operator   : JT
Acquired   : 02 Oct 2020   9:25   using AcqMethod T200106F.M
Instrument :   Teri
Sample Name: 09-333-01
Misc Info   :
Vial Number: 55



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

January 8, 2021

Brani Jurista
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 2012-198

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on December 18, 2020.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

Case Narrative

Samples were collected on December 18, 2020 and received by the laboratory on December 18, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9R-121820**					
Laboratory ID:	12-198-01					
Benzene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
Toluene	ND	1.0	EPA 8260D	12-21-20	12-21-20	
Ethylbenzene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
m,p-Xylene	ND	0.40	EPA 8260D	12-21-20	12-21-20	
o-Xylene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*75-127*				
Toluene-d8	*103*	*80-127*				
4-Bromofluorobenzene	*102*	*78-125*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13-121820**					
Laboratory ID:	12-198-02					
Benzene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
Toluene	ND	1.0	EPA 8260D	12-21-20	12-21-20	
Ethylbenzene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
m,p-Xylene	ND	0.40	EPA 8260D	12-21-20	12-21-20	
o-Xylene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*103*	*75-127*				
Toluene-d8	*106*	*80-127*				
4-Bromofluorobenzene	*105*	*78-125*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-5-121820**					
Laboratory ID:	12-198-03					
Benzene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
Toluene	ND	1.0	EPA 8260D	12-21-20	12-21-20	
Ethylbenzene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
m,p-Xylene	ND	0.40	EPA 8260D	12-21-20	12-21-20	
o-Xylene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*75-127*				
Toluene-d8	*105*	*80-127*				
4-Bromofluorobenzene	*107*	*78-125*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-16R-121820**					
Laboratory ID:	12-198-04					
Benzene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
Toluene	ND	1.0	EPA 8260D	12-21-20	12-21-20	
Ethylbenzene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
m,p-Xylene	ND	0.40	EPA 8260D	12-21-20	12-21-20	
o-Xylene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*75-127*				
Toluene-d8	*105*	*80-127*				
4-Bromofluorobenzene	*103*	*78-125*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1221W1					
Benzene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
Toluene	ND	1.0	EPA 8260D	12-21-20	12-21-20	
Ethylbenzene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
m,p-Xylene	ND	0.40	EPA 8260D	12-21-20	12-21-20	
o-Xylene	ND	0.20	EPA 8260D	12-21-20	12-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*75-127*				
Toluene-d8	*103*	*80-127*				
4-Bromofluorobenzene	*102*	*78-125*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1221W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**10.1**	**10.4**	10.0	10.0	101	104	65-126	3	19	
Benzene	**10.5**	**10.5**	10.0	10.0	105	105	71-119	0	16	
Trichloroethene	**10.8**	**10.8**	10.0	10.0	108	108	82-123	0	18	
Toluene	**10.7**	**10.8**	10.0	10.0	107	108	77-119	1	18	
Chlorobenzene	**9.74**	**9.85**	10.0	10.0	97	99	80-120	1	17	
Surrogate:										
Dibromofluoromethane					*104*	*103*	*75-127*			
Toluene-d8					*107*	*104*	*80-127*			
4-Bromofluorobenzene					*109*	*104*	*78-125*			

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9R-121820**					
Laboratory ID:	12-198-01					
Diesel Range Organics	**0.54**	0.21	NWTPH-Dx	12-21-20	12-22-20	
Lube Oil Range Organics	**1.6**	0.21	NWTPH-Dx	12-21-20	12-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*101*	*50-150*				
Client ID:	**MW-13-121820**					
Laboratory ID:	12-198-02					
Diesel Range Organics	**0.31**	0.20	NWTPH-Dx	12-21-20	12-22-20	
Lube Oil Range Organics	**0.65**	0.20	NWTPH-Dx	12-21-20	12-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*95*	*50-150*				
Client ID:	**SVE-5-121820**					
Laboratory ID:	12-198-03					
Diesel Range Organics	**1.4**	0.20	NWTPH-Dx	12-21-20	12-22-20	
Lube Oil Range Organics	**1.1**	0.20	NWTPH-Dx	12-21-20	12-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*94*	*50-150*				
Client ID:	**MW-16R-121820**					
Laboratory ID:	12-198-04					
Diesel Range Organics	**0.31**	0.21	NWTPH-Dx	12-21-20	12-22-20	
Lube Oil Range Organics	**0.63**	0.21	NWTPH-Dx	12-21-20	12-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*99*	*50-150*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1221W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	12-21-20	12-21-20	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	12-21-20	12-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB1221W1										
	ORIG	DUP									
Diesel Fuel #2	**0.474**	**0.465**	NA	NA		NA		NA	2	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*100*	*102*	*50-150*			

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9R-121820**					
Laboratory ID:	12-198-01					
Naphthalene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
2-Methylnaphthalene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
1-Methylnaphthalene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Acenaphthylene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Acenaphthene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Fluorene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Phenanthrene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Anthracene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Fluoranthene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Pyrene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[a]anthracene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Chrysene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[b]fluoranthene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo(j,k)fluoranthene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[a]pyrene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Dibenz[a,h]anthracene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[g,h,i]perylene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*70*	*20 - 106*				
Pyrene-d10	*91*	*26 - 104*				
Terphenyl-d14	*109*	*44 - 127*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13-121820**					
Laboratory ID:	12-198-02					
Naphthalene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
2-Methylnaphthalene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
1-Methylnaphthalene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Acenaphthylene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Acenaphthene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Fluorene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Phenanthrene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Anthracene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Fluoranthene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Pyrene	**ND**	0.095	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[a]anthracene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Chrysene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[b]fluoranthene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo(j,k)fluoranthene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[a]pyrene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Dibenz[a,h]anthracene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[g,h,i]perylene	**ND**	0.0095	EPA 8270E/SIM	12-18-20	12-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*72*	*20 - 106*				
Pyrene-d10	*88*	*26 - 104*				
Terphenyl-d14	*101*	*44 - 127*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-5-121820**					
Laboratory ID:	12-198-03					
Naphthalene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
2-Methylnaphthalene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
1-Methylnaphthalene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Acenaphthylene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Acenaphthene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Fluorene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Phenanthrene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Anthracene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Fluoranthene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Pyrene	**ND**	0.15	EPA 8270E/SIM	12-18-20	12-22-20	U1
Benzo[a]anthracene	**ND**	0.014	EPA 8270E/SIM	12-18-20	12-22-20	U1
Chrysene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[b]fluoranthene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo(j,k)fluoranthene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[a]pyrene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Dibenz[a,h]anthracene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[g,h,i]perylene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*70*	*20 - 106*				
Pyrene-d10	*97*	*26 - 104*				
Terphenyl-d14	*109*	*44 - 127*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

PAHs EPA 8270E/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-16R-121820**					
Laboratory ID:	12-198-04					
Naphthalene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
2-Methylnaphthalene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
1-Methylnaphthalene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Acenaphthylene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Acenaphthene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Fluorene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Phenanthrene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Anthracene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Fluoranthene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Pyrene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[a]anthracene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Chrysene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[b]fluoranthene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo(j,k)fluoranthene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[a]pyrene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Dibenz[a,h]anthracene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Benzo[g,h,i]perylene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*72*	*20 - 106*				
Pyrene-d10	*86*	*26 - 104*				
Terphenyl-d14	*100*	*44 - 127*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1218W1					
Naphthalene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-18-20	
2-Methylnaphthalene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-18-20	
1-Methylnaphthalene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-18-20	
Acenaphthylene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-18-20	
Acenaphthene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-18-20	
Fluorene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-18-20	
Phenanthrene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-18-20	
Anthracene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-18-20	
Fluoranthene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-18-20	
Pyrene	**ND**	0.10	EPA 8270E/SIM	12-18-20	12-18-20	
Benzo[a]anthracene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-18-20	
Chrysene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-18-20	
Benzo[b]fluoranthene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-18-20	
Benzo(j,k)fluoranthene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-18-20	
Benzo[a]pyrene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-18-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-18-20	
Dibenz[a,h]anthracene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-18-20	
Benzo[g,h,i]perylene	**ND**	0.010	EPA 8270E/SIM	12-18-20	12-18-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*52*	*20 - 106*				
Pyrene-d10	*81*	*26 - 104*				
Terphenyl-d14	*84*	*44 - 127*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1218W1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.275**	**0.245**	0.500	0.500	55	49	30 - 98	12	40	
Acenaphthylene	**0.335**	**0.303**	0.500	0.500	67	61	39 - 106	10	32	
Acenaphthene	**0.319**	**0.298**	0.500	0.500	64	60	36 - 114	7	33	
Fluorene	**0.360**	**0.335**	0.500	0.500	72	67	45 - 112	7	30	
Phenanthrene	**0.402**	**0.363**	0.500	0.500	80	73	51 - 109	10	24	
Anthracene	**0.351**	**0.333**	0.500	0.500	70	67	49 - 109	5	25	
Fluoranthene	**0.384**	**0.372**	0.500	0.500	77	74	53 - 115	3	22	
Pyrene	**0.405**	**0.382**	0.500	0.500	81	76	49 - 129	6	32	
Benzo[a]anthracene	**0.428**	**0.402**	0.500	0.500	86	80	61 - 123	6	24	
Chrysene	**0.418**	**0.393**	0.500	0.500	84	79	59 - 114	6	24	
Benzo[b]fluoranthene	**0.437**	**0.411**	0.500	0.500	87	82	60 - 125	6	26	
Benzo(j,k)fluoranthene	**0.432**	**0.398**	0.500	0.500	86	80	58 - 121	8	22	
Benzo[a]pyrene	**0.413**	**0.387**	0.500	0.500	83	77	58 - 118	7	24	
Indeno(1,2,3-c,d)pyrene	**0.430**	**0.410**	0.500	0.500	86	82	59 - 124	5	26	
Dibenz[a,h]anthracene	**0.437**	**0.408**	0.500	0.500	87	82	59 - 123	7	25	
Benzo[g,h,i]perylene	**0.419**	**0.396**	0.500	0.500	84	79	58 - 120	6	25	
Surrogate:										
2-Fluorobiphenyl					*52*	*51*	*20 - 106*			
Pyrene-d10					*82*	*78*	*26 - 104*			
Terphenyl-d14					*92*	*88*	*44 - 127*			

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

VOLATILE PETROLEUM HYDROCARBONS

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9R-121820**					
Laboratory ID:	12-198-01					
Aliphatic C5-C6	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C6-C8	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C8-C10	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C10-C12	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Total Aliphatic:	**NA**		NWTPH-VPH	12-22-20	12-22-20	
Aromatic C8-C10	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aromatic C10-C12	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aromatic C12-C13	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Total Aromatic:	**NA**		NWTPH-VPH	12-22-20	12-22-20	
Methyl t-butyl ether	**ND**	10	EPA 8021B	12-22-20	12-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*80*	*65-120*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

VOLATILE PETROLEUM HYDROCARBONS

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13-121820**					
Laboratory ID:	12-198-02					
Aliphatic C5-C6	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C6-C8	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C8-C10	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C10-C12	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Total Aliphatic:	**NA**		NWTPH-VPH	12-22-20	12-22-20	
Aromatic C8-C10	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aromatic C10-C12	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aromatic C12-C13	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Total Aromatic:	**NA**		NWTPH-VPH	12-22-20	12-22-20	
Methyl t-butyl ether	**ND**	10	EPA 8021B	12-22-20	12-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*75*	*65-120*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

VOLATILE PETROLEUM HYDROCARBONS

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-5-121820**					
Laboratory ID:	12-198-03					
Aliphatic C5-C6	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C6-C8	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C8-C10	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C10-C12	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Total Aliphatic:	**NA**		NWTPH-VPH	12-22-20	12-22-20	
Aromatic C8-C10	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aromatic C10-C12	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aromatic C12-C13	**170**	50	NWTPH-VPH	12-22-20	12-22-20	
Total Aromatic:	**170**		NWTPH-VPH	12-22-20	12-22-20	
Methyl t-butyl ether	**ND**	10	EPA 8021B	12-22-20	12-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*75*	*65-120*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

VOLATILE PETROLEUM HYDROCARBONS

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-16R-121820**					
Laboratory ID:	12-198-04					
Aliphatic C5-C6	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C6-C8	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C8-C10	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C10-C12	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Total Aliphatic:	**NA**		NWTPH-VPH	12-22-20	12-22-20	
Aromatic C8-C10	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aromatic C10-C12	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aromatic C12-C13	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Total Aromatic:	**NA**		NWTPH-VPH	12-22-20	12-22-20	
Methyl t-butyl ether	**ND**	10	EPA 8021B	12-22-20	12-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*77*	*65-120*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

VOLATILE PETROLEUM HYDROCARBONS
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1222W1					
Aliphatic C5-C6	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C6-C8	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C8-C10	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aliphatic C10-C12	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Total Aliphatic:	**NA**		NWTPH-VPH	12-22-20	12-22-20	
Aromatic C8-C10	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aromatic C10-C12	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Aromatic C12-C13	**ND**	50	NWTPH-VPH	12-22-20	12-22-20	
Total Aromatic:	**NA**		NWTPH-VPH	12-22-20	12-22-20	
Methyl t-butyl ether	**ND**	1.0	EPA 8021B	12-22-20	12-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*78*	*65-120*				

Date of Report: January 8, 2021
Samples Submitted: December 18, 2020
Laboratory Reference: 2012-198
Project: 188-002

VOLATILE PETROLEUM HYDROCARBONS
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	11-198-01									
	ORIG	DUP								
Aliphatic C5-C6	**ND**	**ND**	NA	NA		NA	NA	NA	30	
Aliphatic C6-C8	**ND**	**ND**	NA	NA		NA	NA	NA	30	
Aliphatic C8-C10	**ND**	**ND**	NA	NA		NA	NA	NA	30	
Aliphatic C10-C12	**ND**	**ND**	NA	NA		NA	NA	NA	30	
Total Aliphatic:	**NA**	**NA**	NA	NA		NA	NA	NA	30	
Aromatic C8-C10	**ND**	**ND**	NA	NA		NA	NA	NA	30	
Aromatic C10-C12	**ND**	**ND**	NA	NA		NA	NA	NA	30	
Aromatic C12-C13	**ND**	**ND**	NA	NA		NA	NA	NA	30	
Total Aromatic:	**NA**	**NA**	NA	NA		NA	NA	NA	30	
MTBE	**ND**	**ND**	NA	NA		NA	NA	NA	30	
Surrogate:										
Fluorobenzene						*80 76*	*65-120*			

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

January 7, 2021

Mr. David Baumeister
OnSite Environmental, Inc.
14648 NE 95th Street
Redmond, WA 98052

Dear Mr. Baumeister,

On December 21st, 4 samples were received by our laboratory and assigned our laboratory project number EV20120153. The project was identified as your Lab Ref #12-198 / Proj #188-002. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Glen Perry

Glen Perry
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	OnSite Environmental, Inc. 14648 NE 95th Street Redmond, WA 98052	DATE:	1/7/2021
		ALS JOB#:	EV20120153
		ALS SAMPLE#:	EV20120153-01
CLIENT CONTACT:	David Baumeister	DATE RECEIVED:	12/21/2020
CLIENT PROJECT:	Lab Ref #12-198 / Proj #188-002	COLLECTION DATE:	12/18/2020 9:38:00 AM
CLIENT SAMPLE ID	MW-9R-121820	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
>C8-C10 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C10-C12 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C12-C16 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C16-C21 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C21-C34 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C8-C10 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C10-C12 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C12-C16 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C16-C21 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C21-C34 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWEPH	**101**	01/05/2021	JNF
p-Terphenyl	NWEPH	**58.3**	01/05/2021	JNF

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	OnSite Environmental, Inc. 14648 NE 95th Street Redmond, WA 98052	DATE:	1/7/2021
		ALS JOB#:	EV20120153
		ALS SAMPLE#:	EV20120153-02
CLIENT CONTACT:	David Baumeister	DATE RECEIVED:	12/21/2020
CLIENT PROJECT:	Lab Ref #12-198 / Proj #188-002	COLLECTION DATE:	12/18/2020 11:18:00 AM
CLIENT SAMPLE ID	MW-13-121820	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
>C8-C10 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C10-C12 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C12-C16 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C16-C21 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C21-C34 Aliphatics	NWEPH	**72**	50	1	UG/L	01/05/2021	JNF
>C8-C10 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C10-C12 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C12-C16 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C16-C21 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C21-C34 Aromatics	NWEPH	**150**	50	1	UG/L	01/05/2021	JNF

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWEPH	**87.7**	01/05/2021	JNF
p-Terphenyl	NWEPH	**82.1**	01/05/2021	JNF

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	OnSite Environmental, Inc. 14648 NE 95th Street Redmond, WA 98052	DATE: ALS JOB#: ALS SAMPLE#:	1/7/2021 EV20120153 EV20120153-03
CLIENT CONTACT:	David Baumeister	DATE RECEIVED:	12/21/2020
CLIENT PROJECT:	Lab Ref #12-198 / Proj #188-002	COLLECTION DATE:	12/18/2020 12:14:00 PM
CLIENT SAMPLE ID	SVE-5-121820	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
>C8-C10 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C10-C12 Aliphatics	NWEPH	**85**	50	1	UG/L	01/05/2021	JNF
>C12-C16 Aliphatics	NWEPH	**420**	50	1	UG/L	01/05/2021	JNF
>C16-C21 Aliphatics	NWEPH	**470**	50	1	UG/L	01/05/2021	JNF
>C21-C34 Aliphatics	NWEPH	**340**	50	1	UG/L	01/05/2021	JNF
>C8-C10 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C10-C12 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C12-C16 Aromatics	NWEPH	**110**	50	1	UG/L	01/05/2021	JNF
>C16-C21 Aromatics	NWEPH	**290**	50	1	UG/L	01/05/2021	JNF
>C21-C34 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWEPH	**104**	01/05/2021	JNF
p-Terphenyl	NWEPH	**83.1**	01/05/2021	JNF

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	OnSite Environmental, Inc. 14648 NE 95th Street Redmond, WA 98052	DATE: ALS JOB#: ALS SAMPLE#:	1/7/2021 EV20120153 EV20120153-04
CLIENT CONTACT:	David Baumeister	DATE RECEIVED:	12/21/2020
CLIENT PROJECT:	Lab Ref #12-198 / Proj #188-002	COLLECTION DATE:	12/18/2020 10:16:00 AM
CLIENT SAMPLE ID	MW-16R-121820	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
>C8-C10 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C10-C12 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C12-C16 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C16-C21 Aliphatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C21-C34 Aliphatics	NWEPH	**62**	50	1	UG/L	01/05/2021	JNF
>C8-C10 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C10-C12 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C12-C16 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C16-C21 Aromatics	NWEPH	U	50	1	UG/L	01/05/2021	JNF
>C21-C34 Aromatics	NWEPH	**56**	50	1	UG/L	01/05/2021	JNF

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWEPH	**105**	01/05/2021	JNF
p-Terphenyl	NWEPH	**89.1**	01/05/2021	JNF

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	OnSite Environmental, Inc. 14648 NE 95th Street Redmond, WA 98052	DATE: ALS SDG#: WDOE ACCREDITATION:	1/7/2021 EV20120153 C601
CLIENT CONTACT:	David Baumeister		
CLIENT PROJECT:	Lab Ref #12-198 / Proj #188-002		

LABORATORY BLANK RESULTS

MB-123120W - Batch R376034 - Water by NWEPH

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
>C8-C10 Aromatics	NWEPH	U	UG/L	50	01/05/2021	JNF
>C10-C12 Aromatics	NWEPH	U	UG/L	50	01/05/2021	JNF
>C12-C16 Aromatics	NWEPH	U	UG/L	50	01/05/2021	JNF
>C16-C21 Aromatics	NWEPH	U	UG/L	50	01/05/2021	JNF
>C21-C34 Aromatics	NWEPH	U	UG/L	50	01/05/2021	JNF

U - Analyte analyzed for but not detected at level above reporting limit.

MB-123120W - Batch R376036 - Water by NWEPH

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
>C8-C10 Aliphatics	NWEPH	U	UG/L	50	01/05/2021	JNF
>C10-C12 Aliphatics	NWEPH	U	UG/L	50	01/05/2021	JNF
>C12-C16 Aliphatics	NWEPH	U	UG/L	50	01/05/2021	JNF
>C16-C21 Aliphatics	NWEPH	U	UG/L	50	01/05/2021	JNF
>C21-C34 Aliphatics	NWEPH	U	UG/L	50	01/05/2021	JNF

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	OnSite Environmental, Inc. 14648 NE 95th Street Redmond, WA 98052	DATE: ALS SDG#: WDOE ACCREDITATION:	1/7/2021 EV20120153 C601
CLIENT CONTACT:	David Baumeister		
CLIENT PROJECT:	Lab Ref #12-198 / Proj #188-002		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: R376034 - Water by NWEPH

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
>C8-C10 Aromatics - BS	NWEPH	**83.5**			70	130	01/06/2021	JNF
>C8-C10 Aromatics - BSD	NWEPH	**80.7**	**3**		70	130	01/05/2021	JNF
>C10-C12 Aromatics - BS	NWEPH	**90.7**			70	130	01/06/2021	JNF
>C10-C12 Aromatics - BSD	NWEPH	**87.3**	**4**		70	130	01/05/2021	JNF
>C12-C16 Aromatics - BS	NWEPH	**90.7**			70	130	01/06/2021	JNF
>C12-C16 Aromatics - BSD	NWEPH	**88.2**	**3**		70	130	01/05/2021	JNF
>C16-C21 Aromatics - BS	NWEPH	**90.4**			70	130	01/06/2021	JNF
>C16-C21 Aromatics - BSD	NWEPH	**89.6**	**1**		70	130	01/05/2021	JNF
>C21-C34 Aromatics - BS	NWEPH	**74.9**			70	130	01/06/2021	JNF
>C21-C34 Aromatics - BSD	NWEPH	**87.2**	**15**		70	130	01/05/2021	JNF

ALS Test Batch ID: R376036 - Water by NWEPH

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
>C8-C10 Aliphatics - BS	NWEPH	**42.6**		LCS01	70	130	01/05/2021	JNF
>C8-C10 Aliphatics - BSD	NWEPH	**49.1**	**14**	LCS01	70	130	01/05/2021	JNF
>C10-C12 Aliphatics - BS	NWEPH	**58.9**		LCS01	70	130	01/05/2021	JNF
>C10-C12 Aliphatics - BSD	NWEPH	**69.0**	**16**	LCS01	70	130	01/05/2021	JNF
>C12-C16 Aliphatics - BS	NWEPH	**79.8**			70	130	01/05/2021	JNF
>C12-C16 Aliphatics - BSD	NWEPH	**91.8**	**14**		70	130	01/05/2021	JNF
>C16-C21 Aliphatics - BS	NWEPH	**83.5**			70	130	01/05/2021	JNF
>C16-C21 Aliphatics - BSD	NWEPH	**95.6**	**14**		70	130	01/05/2021	JNF
>C21-C34 Aliphatics - BS	NWEPH	**77.2**			70	130	01/05/2021	JNF
>C21-C34 Aliphatics - BSD	NWEPH	**89.3**	**15**		70	130	01/05/2021	JNF

LCS01 - The LCS and/or LCSD recovery was below the lower control limit. The sample results may be biased low for this analyte.

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

EV20120153-

OnSite Environmental Inc.

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

Laboratory: ALS Environmental
Attention: Rick Bagan
8620 Holly Drive Everett, WA 98208
Phone Number: (425) 356-2600

Turnaround Request
1 Day 2 Day 3 Day
Standard
Other:

Laboratory Reference #: 12-198
Project Manager: David Baumeister
email: dbaumeister@onsite-env.com
Project Number: 188-002
Project Name:

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	Requested Analyses
1	MW-9R-121820	12/18/20	9:38	W	2	EPH
2	MW-13-121820	12/18/20	11:18	W	2	EPH
3	SVE-5-121820	12/18/20	12:14	W	2	EPH
4	MW-16R-121820	12/18/20	10:16	W	2	EPH

Signature	Company	Date	Time	Comments/Special Instructions
Relinquished by: Nichole Blair	OSE	12/21	1412	
Received by: [illegible]	ALPHA	12/21	1412	
Relinquished by: [illegible]	ALPHA	12/21	1503	
Received by: Shannon Huffman	ALS	12/21	1515	
Relinquished by:				
Received by:				

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

Page 1 of 1

Laboratory Number: 12-198

Company: Farallon
Project Number: 188-002
Project Name: Lakeview facility
Project Manager: Brani Jurista
Sampled by: Elise + Lisa

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ______ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-~~Gx~~/BTEX 8260d **	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level) *	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	EPH	VPH		% Moisture
1	MW-9R-121820	12/18	938	W	12		X		X					X									X	X		
2	MW-13-121820	12/18	1118	W	12		X		X					X									X	X		
3	SVE-5-121820	12/18	1214	W	12		X		X					X									X	X		
4	MW-16R-121820	12/18	1016	W	12		X		X					X									X	X		

CMB 12/18/20

	Signature	Company	Date	Time
Relinquished	Elise Beyge	Farallon	12/18/20	1500
Received		OSE	12/18/20	1500
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
*includes napthalenes too
**Just BTEX

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

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

February 17, 2021

Brani Jurista
Farallon Consulting
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 2102-135

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on February 12, 2021.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: February 17, 2021
Samples Submitted: February 12, 2021
Laboratory Reference: 2102-135
Project: 188-002

Case Narrative

Samples were collected on February 10, 2021 and received by the laboratory on February 12, 2021. They were maintained at the laboratory at a temperature of 2^oC to 6^oC.

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: February 17, 2021
Samples Submitted: February 12, 2021
Laboratory Reference: 2102-135
Project: 188-002

pH
EPA 9045D

Matrix: Soil
Units: pH (@ 25ºC)

Analyte	Result	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9D-30.0**				
Laboratory ID:	02-135-01				
pH	**11.3**	EPA 9045D	2-12-21	2-12-21	

OnSite Environmental Inc.

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

Laboratory Number: 02-135

Company: Faralllon
Project Number: 188-002
Project Name: Woodworth Lakeview
Project Manager: Brani Jurista
Sampled by: Emi Smith

Turnaround Request (in working days)
(Check One)
- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☒ Standard (7 Days)
- ☐ ______ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	pH				~~% Moisture~~ NO DB
1	MW-9D-30.0	~~2/9/21~~ 2/10/21	1345	S	1																		X				~~X~~

	Signature	Company	Date	Time
Relinquished	Emi Smith	Farallon	2/12/21	1215
Received	[signature]	OSE	2/12/21	12:15
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

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

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

February 25, 2021

Brani Jurista
Farallon Consulting
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 2102-197

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on February 19, 2021.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: February 25, 2021
Samples Submitted: February 19, 2021
Laboratory Reference: 2102-197
Project: 188-002

Case Narrative

Samples were collected on February 18, 2021 and received by the laboratory on February 19, 2021. They were maintained at the laboratory at a temperature of 2^oC to 6^oC.

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.

NWTPH-Gx Analysis

Method 5035A VOA vials were not provided for the samples. The samples were therefore extracted from 4-ounce jars for 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: February 25, 2021
Samples Submitted: February 19, 2021
Laboratory Reference: 2102-197
Project: 188-002

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-36-5.0**					
Laboratory ID:	02-197-01					
Gasoline	**ND**	3.2	NWTPH-Gx	2-23-21	2-23-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*58-129*				
Client ID:	**MW-36-10.0**					
Laboratory ID:	02-197-02					
Gasoline	**ND**	4.3	NWTPH-Gx	2-23-21	2-23-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*93*	*58-129*				
Client ID:	**MW-36-15.0**					
Laboratory ID:	02-197-03					
Gasoline	**ND**	72	NWTPH-Gx	2-23-21	2-23-21	U1
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*96*	*58-129*				
Client ID:	**MW-36-20.0**					
Laboratory ID:	02-197-04					
Gasoline	**ND**	4.8	NWTPH-Gx	2-23-21	2-23-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*97*	*58-129*				

Date of Report: February 25, 2021
Samples Submitted: February 19, 2021
Laboratory Reference: 2102-197
Project: 188-002

GASOLINE RANGE ORGANICS
NWTPH-Gx
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0223S2					
Gasoline	**ND**	5.0	NWTPH-Gx	2-23-21	2-23-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*58-129*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	02-208-02										
	ORIG	DUP									
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*96*	*95*	*58-129*			

Date of Report: February 25, 2021
Samples Submitted: February 19, 2021
Laboratory Reference: 2102-197
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-36-5.0**					
Laboratory ID:	02-197-01					
Diesel Range Organics	**ND**	26	NWTPH-Dx	2-23-21	2-23-21	
Lube Oil Range Organics	**ND**	51	NWTPH-Dx	2-23-21	2-23-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*102*	*50-150*				
Client ID:	**MW-36-10.0**					
Laboratory ID:	02-197-02					
Diesel Range Organics	**ND**	26	NWTPH-Dx	2-23-21	2-23-21	
Lube Oil Range Organics	**ND**	52	NWTPH-Dx	2-23-21	2-23-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*96*	*50-150*				
Client ID:	**MW-36-15.0**					
Laboratory ID:	02-197-03					
Diesel Fuel #2	**180**	28	NWTPH-Dx	2-23-21	2-23-21	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	2-23-21	2-23-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*95*	*50-150*				
Client ID:	**MW-36-20.0**					
Laboratory ID:	02-197-04					
Diesel Range Organics	**ND**	27	NWTPH-Dx	2-23-21	2-23-21	
Lube Oil Range Organics	**ND**	55	NWTPH-Dx	2-23-21	2-23-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*93*	*50-150*				

Date of Report: February 25, 2021
Samples Submitted: February 19, 2021
Laboratory Reference: 2102-197
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0223S2					
Diesel Range Organics	**ND**	25	NWTPH-Dx	2-23-21	2-23-21	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	2-23-21	2-23-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*89*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB0223S2										
	ORIG	DUP									
Diesel Fuel #2	**92.4**	**91.8**	NA	NA		NA		NA	1	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*100*	*100*	*50-150*			

Date of Report: February 25, 2021
Samples Submitted: February 19, 2021
Laboratory Reference: 2102-197
Project: 188-002

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
MW-36-5.0	02-197-01	**3**	2-23-21
MW-36-10.0	02-197-02	**4**	2-23-21
MW-36-15.0	02-197-03	**11**	2-23-21
MW-36-20.0	02-197-04	**8**	2-23-21

OnSite Environmental Inc.

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

Page 1 of 1

Laboratory Number: 02-197

Company: Farallon
Project Number: 188-002
Project Name: Woodworth Lakeview
Project Manager: Brani Jurista
Sampled by: Emi Smith

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ ______ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
1	MW-36-5.0	2/18/21	1440	S	1			X	X																		X
2	MW-36-10.0		1445					X	X																		
3	MW-36-15.0		1505					X	X																		
4	MW-36-20.0		1510					X	X																		

ES

	Signature	Company	Date	Time
Relinquished	Emi Smith	Farallon	2/19/21	1725
Received	[signature]	OSE	2/19/21	1725
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

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

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

March 2, 2021

Brani Jurista
Farallon Consulting
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 2102-232

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on February 24, 2021.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: March 2, 2021
Samples Submitted: February 24, 2021
Laboratory Reference: 2102-232
Project: 188-002

Case Narrative

Samples were collected on February 23 and 24, 2021 and received by the laboratory on February 24, 2021. They were maintained at the laboratory at a temperature of 2^oC to 6^oC.

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: March 2, 2021
Samples Submitted: February 24, 2021
Laboratory Reference: 2102-232
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-6-022321**					
Laboratory ID:	02-232-02					
Diesel Range Organics	**0.47**	0.21	NWTPH-Dx	2-26-21	3-1-21	
Lube Oil Range Organics	**0.83**	0.21	NWTPH-Dx	2-26-21	3-1-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*105*	*50-150*				

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-36-022321**					
Laboratory ID:	02-232-03					
Diesel Range Organics	**1.1**	0.21	NWTPH-Dx	2-26-21	3-1-21	
Lube Oil Range Organics	**0.56**	0.21	NWTPH-Dx	2-26-21	3-1-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*101*	*50-150*				

Date of Report: March 2, 2021
Samples Submitted: February 24, 2021
Laboratory Reference: 2102-232
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0226W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	2-26-21	3-2-21	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	2-26-21	3-2-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*103*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB0226W1										
	ORIG	DUP									
Diesel Fuel #2	**0.485**	**0.481**	NA	NA		NA		NA	1	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*106*	*103*	*50-150*			

Date of Report: March 2, 2021
Samples Submitted: February 24, 2021
Laboratory Reference: 2102-232
Project: 188-002

pH
SM 4500-H B

Matrix: Water
Units: pH (@ 25ºC)

Analyte	Result	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9A-022321**				
Laboratory ID:	02-232-01				
pH	**6.8**	SM 4500-H B	2-25-21	2-25-21	
Client ID:	**MW-9D-022421**				
Laboratory ID:	02-232-04				
pH	**7.3**	SM 4500-H B	2-25-21	2-25-21	

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical ____________.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

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

Page 1 of 1

Laboratory Number: 02-232

Company: Farallon
Project Number: 188-002
Project Name: Woodworth Lakeview
Project Manager: Brani Jurista
Sampled by: Lisa T / Greg P

Turnaround Request (in working days) (Check One)
- ☐ Same Day ☐ 1 Day
- ☐ 2 Days ☐ 3 Days
- ☒ Standard (7 Days)
- ☐ ______ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	MW-9A-022321	2/23/21	1215	Water	1
2	MW-6-022321	2/23/21	1336	Water	2
3	MW-3B-022321	2/23/21	1448	Water	2
4	MW-9D-022421	2/24/21	902	Water	6

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

	Signature	Company	Date	Time
Relinquished	[illegible]	Farallon	2/24/21	1415
Received	[illegible]	Speedy	2-24-21	1537
Relinquished	[illegible]	Speedy	2-24-21	1643
Received	[illegible]	OSE	2/24/21	1643
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
*Hold MW-9D for HVOCs

Data Package: Standard ☐ Level III ☐ Level IV ☐

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

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

July 26, 2021

Brani Jurista
Farallon Consulting
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 188-002
Laboratory Reference No. 2107-229

Dear Brani:

Enclosed are the analytical results and associated quality control data for samples submitted on July 23, 2021.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: July 26, 2021
Samples Submitted: July 23, 2021
Laboratory Reference: 2107-229
Project: 188-002

Case Narrative

Samples were collected on July 22, 2021 and received by the laboratory on July 23, 2021. They were maintained at the laboratory at a temperature of $2^{o}C$ to $6^{o}C$.

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: July 26, 2021
Samples Submitted: July 23, 2021
Laboratory Reference: 2107-229
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9D-072221**					
Laboratory ID:	07-229-01					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	7-23-21	7-26-21	
Lube Oil Range Organics	**ND**	0.21	NWTPH-Dx	7-23-21	7-26-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*127*	*50-150*				
Client ID:	**MW-9A-072221**					
Laboratory ID:	07-229-02					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	7-23-21	7-26-21	
Lube Oil Range Organics	**ND**	0.21	NWTPH-Dx	7-23-21	7-26-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*111*	*50-150*				

Date of Report: July 26, 2021
Samples Submitted: July 23, 2021
Laboratory Reference: 2107-229
Project: 188-002

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0723W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	7-23-21	7-26-21	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	7-23-21	7-26-21	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*118*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB0723W1										
	ORIG	DUP									
Diesel Fuel #2	**0.464**	**0.444**	NA	NA		NA		NA	4	NA	
Surrogate:											
o-Terphenyl						*124*	*118*	*50-150*			

Date of Report: July 26, 2021
Samples Submitted: July 23, 2021
Laboratory Reference: 2107-229
Project: 188-002

TOTAL ARSENIC
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9D-072221**					
Laboratory ID:	07-229-01					
Arsenic	**ND**	3.3	EPA 200.8	7-23-21	7-23-21	
Client ID:	**MW-9A-072221**					
Laboratory ID:	07-229-02					
Arsenic	**3.6**	3.3	EPA 200.8	7-23-21	7-23-21	

Date of Report: July 26, 2021
Samples Submitted: July 23, 2021
Laboratory Reference: 2107-229
Project: 188-002

TOTAL ARSENIC
EPA 200.8
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0723WM1					
Arsenic	**ND**	3.3	EPA 200.8	7-23-21	7-23-21	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	07-229-01										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	07-229-01										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**115**	**117**	111	111	ND	**103**	**105**	75-125	2	20	

Date of Report: July 26, 2021
Samples Submitted: July 23, 2021
Laboratory Reference: 2107-229
Project: 188-002

DISSOLVED ARSENIC
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9D-072221**					
Laboratory ID:	07-229-01					
Arsenic	**ND**	3.0	EPA 200.8	7-23-21	7-23-21	

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9A-072221**					
Laboratory ID:	07-229-02					
Arsenic	**3.0**	3.0	EPA 200.8	7-23-21	7-23-21	

Date of Report: July 26, 2021
Samples Submitted: July 23, 2021
Laboratory Reference: 2107-229
Project: 188-002

DISSOLVED ARSENIC
EPA 200.8
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0723F1					
Arsenic	**ND**	3.0	EPA 200.8	7-23-21	7-23-21	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	07-229-02										
	ORIG	DUP									
Arsenic	**3.00**	**3.08**	NA	NA		NA		NA	3	20	
MATRIX SPIKES											
Laboratory ID:	07-229-02										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**81.6**	**84.8**	80.0	80.0	3.00	**98**	**102**	75-125	4	20	

Date of Report: July 26, 2021
Samples Submitted: July 23, 2021
Laboratory Reference: 2107-229
Project: 188-002

pH
SM 4500-H B

Matrix: Water
Units: pH (@ 25ºC)

Analyte	Result	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9D-072221**				
Laboratory ID:	07-229-01				
pH	**6.8**	SM 4500-H B	7-23-21	7-23-21	
Client ID:	**MW-9A-072221**				
Laboratory ID:	07-229-02				
pH	**6.7**	SM 4500-H B	7-23-21	7-23-21	

OnSite Environmental Inc.

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.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

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

Page 1 of 1

Laboratory Number: 07-229

Company: Farallon consulting
Project Number: 188-002
Project Name: Woodworth Lakeview fac
Project Manager: Brani Jurista
Sampled by: Elise Bugge

Turnaround Request (in working days) (Check One)

- [x] Same Day (pH only)
- [x] 1 Day
- [ ] 2 Days
- [ ] 3 Days
- [ ] Standard (7 Days)
- [ ] ______ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260D	Halogenated Volatiles 8260D	EDB EPA 8011 (Waters Only)	Semivolatiles 8270E/SIM (with low-level PAHs)	PAHs 8270E/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270E/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	total + diss As	pH			% Moisture
1	MW-9D-072221	7/22/21	1155	W	4				X														X	X			
2	MW-9A-072221	7/22/21	1256	W	4				X														X	X			

emb

	Signature	Company	Date	Time
Relinquished	[illegible]	FLN	7/22/21	1510
Received	[illegible]	Speedy	7-23-21	1059
Relinquished	[illegible]	Speedy	7-23-21	1226
Received	[illegible]	OSE	7/23/21	1226
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

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

ESN
NORTHWEST
Environmental
Services Network

June 19, 2020

Alex Koch
Blue Sage Environmental
198007 E 30th Ave
Kennewick, WA 99337

Dear Mr. Koch:

Please find enclosed the analytical data reports for the Lakewood Pit Project in Lakewood, Washington. Water samples were analyzed for Diesel and Oil by NWTPH-Dx/Dx Extended on June 11, 2020.

The results of the analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. A copy of the invoice for this work is enclosed for your records.

ESN Northwest appreciates the opportunity to have provided these services to Blue Sage Environmental for this project. If you have any further questions about the data report, please give us a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Julie Todd

Julie Todd
Office Manager

1210 Eastside Street SE, Suite 200 ■ Olympia, Washington 98501 ■ 360.459.4670 ■ FAX 360.459.3432
Web Site: *www.esnnw.com* E-Mail: *info@esnnw.com*

ESN NORTHWEST CHEMISTRY LABORATORY

BSE - Miles Sand & Gravel
LAKE WOOD PIT PROJECT
Lakewood, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Diesel Range Organics & Lube Oil Range Organics in Water by Method NWTPH-Dx

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (ug/L)	Lube Oil Range Organics (ug/L)
Method Blank	6/11/2020	6/11/2020	77	nd	nd
LCS	6/11/2020	6/11/2020	65	103%	---
SVE-5	6/11/2020	6/11/2020	115	**2100**	nd
MW-11	6/11/2020	6/11/2020	116	nd	nd
Reporting Limits				100	250

"---" Indicates not tested for component.
"nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST | Environmental Services Network

CHAIN-OF-CUSTODY RECORD

CLIENT: Miles Sand & Gravel / BSE

ADDRESS:

PHONE: EMAIL

CLIENT PROJECT #: PROJECT MANAGER: Alex Koch

DATE: 6/10/20 PAGE 1 OF 1

PROJECT NAME: Lake Wood Pit

LOCATION: Lakewood

COLLECTOR: Dan Hatch DATE OF COLLECTION: 6/10/20

Sample Number	Depth	Time	Sample Type	Container Type	TPH-HCID	TPH-DIESEL AND OIL	TPH-GASOLINE	BTEX 8260	VOC 8260CL	VOC 8260	SEMIVOC 8270	PAH's 8270	PCB's 8082	CL PESTICIDES 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	ASBESTOS PLM	GRO Suite 830-1	DRO Suite 830-1	WO Suite 830-1
1. SVE-5		1105	GW	500mL Ab		X															
2. MW-4		1155	GW	" "		X															
3.																					
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					
11.																					
12.																					
13.																					
14.																					
15.																					
16.																					
17.																					
18.																					

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	6/10/20	Arice Harnden	6/10/20 12:05pm
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	2
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: 24 HR 48 HR 5 DAY

1210 Eastside Street SE, Suite 200
Olympia, Washington 98501

Phone: 360-459-4670
Fax: 360-459-3432

Website: www.esnnw.com
E-Mail: lab@esnnw.com

ESN NORTHWEST
Environmental
Services Network

July 1, 2020

Alex Koch
Blue Sage Environmental
198007 E 30th Ave
Kennewick, WA 99337

Dear Mr. Koch:

Please find enclosed the analytical data reports for the Lakeview Project in Lakewood, Washington. Water samples were analyzed for Diesel and Oil by NWTPH-Dx/Dx Extended and pH by Method 150.1 on June 22 & 26, 2020.

The results of the analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. A copy of the invoice for this work is enclosed for your records.

ESN Northwest appreciates the opportunity to have provided these services to Blue Sage Environmental for this project. If you have any further questions about the data report, please give us a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Julie Todd

Julie Todd
Office Manager

1210 Eastside Street SE, Suite 200 ■ Olympia, Washington 98501 ■ 360.459.4670 ■ FAX 360.459.3432
Web Site: *www.esnnw.com* E-Mail: *info@esnnw.com*

ESN NORTHWEST CHEMISTRY LABORATORY

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Miles Sand and Gravel (BSE)
PROJECT LAKEVIEW
Lakewood, Washington

Analysis of Diesel Range Organics & Lube Oil Range Organics in Water by Method NWTPH-Dx

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (ug/L)	Lube Oil Range Organics (ug/L)
Method Blank	6/26/2020	6/26/2020	92	nd	nd
LCS	6/26/2020	6/26/2020	89	95%	---
MW-11	6/26/2020	6/26/2020	94	nd	nd
SVE-5	6/26/2020	6/26/2020	99	**1600**	nd
Reporting Limits				100	250

"---" Indicates not tested for component.
"nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST CHEMISTRY LABORATORY

Miles Sand and Gravel (BSE)
PROJECT LAKEVIEW
Lakewood, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670   (360) 459-3432 Fax
lab@esnnw.com

Analysis of pH in Water by EPA Method 150.1

Sample Number	Date Sampled	Date Analyzed	pH
MW-23	6/22/2020	6/22/2020	**7.05**
MW-16R	6/22/2020	6/22/2020	**6.93**
MW-9R	6/22/2020	6/22/2020	**6.77**
MW-9B	6/22/2020	6/22/2020	**11.8**
MW-31	6/22/2020	6/22/2020	**11.3**

ESN NORTHWEST Environmental Services Network

CHAIN-OF-CUSTODY RECORD

CLIENT: Miles Sand & Gravel / BSE

ADDRESS:

PHONE: EMAIL

CLIENT PROJECT #: PROJECT MANAGER: Alex K.

DATE: 6/22/20 PAGE 1 OF

PROJECT NAME: Lakeview

LOCATION: Lakewood

COLLECTOR: Dan Hatch DATE OF COLLECTION: 6/22/20

Sample Number	Depth	Time	Sample Type	Container Type	TPH-HCID	TPH-DIESEL AND OIL	TPH-GASOLINE	BTEX 8260	VOC 8260CL	VOC 8260	SEMIVOC 8270	PAH's 8270	PCB's 8082	CL PESTICIDES 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	ASBESTOS PLM	GRO Suite 830-1	DRO Suite 830-1	WO Suite 830-1	pH				
1. MW-11		905	GW	1L Amber		X																				
2. SVE-5		1005	GW	1L Amber		X																				
3. MW-23		1120	GW	2-VOA																		X				
4. MW-16R		1215	GW	2-VOA																		X				
5. MW-9R		1240	GW	↓																		X				
6. MW-9B		1350	GW	↓																		X				
7. MW-31		1440	GW	↓																		X				
8. [illegible]																										
9.																										
10.																										
11.																										
12.																										
13.																										
14.																										
15.																										
16.																										
17.																										
18.																										

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
Dan Hatch	6/22/20 16:00	Jennifer Arnold	6-22-20
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	12
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: 24 HR 48 HR 5 DAY

1210 Eastside Street SE, Suite 200
Olympia, Washington 98501

Phone: 360-459-4670
Fax: 360-459-3432

Website: www.esnnw.com
E-Mail: lab@esnnw.com

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

October 8, 2020

Ryan Ransavage, Project Manager
Miles Resources
400 Valley Highway NE
Puyallup, WA 98372

Dear Mr Ransavage:

Included are the results from the testing of material submitted on September 30, 2020 from the Lakeview (Miles), F&BI 009561 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Alex Koch (akoch19672@gmail.com), ryan.ransavage@miles.rocks
NAA1008R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 30, 2020 by Friedman & Bruya, Inc. from the Company/HomeOwner Lakeview (Miles), F&BI 009561 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Miles Resources
009561 -01	MW-13
009561 -02	SVE-5
009561 -03	MW-16R
009561 -04	MW-9R
009561 -05	MW-9B
009561 -06	MW-6

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/08/20
Date Received: 09/30/20
Project: Lakeview (Miles), F&BI 009561
Date Extracted: 10/01/20
Date Analyzed: 10/01/20

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 41-152)
MW-13 009561-01	1,800 x	1,300 x	99
SVE-5 009561-02	1,400 x	480 x	110
MW-16R 009561-03	290 x	450 x	93
MW-9R 009561-04	470 x	460 x	87
MW-6 009561-06	1,500 x	740 x	87
Method Blank 00-2220 MB2	<50	<250	85

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/08/20
Date Received: 09/30/20
Project: Lakeview (Miles), F&BI 009561
Date Extracted: NA
Date Analyzed: 09/30/20

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR pH USING EPA METHOD 150.2

Sample ID Laboratory ID	pH
MW-9B 009561-05	12.2 ve

Date of Report: 10/08/20
Date Received: 09/30/20
Project: Lakeview (Miles) , F&BI 009561

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	112	100	63-142	11

Date of Report: 10/08/20
Date Received: 09/30/20
Project: Lakeview (Miles) , F&BI 009561

QUALITY ASSURANCE RESULTS
FROM THE ANALYSIS OF WATER SAMPLES
FOR pH BY METHOD 150.2

Laboratory Code: 009561-05 (Duplicate)

Analyte	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
pH	12.2 ve	12.2 ve	0	0-20

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

009561

SAMPLE CHAIN OF CUSTODY

ME 09/30/20

AI2 / B05

Page # 1 of 1

Report To Alex Koch

Company Miles Resources

Address

City, State, ZIP

Phone 509 947 4059 Email akoch19672@gmail.com

SAMPLERS (signature)	
PROJECT NAME Lakeview (Miles)	PO #
REMARKS Project specific RLs? - Yes / No	INVOICE TO Miles Resources

TURNAROUND TIME
☑ Standard turnaround ☐ RUSH Rush charges authorized by:
SAMPLE DISPOSAL ☐ Archive samples ☐ Other Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	pH				Notes
MW-13	01	9/29/20	9:30	GW	1	X											
SVE-3	02	9/29/20	11:05		1	X											
MW-16R	03	9/29/20	1245		1	X											
MW-9R	04	9/29/20	13:30		1	X											
MW-9B	05	9/29/20	16:35		1								X				
MW-6	06	9/30/20	8:50		1	X											

Samples received at 4 °C

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Dan Hatch	Blue Sage	9/30/20	1015
Received by:	Nhan Phan	FeBI	9/30/20	1450
Relinquished by:				
Received by:				

ATTACHMENT B
BORING LOGS

RESPONSE TO AUGUST 30, 2019 LETTER REGARDING FURTHER ACTION AT THE WOODWORTH & CO INC. LAKEVIEW PLANT
2800 104th Street Court South
Lakewood, Washington

Farallon PN: 188-002

FARALLON CONSULTING

Log of Boring: B-21

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/5/19 @ 1055
Date/Time Completed: 12/5/19 @ 1115
Equipment: Geoprobe 7800
Drilling Company: Holt Drilling
Drilling Foreman: Louie Ferner
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): NA

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		0.0-0.3': Asphalt. Vac clear for utilities.	AC		100					Concrete
		0.3-2.5': Silty SAND with gravel (65% sand, 25% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, gray, moist, no odor, no sheen.	SM							
		2.5-5.0': Silty SAND with silt (80% sand, 15% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, black-brown, moist, no odor, no sheen.	SM				0.0	B21-3.0	X	
5		5.0-7.3': Silty SAND with silt (80% sand, 15% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, black-brown, moist, no odor, no sheen.	SM		100		0.0			Bentonite
		7.3-8.2': Silty GRAVEL with sand (60% gravel, 25% silt, 15% sand), fine and coarse gravel, fine to coarse sand, tan, moist, no odor, no sheen.	GM				0.0			
		8.2-10.0': SILT with gravel (80% silt, 15% gravel. 5% sand), fine gravel and sand, gray, moist, no odor, no sheen.	ML							
10							0.0	B21-10.0		

Well Construction Information

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

Log of Boring: B-22

FARALLON CONSULTING

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/5/19 @ 1150
Date/Time Completed: 12/5/19 @ 1210
Equipment: Geoprobe 7800
Drilling Company: Holt Drilling
Drilling Foreman: Louie Ferner
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): NA

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		0.0-0.3': Asphalt. Vac clear for utilities.	AC		100					Asphalt
		0.3-0.8': Concrete.	CO							
		0.8-2.5': Silty SAND with gravel (65% sand, 20% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM							
		2.5-5.0': Silty SAND (80% sand, 15% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, black-brown, moist, no odor, no sheen.	SM				0.7	B22-3.0		
5		5.0-7.5': Silty SAND (80% sand, 15% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM		100					Bentonite
		7.5-8.5': Silty GRAVEL with sand (60% gravel, 25% sitl, 15% sand), fine and coarse gravel, fine to coarse sand, tan, moist, no odor, no sheen.	GM				0.2			
		8.5-10.0': SILT with gravel (80% silt, 15% gravel, 5% sand), fine gravel, fine sand, tan, moist, no odor, no sheen.	ML							
10							0.0	B22-10.0	X	

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Asphalt
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: B-23

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/5/19 @ 1215
Date/Time Completed: 12/5/19 @ 1225
Equipment: Geoprobe 7800
Drilling Company: Holt Drilling
Drilling Foreman: Louie Ferner
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): NA

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		0.0-0.3': Asphalt. Vac clear for utilities.	AC		100					Asphalt
		0.3-0.8': Concrete.	CO							
		0.8-3.0': Silty SAND with gravel (65% sand, 20% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Refusal at 3.0' due to cobbles	SM				0.0	B23-3.0	X	
		3.0-5.0': Silty SAND (80% sand, 15% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, black-brown, moist, no odor, no sheen.	SM		100					
5		5.0-6.2': Silty SAND (80% sand, 15% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM		100					Bentonite
		6.2-8.1': Silty GRAVEL with sand (60% gravel, 25% silt, 15% sand), fine and coarse gravel, fine to coarse sand, tan, moist, no odor, no sheen.	GM				0.2			
		8.1-10.0': SILT with gravel (80% silt, 15% gravel, 5% sand), fine gravel, fine sand, tan, moist, no odor, no sheen.	ML							
10							0.0	B23-10.0		

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Asphalt
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: X: NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: B-24

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/5/19 @ 1230
Date/Time Completed: 12/5/19 @ 1245
Equipment: Geoprobe 7800
Drilling Company: Holt Drilling
Drilling Foreman: Louie Ferner
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): NA

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		0.0-0.3': Asphalt. Vac clear for utilities.	AC		100					Asphalt
		0.3-0.8': Concrete.	CO							
		0.8-2.4': Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM							
		2.4-3.3': Silty SAND with gravel (50% sand, 35% gravel, 15% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM		100		0.2	B24-2.4	X	
		3.3-5.0': Silty SAND (80% sand, 15% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM							
5		5.0-7.4': Silty SAND (80% sand, 15% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, black-brown, moist, no odor, no sheen.	SM		100					Bentonite
		7.4-8.5': Silty GRAVEL with sand (60% gravel, 20% sand, 20% silt), fine and coarse gravel, fine to coarse sand, tan, moist, no odor, no sheen.	GM							
		8.5-10.0': SILT with gravel (80% silt, 15% gravel, 5% sand), coarse gravel, fine sand, tan, moist, no odor, no sheen.	ML							
10							0.3	B24-10.0	X	

Well Construction Information

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

Log of Boring: B-25

FARALLON CONSULTING

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/5/19 @ 1430
Date/Time Completed: 12/5/19 @ 1450
Equipment: Geoprobe 7800
Drilling Company: Holt Drilling
Drilling Foreman: Louie Ferner
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 15.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-3.0': Silty SAND with gravel (60% sand, 20% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Vac clear to 5.6' for utilities.	SM	100					Asphalt
	3.0-5.0': Silty SAND with gravel (50% sand, 30% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM			0.3	B25-3.0		
5	5.0-5.6': Silty SAND with gravel (50% sand, 30% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM	100					
	5.6-7.5': Silty SAND with gravel (50% sand, 30% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM	95					
	7.5-9.5': Silty GRAVEL with sand (60% gravel, 20% sand, 20% silt), fine and coarse gravel, fine to coarse sand, light brown, moist, no odor, no sheen.	GW			0.1	B25-9.0	X	Bentonite
	9.5-10.0': No recovery.	--						
10	10.0-12.7': Silty SAND with gravel (60% sand, 20% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, tan, moist, no odor, no sheen.	SM	100					
	12.7-15.0': Silty GRAVEL with sand (60% gravel, 20% sand, 20% silt), fine and coarse gravel, fine to coarse sand, tan, moist, no odor, no sheen.	GW						
15					0.0	B25-15.0	X	

Well Construction Information

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

FARALLON CONSULTING

Log of Boring: B-26

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/5/19 @ 1455
Date/Time Completed: 12/5/19 @ 1515
Equipment: Geoprobe 7800
Drilling Company: Holt Drilling
Drilling Foreman: Louie Ferner
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 15.0
Total Well Depth (ft bgs): NA

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		0.0-3.0': Silty SAND with gravel (80% sand, 15% silt, 5% gravel), fine and medium sand, fine gravel, brown, moist, no odor, no sheen. Vac clear to 3.0' for utilities.	SM		100					Asphalt
		3.0-5.0': Silty SAND with gravel (65% sand, 25% silt, 10% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM		100		0.2	B26-3.0		
5		5.0-6.5': Silty SAND with gravel (65% sand, 25% silt, 10% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM		95					
		6.5-8.8': Silty SAND (80% sand, 15% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, tan, moist, no odor, no sheen.	SM							
		8.8-9.5': Silty SAND with gravel (60% sand, 20% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, tan, moist, no odor, no sheen.	SM				0.1	B26-9.0	X	Bentonite
10		9.5-10.0': No recovery.								
		10.0-14.2': Silty SAND with gravel (60% sand, 20% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, tan, moist, no odor, no sheen.	SM		100		0.1			
15		14.2-15.0': Well-graded GRAVEL (90% gravel, 5% sand, 5% silt), fine and coarse gravel, fine to coarse sand, tan, moist, no odor, no sheen.	GW				0.0	B26-15.0	X	

Well Construction Information

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

Log of Boring: B-27

FARALLON CONSULTING

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/5/19 @ 1520
Date/Time Completed: 12/5/19 @ 1550
Equipment: Geoprobe 7800
Drilling Company: Holt Drilling
Drilling Foreman: Louie Ferner
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 15.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-0.3': Asphalt. Vac clear to 3.5' for utilities.	AC	100					Asphalt
	0.3-0.6': Concrete.	CO						
	0.6-3.0': Silty SAND with gravel (50% sand, 30% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, dark brown, moist, no odor, no sheen.	SM						
	3.0-3.5': Silty SAND with gravel (50% sand, 30% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, dark brown, moist, no odor, no sheen.	SM			0.4	B27-3.0		
		SM	100					
	3.5-5.0': Silty SAND with gravel (50% sand, 30% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.							
5	5.0-6.7': Silty SAND with gravel (50% sand, 30% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM	100					
	6.7-8.8': Silty SAND (80% sand, 15% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM			0.1			
	8.8-9.0': Wood debris.	WD						Bentonite
	9.0-10.0': Silty SAND (80% sand, 20% silt), fine and medium sand, brown, moist, no odor, no sheen.	SM						
10	10.0-12.7': Silty SAND (80% sand, 20% silt), fine and medium sand, brown, moist, no odor, no sheen.	SM	100		0.2	B27-12.0	X	
	12.7-15.0': Silty GRAVEL (65% sand, 25% silt, 10% sand), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	GM						
15					0.1	B27-15.0	X	

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Asphalt
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

Log of Boring: B-28

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started:	12/6/19 @ 0835	**Sampler Type:**	5' Macrocore
Date/Time Completed:	12/6/19 @ 0905	**Drive Hammer (lbs.):**	Auto
Equipment:	Geoprobe 7800	**Depth of Water ATD (ft bgs):**	NE
Drilling Company:	Holt Drilling	**Total Boring Depth (ft bgs):**	15.0
Drilling Foreman:	Louie Ferner	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

Depth (feet bgs.)	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-0.3': Asphalt. Vac clear to 3.8' for utilities.	AC	100					Asphalt
	0.3-0.5': Concrete.	CO						
	0.5-3.8': Silty SAND with gravel (55% sand, 30% gravel, 15% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM			0.2	B28-3.0		
	3.8-5.0': Silty SAND with gravel (55% sand, 30% gravel, 15% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM	100					
5	5.0-6.5': Silty SAND with gravel (60% sand, 20% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, dark brown, moist, no odor, no sheen.	SM	100					
	6.5-7.5': Asphalt.	AC						
	7.5-10.0': Silty SAND (80% sand, 15% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM			0.1	B28-9.0	X	Bentonite
10	10.0-13.5': Silty SAND (80% sand, 15% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM	100					
	13.5-15.0': SILT with sand (80% silt, 15% sand, 5% gravel), fine sand and gravel, tan, moist, no odor, no sheen.	ML						
15					0.1	B28-15.0	X	

Well Construction Information

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

Log of Boring: B-29

FARALLON CONSULTING

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/6/19 @ 948
Date/Time Completed: 12/6/19 @ 1020
Equipment: Geoprobe 7800
Drilling Company: Holt Drilling
Drilling Foreman: Louie Ferner
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 15.0
Total Well Depth (ft bgs): NA

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		0.0-0.1': Asphalt. Vac clear to 3.8' for utilities.	AC		100					Asphalt
		0.1-3.25': Silty GRAVEL with sand (65% gravel, 15% silt, 20% sand), fine and coarse gravel, fine and medium sand, brown, dry, no odor, no sheen. Subrounded gray gravel. Air knife to 3.25' bgs to clear for utilities. Subrounded 4 to 6-inch gray cobbles from 3 to 3.25' bgs.	GM				0.2	B29-3.0		
		3.25-5.0': Silty GRAVEL with sand (65% gravel, 15% silt, 20% sand), fine and coarse gravel, fine and medium sand, brown, moist, no odor, no sheen. Subrounded gray gravel.	GM		100					
5		5.0-7.2': Silty SAND with gravel (60% sand, 25% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen.	SM							
		7.2-9.5': Sandy SILT (60% silt, 30% sand, 10% gravel), fine to coarse sand, fine and coarse gravel, tan, moist, no odor, no sheen. Subrounded gray gravel.	ML				0.1	B29-9.0	X	Bentonite
		9.5-10.0:' No Recovery:								
10		10.0-12.2': Silty SAND with gravel (65% sand, 20% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, tan, moist, no odor, no sheen. Subrounded gray gravel.	SM				0.1	B29-12.0	X	
		12.2-15.0:' No Recovery:								
15										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Asphalt
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

Log of Boring: B-30

FARALLON CONSULTING

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/6/19 @ 1050
Date/Time Completed: 12/6/19 @ 1115
Equipment: Geoprobe 7800
Drilling Company: Holt Drilling
Drilling Foreman: Louie Ferner
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): NA

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		0.0-5.0': Silty SAND with gravel (70% sand, 15% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Air knife to 5.0' bgs to clear for utilities.	SM		100					Soil
							0.2	B30-3.0	X	
5		5.0-8.3': Silty SAND with gravel (70% sand, 25% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded and subangular gravel.	SM		100					
		8.3-10.0': Silty SAND with gravel (60% sand, 25% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, tan, moist, no odor, no sheen.	SM							Bentonite
10							0.1	B30-10.0	X	

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Asphalt
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: B-31

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started:	12/6/19 @ 1130
Date/Time Completed:	12/6/19 @ 1150
Equipment:	Geoprobe 7800
Drilling Company:	Holt Drilling
Drilling Foreman:	Louie Ferner
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):	NA

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		0.0-0.6': Asphalt (100% asphalt), black. Air Knife to 5.5' bgs to clear for utilities.	AC							Asphalt
		0.6-3.0': Silty SAND with gravel (55% sand, 25% silt, 20% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel.	SM		100					
		3.0-5.5': Well-graded GRAVEL with silt and sand (75% gravel,10% silt,15% sand), fine and coarse gravel, fine to coarse sand, brown, moist, no odor, no sheen. Subrounded gray gravel. Subrounded gray 4 to 6-inch gray cobbles.	GW-GM				0.2	B31-3.0	X	
5										
		5.5-7.2': Well-graded GRAVEL with silt and sand (75% gravel,10% silt,15% sand), fine and coarse gravel, fine to coarse sand, brown, moist, no odor, no sheen. Subrounded gray gravel. Subrounded gray 4 to 6-inch gray cobbles.	GW-GM							
		7.2-7.8': SILT with gravel (80% silt, 5% sand, 15% gravel), fine sand, fine and coarse gravel, brown with red mottling, moist to slight wet, no odor, no sheen. Subrounded gray and black gravel.	ML		100					
		7.8-10.0': Well-graded GRAVEL (90% gravel,5% silt,5% sand), fine and coarse gravel, fine to coarse sand, brown, moist, no odor, no sheen. Subrounded gray, black and white gravel.	GW							Bentonite
10							0.0	B31-10.0	X	

Well Construction Information

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

Log of Boring: B-32

FARALLON CONSULTING

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/6/19 @ 1155
Date/Time Completed: 12/6/19 @ 1220
Equipment: Geoprobe 7800
Drilling Company: Holt Drilling
Drilling Foreman: Louie Ferner
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): NA

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		0.0-0.8': Asphalt (100% asphalt), black. Air Knife to 1.5' bgs to clear for utilities.	AC		100					Asphalt
		0.8-1.5': Silty GRAVEL with sand (55% gravel,15% silt, 30% sand), fine and coarse gravel, fine to coarse sand, brown, moist, no odor, no sheen. Subrounded gray gravel.	GM							
		1.5-2.0': Asphalt (100% asphalt), black. Observe 2nd layer of asphalt.	AC		100					
		2.0-4.2': Silty SAND with gravel (65% sand, 20% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, tan, moist, no odor, no sheen. Subrounded gray gravel.	SM				0.1	B32-3.0	X	
		4.2-5.0': Silty GRAVEL with sand (60% gravel, 20% silt, 20% sand), fine and coarse gravel, fine to coarse sand, tan, moist, no odor, no sheen. Subrounded gray gravel.	GM							
5		5.0-7.8': Silty SAND with gravel (65% sand, 20% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, dark brown, moist, no odor, no sheen. Subrounded gray gravel.	SM		100					
		7.8-10.0': Silty GRAVEL with sand (60% gravel, 20% silt, 20% sand), fine and coarse gravel, fine to coarse sand, tan, moist, no odor, no sheen. Subrounded gray gravel.	GM							Bentonite
10							0.0	B32-10.0	X	

Well Construction Information

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

Log of Boring: B-33

FARALLON CONSULTING

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/6/19 @ 1235
Date/Time Completed: 12/6/19 @ 1255
Equipment: Geoprobe 7800
Drilling Company: Holt Drilling
Drilling Foreman: Louie Ferner
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): NA

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		0.0-0.7': Asphalt (100% asphalt), black. Air Knife to 5.3' bgs to clear for utilities.	AC							Asphalt
		0.7-3.0': Silty SAND with gravel (60% sand, 15% silt, 25% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel. Subrounded 4 to 6-inch gray cobbles.	SM		100					
		3.0-5.3': Silty SAND with gravel (60% sand, 15% silt, 25% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel. Subrounded 4 to 6-inch gray cobbles.	SM		100		0.4	B33-3.0	X	
5		5.3-8.3': Well-graded SAND with gravel (75% sand, 5% silt, 20% gravel), fine to coarse sand, fine and coarse gravel, dark brown, moist, no odor, no sheen. Subrounded gray gravel.	SW		100					
		8.3-10.0': Silty GRAVEL with sand (60% gravel, 20% silt, 20% sand), fine and coarse gravel, fine to coarse sand, tannish-brown, moist, no odor, no sheen. Subrounded gray gravel.	GM							Bentonite
10							0.1	B33-10.0	X	

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Asphalt
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

Log of Boring: B-34

FARALLON CONSULTING

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started:	12/6/19 @ 1345	**Sampler Type:**	5' Macrocore
Date/Time Completed:	12/6/19 @ 1410	**Drive Hammer (lbs.):**	Auto
Equipment:	Geoprobe 7800	**Depth of Water ATD (ft bgs):**	NE
Drilling Company:	Holt Drilling	**Total Boring Depth (ft bgs):**	10.0
Drilling Foreman:	Louie Ferner	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

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		0.0-0.4': Asphalt (100% asphalt), black. Air Knife to 5.0' bgs to clear for utilities.	AC		100					Asphalt
		0.4-3.0': Well-graded SAND with silt and gravel (70% sand, 10% silt, 20% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel.	SW-SM							
		3.0-5.0': Well-graded SAND with silt and gravel (60% sand, 10% silt, 30% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel.	SW-SM				0.4	B34-3.0	X	
5		5.0-7.5': Silty SAND with gravel (60% sand, 15% silt, 25% gravel), fine to coarse sand, fine and coarse gravel, dark brown, moist, no odor, no sheen. Subrounded gray gravel.	SM		100					
		7.5-8.5': Well-graded SAND (90% sand, 5% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, light-brown, moist, no odor, no sheen. Subrounded gray gravel.	GW				0.1			
		8.5-10.0': Silty GRAVEL with SAND (65% gravel, 20% silt, 15% sand), fine and coarse gravel, fine to coarse sand, tan, moist, no odor, no sheen. Subangular gray, black and white gravel.	GM							Bentonite
10							0.1	B34-10.0	X	

Well Construction Information

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

Log of Boring: B-35

FARALLON CONSULTING

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/19/19 @ 1130
Date/Time Completed: 12/19/19 @ 1155
Equipment: Geoprobe 7822
Drilling Company: Holt Drilling
Drilling Foreman: Michael Running
Drilling Method: Direct Push

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

Depth (feet bgs.)	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-2.5': Concrete (100% concrete), blackish-white. Core to 2.5' bgs to clear for utilities.	CO	100					Asphalt
	2.5-3.5': Silty GRAVEL with SAND (60% gravel, 20% silt, 20% sand), fine and coarse gravel, fine to coarse sand, brown, moist, no odor, no sheen. Subangular gray gravel.	GM	100		0.0			
	3.5-5.0': Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine to coarse sand, fine and coarse gravel, light-brown, moist, no odor, no sheen. Subrounded gray and black gravel.	SM						
5	5.0-8.5': Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine to coarse sand, fine and coarse gravel, light-brown, moist, no odor, no sheen. Subrounded gray and black gravel.	SM	100		2.5	B35-5.0		Bentonite
	8.5-9.0': SILT with gravel (80% silt, 15% gravel, 5% sand), fine and coarse gravel, fine and medium sand, light-brown, moist, no odor, no sheen. Subangular gray gravel. Driller stated soil very dense and refusal at 9.0' bgs at two locations.	ML			0.5	B35-9.0	X	
10								

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

Log of Boring: B-36

FARALLON CONSULTING

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/19/19 @ 1215
Date/Time Completed: 12/19/19 @ 1300
Equipment: Geoprobe 7822
Drilling Company: Holt Drilling
Drilling Foreman: Michael Running
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 14.0
Total Boring Depth (ft bgs): 15.0
Total Well Depth (ft bgs): NA

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		0.0-3.5': Well-graded GRAVEL Fill (90% gravel, 5% silt, 5% sand), fine and coarse gravel, fine to coarse sand, grayish-brown, moist with ponded water from surface to 1.2' bgs, no odor, no sheen. Subangular gray gravel. Hand auger to 3.5' bgs to clear for utilities.	GW		100		0.0			Soil
		3.5-4.0': Asphalt (100% asphalt), black,	AC		100					
		4.0-5.0': Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel.	SM							
5		5.0-15.0': Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel.	SM		100		0.0	B36-5.0	X	Bentonite
10							0.0	B36-10.0	X	
								B36-13.5	X	Water level
15							0.0	B36-121919-GW	X	

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA **Y:** NA
Screened Interval (ft bgs):	10-15	**Boring Abandonment:**	Bentonite	**Unique Well ID:**	NA

Log of Boring: B-37

FARALLON CONSULTING

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started:	12/19/19 @ 1315	**Sampler Type:**	5' Macrocore
Date/Time Completed:	12/19/19 @ 1350	**Drive Hammer (lbs.):**	Auto
Equipment:	Geoprobe 7822	**Depth of Water ATD (ft bgs):**	13.5
Drilling Company:	Holt Drilling	**Total Boring Depth (ft bgs):**	15.0
Drilling Foreman:	Michael Running	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

Depth (feet bgs.)	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-1.9': Silty SAND with gravel Fill (60% sand, 20% silt, 20% gravel), fine to coarse sand, fine and coarse gravel, grayish-brown, moist, no odor, no sheen. Subrounded gray gravel. Hand auger to 1.9' bgs to clear for utilities.	SM	100					Soil
	1.9-2.4': Asphalt (100% asphalt), black.	AC						
	2.4-5.0': Silty SAND with gravel (65% sand, 20% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, gray, moist, no odor, no sheen. Subrounded gray gravel.	SM			0.0			
5	5.0-8.1': Silty SAND with gravel (65% sand, 20% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, gray, moist, no odor, no sheen. Subrounded gray gravel.	SM	100		0.0	B37-5.0	X	
	8.1-8.6': Well-graded GRAVEL (95% gravel, 5% sand), fine and coarse gravel, fine to coarse sand, dark gray, moist, no odor, no sheen. Subangular gray and black gravel.	GW						Bentonite
	8.6-10.0': SILT with sand (80% silt, 20% sand), fine and medium sand, gray, moist, no odor, no sheen.	ML						
10	10.0-12.3': SILT with sand (80% silt, 20% sand), fine and medium sand, gray, moist, no odor, no sheen.	ML	100		0.0	B37-10.0	X	
	12.3-13.4': Silty SAND with gravel (60% sand, 25% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, dark gray, moist to wet at 13.5' bgs, no odor, no sheen. Subrounded gray gravel.	SM			0.0	B37-13.0	X	
	13.4-15.0': SILT with sand (60% silt, 25% sand, 15% gravel), fine and medium sand, fine and coarse gravel, dark gray, wet, no odor, no sheen.	ML						∇ Water level
15					0.0			

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA **Y:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite	**Unique Well ID:**	NA

FARALLON CONSULTING

Log of Boring: B-38

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/19/19 @1400
Date/Time Completed: 12/19/19 @ 1505
Equipment: Geoprobe 7822
Drilling Company: Holt Drilling
Drilling Foreman: Michael Running
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 14.0
Total Boring Depth (ft bgs): 15.0
Total Well Depth (ft bgs): NA

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		0.0-4.5': Silty GRAVEL with sand (60% gravel, 20% silt, 20% sand), fine and coarse gravel, fine to coarse sand, dark grayish-brown, moist, no odor, no sheen. Subangular gray and black gravel.	GM		100		0.0			Soil
		4.5-5.0': Silty SAND with gravel (65% sand, 20% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded and subangular gravel.	SM							
5		5.0-7.6': Silt SAND with gravel (65% sand, 20% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, gray, moist, no odor, no sheen. Subrounded and subangular gravel.	SM		100		0.0	B38-5.0	X	
		7.6-8.4': Well-graded GRAVEL (90% gravel, 5% silt, 5% sand), fine and coarse gravel, fine and coarse sand, gray, moist, no odor, no sheen. Subrounded and subangular gray gravel.	GW							
		8.4-10.0': SILT with sand (80% silt, 20% sand), fine and medium sand, gray, moist, no odor, no sheen.	ML							Bentonite
10		10.0-10.8': SILT with sand (80% silt, 20% sand), fine and medium sand, gray, moist, no odor, no sheen.	ML		100		0.0	B38-10.0	X	
		10.8-11.8': Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine to coarse sand, fine and coarse gravel, gray, moist, no odor, no sheen. Subrounded gray gravel.	SM							
		11.8-14.0': Silty SAND (80% sand, 15% silt, 5% gravel), fine and medium sand, fine and coarse gravel, brown, moist to wet at 14.0' bgs, no odor, no sheen. Subrounded gray gravel.	SM				0.0	B38-13.0	X	Water Level
		14.0-15.0': SILT with gravel (80% silt, 15% gravel, 5% sand), fine sand, fine and coarse gravel, gray, wet, no odor, no sheen.	ML							
15							0.0			

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Soil	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA **Y:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite	**Unique Well ID:**	NA

FARALLON CONSULTING

Log of Boring: B-39

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/20/19 @ 1000
Date/Time Completed: 12/20/19 @ 1045
Equipment: Hand Auger
Drilling Company: Holt Drilling
Drilling Foreman: Michael Running
Drilling Method: NA

Sampler Type: NA
Drive Hammer (lbs.): NA
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 3.5
Total Well Depth (ft bgs): NA

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		0.0-0.4': Organic SILT (90% silt, 5% sand, 5% gravel), fine sand, fine gravel, brown, moist, no odor, no sheen. Subrounded gray gravel, low plasticity. Forest duff surface with pine needles and moss.	OL		100					Soil
		0.4-1.2': Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine to coarse sand, fine and coarse gravel, dark brown, moist, no odor, no sheen. Subrounded gray gravel.	SM				0.0	B39-1.0		
		1.2-1.8': Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine to coarse sand, fine and coarse gravel, dark brown, moist, no odor, no sheen. Subrounded gray gravel. Observe 4 to 6-inch rounded gray cobbles.	SM							
		1.8-3.5': Silty SAND with gravel (50% sand, 30% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel. Refusal at 3.5' bgs.	SM				0.0			Bentonite
							0.0	B39-3.5	X	
5										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Soil
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: B-40

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: Ken Scott

Date/Time Started: 12/20/19 @ 1100
Date/Time Completed: 12/20/19 @ 1130
Equipment: Hand Auger
Drilling Company: Holt Drilling
Drilling Foreman: Michael Running
Drilling Method: NA

Sampler Type: NA
Drive Hammer (lbs.): NA
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 4.0
Total Well Depth (ft bgs): NA

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		0.0-2.3': Silty SAND with gravel Fill (60% sand, 15% silt, 25% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel.	SM		100					Soil
							0.0			
							0.0	B40-2.0		
		2.3-4.0': Silty SAND with gravel (50% sand, 20% silt, 30% gravel), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel.	SM							Bentonite
							0.0	B40-4.0	X	
5										

Well Construction Information

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

FARALLON CONSULTING

Log of Test Pit: B-41

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: Lakewood, WA

Farallon PN: 188-002

Logged By: M. Gehring

Date/Time Started:	1/3/20 @1223	**Sampler Type:**	Bucket
Date/Time Completed:	1/3/20 @1235	**Depth of Water (ft bgs):**	NA
Equipment:	Backhoe	**Total Excavation Depth (ft bgs):**	5.0
Excavation Company:	Miles	**Excavation Diameter (ft):**	7.0
Excavation Foreman:	Ed	**Ground Surface Elevation (ft):**	NA
Excavating Method:	Backhoe	**Backfill Material:**	Native Soil

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-5.0': Well graded SAND with silt (80% sand, 10% silt, 10% gravel), fine to coarse sand, fine gravel, brown, moist, no odor, no sheen.	SW-SM				
5						B-41-5.0	X
10							

FARALLON CONSULTING

Log of Test Pit: B-42

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: Lakewood, WA

Farallon PN: 188-002

Logged By: M. Gehring

Date/Time Started:	1/3/20 @1235	**Sampler Type:**	Bucket
Date/Time Completed:	1/3/20 @1247	**Depth of Water (ft bgs):**	NA
Equipment:	Backhoe	**Total Excavation Depth (ft bgs):**	5.0
Excavation Company:	Miles	**Excavation Diameter (ft):**	7.0
Excavation Foreman:	Ed	**Ground Surface Elevation (ft):**	NA
Excavating Method:	Backhoe	**Backfill Material:**	Native Soil

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-5.0': Well graded SAND with silt (80% sand, 10% silt, 10% gravel), fine to coarse sand, fine gravel, brown, moist, no odor, no sheen.	SW-SM				
5						B-42-5.0	X
10							

Log of Test Pit: B-43

FARALLON CONSULTING

Client: Woodworth Capital, Inc.	**Date/Time Started:** 1/3/20 @1247	**Sampler Type:** Bucket	
Project: Woodworth Lakeview Facility	**Date/Time Completed:** 1/3/20 @1250	**Depth of Water (ft bgs):**	NA
Location: Lakewood, WA	**Equipment:** Backhoe	**Total Excavation Depth (ft bgs):**	5.0
	Excavation Company: Miles	**Excavation Diameter (ft):**	7.0
Farallon PN: 188-002	**Excavation Foreman:** Ed	**Ground Surface Elevation (ft):**	NA
Logged By: M. Gehring	**Excavating Method:** Backhoe	**Backfill Material:** Native Soil	

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-5.0': Well graded SAND with silt (80% sand, 10% silt, 10% gravel), fine to coarse sand, fine gravel, brown, moist, no odor, no sheen.	SW-SM				
5						B-43-5.0	X
10							

Log of Boring: MW-9A

FARALLON CONSULTING

Client: Woodworth Capital Inc.
Project: Woodworth Lakeview Facility
Location: Lakewood, WA

Farallon PN: 188-002

Logged By: Elise Bugge

Date/Time Started:	1/4/2021 0910	**Sampler Type:**	10' Core Barrel
Date/Time Completed:	1/5/2021 1300	**Drive Hammer (lbs.):**	Auto
Equipment:	Terrasonic TSI 150 CC	**Depth of Water ATD (ft bgs):**	32.0, 23.0
Drilling Company:	Cascade	**Total Boring Depth (ft bgs):**	115.0
Drilling Foreman:	Rico Rodriguez	**Total Well Depth (ft bgs):**	32.0
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-3.0': Poorly graded SAND with silt (80% sand, 10% silt, 10% gravel), fine sand, brown, dry to moist.	SP-SM		80				Flush monument in concrete
		3.0-6.0': Silty SAND with gravel (70% sand, 15% silt, 15% gravel), fine sand, fine and coarse gravel, brown, moist.	SM						
5		6.0-8.0': Silty SAND (80% sand, 20% silt), fine sand, brown, moist.	SM			0.2			
		8.0-10.0': No Recovery							
10		10.0-15.5': Silty SAND with gravel (60% sand, 25% silt, 15% gravel), fine sand, brown, moist, no odor, trace wood debris.	SM		100		MW-9A-10.0 (Soil)		Bentonite
15									Casing
		15.5-20.0': Well-graded SAND with gravel (70% sand, 30% gravel), fine to coarse sand, fine and coarse gravel, brown, dry to moist, no odor, brick debris, asphalt debris, and white/yellow powder debris present.	SP			0.1			
20									Sand pack

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NM
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NM
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** **Y:**
Screened Interval (ft bgs):	22.0-32.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BLZ-465

Client: Woodworth Capital Inc.
Project: Woodworth Lakeview Facility
Location: Lakewood, WA

Farallon PN: 188-002

Logged By: Elise Bugge

Date/Time Started: 1/4/2021 0910
Date/Time Completed: 1/5/2021 1300
Equipment: Terrasonic TSI 150 CC
Drilling Company: Cascade
Drilling Foreman: Rico Rodriguez
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 32.0, 23.0
Total Boring Depth (ft bgs): 115.0
Total Well Depth (ft bgs): 32.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		20.0-22.5': Silty SAND (60% sand, 35% silt, 5% gravel), fine to coarse sand, brownish gray, moist, no odor.	SM		100	0.1	MW-9A-20.0 (Soil)		
		22.5-24.5': Sandy SILT (60% silt, 40% sand), fine sand, gray, moist, no odor.	ML						Water Level After Stabilization
25		24.5-26.5': Silty SAND (60% sand, 35% silt, 5% gravel), fine to coarse sand, gray, moist, no odor.	SM						
		26.5-30.0': Silty SAND with gravel (70% sand, 15% gravel, 15% silt), fine to coarse sand, fine and coarse gravel, grayish brown, moist, no odor.	SM						PVC screen
30		30.0-32.5': Well-graded SAND with silt and gravel (60% sand, 30% gravel, 10% silt), fine to coarse sand, fine and coarse gravel, brownish gray, wet, no odor, trace white powder debris at 30.0-31.0'.	SW-SM		100	2.1	MW-9A-30.0 (Soil)		
						0.6	MW-9A-32.0 (Soil)		Water Level
		32.5-40.0': Well-graded SAND with gravel (70% sand, 30% gravel), fine to coarse sand, fine and coarse gravel, brown, dry, no odor.	SW				MW-9A-32.0 (GW)		
35							MW-9A-35.0 (Soil)		Bentonite
40									

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 22.0-32.0
Filter Pack: 12/20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA
Ground Surface Elevation (ft): NM
Top of Casing Elevation (ft): NM
Surveyed Location: X: Y:
Unique Well ID: BLZ-465

Log of Boring: MW-9A

FARALLON CONSULTING

Client: Woodworth Capital Inc.	**Date/Time Started:** 1/4/2021 0910	**Sampler Type:** 10' Core Barrel	
Project: Woodworth Lakeview Facility	**Date/Time Completed:** 1/5/2021 1300	**Drive Hammer (lbs.):** Auto	
Location: Lakewood, WA	**Equipment:** Terrasonic TSI 150 CC	**Depth of Water ATD (ft bgs):** 32.0, 23.0	
Farallon PN: 188-002	**Drilling Company:** Cascade	**Total Boring Depth (ft bgs):** 115.0	
Logged By: Elise Bugge	**Drilling Foreman:** Rico Rodriguez	**Total Well Depth (ft bgs):** 32.0	
	Drilling Method: Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		40.0-45.0': Poorly graded SAND (95% sand, 5% silt), fine sand, grayish brown, moist, no odor.	SP		100		MW-9A-40.0 (Soil)		
45		45.0-49.0': Sandy SILT (90% silt, 10% sand), grayish brown, wet at 45.0' then dry at 48.0', no odor.	ML		100				
		49.0-55.0': Well-graded SAND with gravel (60% sand, 40% gravel), fine to coarse sand, fine and coarse gravel, grayish brown, dry to moist, no odor.	SW						
50						1.3	MW-9A-50.0 (Soil)		Bentonite
55		55.0-64.0': Well-graded SAND with silt and gravel (50% sand, 40% gravel, 10% silt), fine to coarse sand, fine and coarse gravel, grayish brown, moist to wet, no odor.	SW		90		MW-9A-55.0 (GW)		
60									

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NM
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NM
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	X: Y:
Screened Interval (ft bgs):	22.0-32.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BLZ-465

FARALLON CONSULTING

Log of Boring: MW-9A

Client: Woodworth Capital Inc.
Project: Woodworth Lakeview Facility
Location: Lakewood, WA

Farallon PN: 188-002

Logged By: Elise Bugge

Date/Time Started: 1/4/2021 0910
Date/Time Completed: 1/5/2021 1300
Equipment: Terrasonic TSI 150 CC
Drilling Company: Cascade
Drilling Foreman: Rico Rodriguez
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 32.0, 23.0
Total Boring Depth (ft bgs): 115.0
Total Well Depth (ft bgs): 32.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
						0.7	MW-9A-60.0 (Soil)		
		64.0-65.0': No Recovery							
65		65.0-74.5': Well-graded GRAVEL with sand (60% gravel, 40% sand), fine and coarse gravel, fine to coarse sand, grayish brown, moist to wet, no odor, charcoal debris at 70.0'.	GW		95				
70							MW-9A-70.0 (Soil)		Bentonite
		74.5-75.0': No Recovery							
75		75.0-80.0': Well-graded SAND with gravel (70% sand, 30% gravel), fine to coarse sand, fine and coarse gravel, grayish brown, moist to wet, no odor.	SW		100		MW-9A-75.0 (GW)		
80									

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 22.0-32.0

Filter Pack: 12/20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): NM
Top of Casing Elevation (ft): NM
Surveyed Location: **X:** **Y:**
Unique Well ID: BLZ-465

Log of Boring: MW-9A

FARALLON CONSULTING

Client: Woodworth Capital Inc.
Project: Woodworth Lakeview Facility
Location: Lakewood, WA

Farallon PN: 188-002

Logged By: Elise Bugge

Date/Time Started: 1/4/2021 0910
Date/Time Completed: 1/5/2021 1300
Equipment: Terrasonic TSI 150 CC
Drilling Company: Cascade
Drilling Foreman: Rico Rodriguez
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 32.0, 23.0
Total Boring Depth (ft bgs): 115.0
Total Well Depth (ft bgs): 32.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		80.0-85.0': Well-graded GRAVEL (90% gravel, 10% sand), fine and coarse gravel, grayish brown, wet, no odor.	GW			0.7	MW-9A-80.0 (Soil)		
85		85.0-95.0': Well-graded GRAVEL with sand (70% gravel, 30% sand), fine and coarse gravel, coarse sand, grayish brown, moist, no odor.	GW		100				
90						1.2	MW-9A-90.0 (Soil)		Bentonite
95		95.0-102.0': Well-graded GRAVEL (90% gravel, 10% sand), fine and coarse gravel, brownish gray, moist to wet, no odor.	GW		70		MW-9A-95.0 (GW)		
100									

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NM
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NM
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** **Y:**
Screened Interval (ft bgs):	22.0-32.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BLZ-465

FARALLON CONSULTING

Log of Boring: MW-9A

Client: Woodworth Capital Inc.
Project: Woodworth Lakeview Facility
Location: Lakewood, WA

Farallon PN: 188-002

Logged By: Elise Bugge

Date/Time Started:	1/4/2021 0910	**Sampler Type:**	10' Core Barrel
Date/Time Completed:	1/5/2021 1300	**Drive Hammer (lbs.):**	Auto
Equipment:	Terrasonic TSI 150 CC	**Depth of Water ATD (ft bgs):**	32.0, 23.0
Drilling Company:	Cascade	**Total Boring Depth (ft bgs):**	115.0
Drilling Foreman:	Rico Rodriguez	**Total Well Depth (ft bgs):**	32.0
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
						0.4	MW-9A-100.0 (Soil)		
		102.0-105.0': Well-graded GRAVEL (90% gravel, 10% sand), fine and coarse gravel, brownish gray, moist to wet, no odor.	GW				MW-9A-102.0 (GW)		
105		105.0-107.0': Well-graded GRAVEL (90% gravel, 10% sand), fine and coarse gravel, brownish gray, moist to wet, no odor.	GW		95				
		107.0-110.5': Well-graded SAND with gravel (80% sand, 20% gravel), fine and coarse gravel, fine to coarse sand, brownish gray, moist to wet, no odor.	SW						
110							MW-9A-110.0 (Soil)		Bentonite
		110.5-115.0': Well-graded GRAVEL (90% gravel, 10% sand), fine and coarse gravel, coarse sand, brownish gray, moist to wet, no odor.	GW						
115						0.3	MW-9A-115.0 (GW)		
120									

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NM
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NM
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	X: Y:
Screened Interval (ft bgs):	22.0-32.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BLZ-465

Log of Boring: MW-9D

Client:	Woodworth Capital Inc.
Project:	Woodworth Lakeview Facility
Location:	Lakewood, WA
Farallon PN:	188-002
Logged By:	Emi Smith

Date/Time Started:	02/10/2021 @ 915	**Sampler Type:**	10' Core Barrel
Date/Time Completed:	02/18/2021 @ 1053	**Drive Hammer (lbs.):**	Auto
Equipment:	Terrasonic TSI 150 CC	**Depth of Water ATD (ft bgs):**	32.0
Drilling Company:	Cascade	**Total Boring Depth (ft bgs):**	120
Drilling Foreman:	Rico Rodriguez	**Total Well Depth (ft bgs):**	119
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-3.0': Poorly graded SAND with silt (80% sand, 10% silt, 10% gravel), fine sand, brown, dry to moist.	SP-SM		80				Monument
		3.0-6.0': Silty SAND with gravel (70% sand, 15% silt, 15% gravel), fine sand, fine and coarse gravel, brown, moist.	SM						
5									Bentonite
		6.0-8.0': Silty SAND (80% sand, 20% silt), fine sand, brown, moist.	SM						
		8.0-10.0': No Recovery							
10		10.0-15.5': Silty SAND with gravel (60% sand, 25% silt, 15% gravel), fine sand, brown, moist, no odor, trace wood debris.	SM		100		(GW)		
15									Casing
		15.5-20.0': Well-graded SAND with gravel (70% sand, 30% gravel), fine to coarse sand, fine and coarse gravel, brown, dry to moist, no odor, brick debris, asphalt debris, white/yellow powder debris.	SP						
20									

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NM
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NM
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	X: Y:
Screened Interval (ft bgs):	109-119	**Boring Abandonment:**	NA	**Unique Well ID:**	BLC-380

Log of Boring: MW-9D

Client:	Woodworth Capital Inc.	**Date/Time Started:**	02/10/2021 @ 915	**Sampler Type:**	10' Core Barrel
Project:	Woodworth Lakeview Facility	**Date/Time Completed:**	02/18/2021 @ 1053	**Drive Hammer (lbs.):**	Auto
Location:	Lakewood, WA	**Equipment:**	Terrasonic TSI 150 CC	**Depth of Water ATD (ft bgs):**	32.0
Farallon PN:	188-002	**Drilling Company:**	Cascade	**Total Boring Depth (ft bgs):**	120
Logged By:	Emi Smith	**Drilling Foreman:**	Rico Rodriguez	**Total Well Depth (ft bgs):**	119
		Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		20.0-22.5': Silty SAND (60% sand, 35% silt, 5% gravel), fine to coarse sand, brownish gray, moist, no odor.	SM		100				
		22.5-24.5': Sandy SILT (60% silt, 40% sand), fine sand, gray, moist, no odor.	ML						
25		24.5-26.5': Silty SAND (60% sand, 35% silt, 5% gravel), fine to coarse sand, gray, moist, no odor.	SM						
		26.5-30.0': Silty SAND with gravel (70% sand, 15% gravel, 15% silt), fine to coarse sand, fine and coarse gravel, grayish brown, moist, no odor.	SM						Bentonite
30		30.0-32.5': Well-graded SAND with silt and gravel (60% sand, 30% gravel, 10% silt), fine to coarse sand, fine and coarse gravel, brownish gray, wet, no odor, trace white powder debris at 30.0-31.0' bgs.	SW-SM		100				Water Level ATD
35		32.5-40.0': Well-graded SAND with gravel (70% sand, 30% gravel), fine to coarse sand, fine and coarse gravel, brown, dry, no odor.	SW						
40									

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NM
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NM
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	X: Y:
Screened Interval (ft bgs):	109-119	**Boring Abandonment:**	NA	**Unique Well ID:**	BLC-380

Log of Boring: MW-9D

FARALLON CONSULTING

Client: Woodworth Capital Inc.	**Date/Time Started:** 02/10/2021 @ 915		**Sampler Type:** 10' Core Barrel
Project: Woodworth Lakeview Facility	**Date/Time Completed:** 02/18/2021 @ 1053		**Drive Hammer (lbs.):** Auto
Location: Lakewood, WA	**Equipment:** Terrasonic TSI 150 CC		**Depth of Water ATD (ft bgs):** 32.0
Farallon PN: 188-002	**Drilling Company:** Cascade		**Total Boring Depth (ft bgs):** 120
Logged By: Emi Smith	**Drilling Foreman:** Rico Rodriguez		**Total Well Depth (ft bgs):** 119
	Drilling Method: Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		40.0-45.0': Poorly graded SAND (95% sand, 5% silt), fine sand, grayish brown, moist, no odor.	SP		100				PVC screen
45		45.0-49.0': Sandy SILT (90% silt, 10% sand), grayish brown, wet at 45.0' then dry at 48.0', no odor.	ML		100				
50		49.0-55.0': Well-graded SAND with gravel (60% sand, 40% gravel), fine to coarse sand, fine and coarse gravel, grayish brown, dry to moist, no odor.	SW						Bentonite
55		55.0-64.0': Well-graded SAND with silt and gravel (50% sand, 40% gravel, 10% silt), fine to coarse sand, fine and coarse gravel, grayish brown, moist to wet, no odor.	SW		90				Water Level
60									

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NM
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NM
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** **Y:**
Screened Interval (ft bgs):	109-119	**Boring Abandonment:**	NA	**Unique Well ID:**	BLC-380

FARALLON CONSULTING

Log of Boring: MW-9D

Client: Woodworth Capital Inc.
Project: Woodworth Lakeview Facility
Location: Lakewood, WA

Farallon PN: 188-002

Logged By: Emi Smith

Date/Time Started: 02/10/2021 @ 915
Date/Time Completed: 02/18/2021 @ 1053
Equipment: Terrasonic TSI 150 CC
Drilling Company: Cascade
Drilling Foreman: Rico Rodriguez
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 32.0
Total Boring Depth (ft bgs): 120
Total Well Depth (ft bgs): 119

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		64.0-65.0': No Recovery							
65		65.0-74.5': Well-graded GRAVEL with sand (60% gravel, 40% sand), fine and coarse gravel, fine to coarse sand, grayish brown, moist to wet, no odor, charcoal debris at 70.0'.	GW		95				
70									Bentonite
		74.5-75.0': No Recovery							
75		75.0-80.0': Well-graded SAND with gravel (70% sand, 30% gravel), fine to coarse sand, fine and coarse gravel, grayish brown, moist to wet, no odor.	SW		100				
80									

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 109-119

Filter Pack: 12/20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): NM
Top of Casing Elevation (ft): NM
Surveyed Location: X: **Y:**
Unique Well ID: BLC-380

Log of Boring: MW-9D

FARALLON CONSULTING

Client: Woodworth Capital Inc.
Project: Woodworth Lakeview Facility
Location: Lakewood, WA

Farallon PN: 188-002

Logged By: Emi Smith

Date/Time Started: 02/10/2021 @ 915
Date/Time Completed: 02/18/2021 @ 1053
Equipment: Terrasonic TSI 150 CC
Drilling Company: Cascade
Drilling Foreman: Rico Rodriguez
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 32.0
Total Boring Depth (ft bgs): 120
Total Well Depth (ft bgs): 119

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		80.0-85.0': Well-graded GRAVEL (90% gravel, 10% sand), fine and coarse gravel, grayish brown, wet, no odor.	GW						
85		85.0-95.0': Well-graded GRAVEL with sand (70% gravel, 30% sand), fine and coarse gravel, coarse sand, grayish brown, moist, no odor.	GW		100				
90									Bentonite
95		95.0-102.0': Well-graded GRAVEL (90% gravel, 10% sand), fine and coarse gravel, brownish gray, moist to wet, no odor.	GW		70				
100									

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 109-119

Filter Pack: 12/20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): NM
Top of Casing Elevation (ft): NM
Surveyed Location: X: **Y:**
Unique Well ID: BLC-380

Client: Woodworth Capital Inc.
Project: Woodworth Lakeview Facility
Location: Lakewood, WA

Farallon PN: 188-002

Logged By: Emi Smith

Date/Time Started: 02/10/2021 @ 915
Date/Time Completed: 02/18/2021 @ 1053
Equipment: Terrasonic TSI 150 CC
Drilling Company: Cascade
Drilling Foreman: Rico Rodriguez
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 32.0
Total Boring Depth (ft bgs): 120
Total Well Depth (ft bgs): 119

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		102.0-105.0': Well-graded GRAVEL (90% gravel, 10% sand), fine and coarse gravel, brownish gray, moist to wet, no odor.	GW						
105		105.0-107.0': Well-graded GRAVEL (90% gravel, 10% sand), fine and coarse gravel, brownish gray, moist to wet, no odor.	GW		95		(GW)		Bentonite
		107.0-110.5': Well-graded SAND with gravel (80% sand, 20% gravel), fine and coarse gravel, fine to coarse sand, brownish gray, moist to wet, no odor.	SW						Sand pack
110		110.5-115.0': Well-graded GRAVEL (90% gravel, 10% sand), fine and coarse gravel, coarse sand, brownish gray, moist to wet, no odor.	GW						
115									Well Screen
120									

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 109-119

Filter Pack: 12/20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): NM
Top of Casing Elevation (ft): NM
Surveyed Location: X: **Y:**
Unique Well ID: BLC-380

FARALLON CONSULTING

Log of Boring: MW-9R

Client: Woodworth Captial, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: R. Ostrom / M. Gehring

Date/Time Started: 12/20/19 @ 1129
Date/Time Completed: 12/20/19 @ 1330
Equipment: Terra Sonic TC-150
Drilling Company: HOLT Drilling
Drilling Foreman: Arthur Wisehart
Drilling Method: Sonic

Sampler Type: 5' Corebarrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 17.0
Total Boring Depth (ft bgs): 25.0
Total Well Depth (ft bgs): 25.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-3.0': Silty SAND with gravel Fill (60% sand, 20% silt, 20% gravel), fine to coarse sand, fine to coarse gravel, brown, moist, no odor, no sheen. Subrounded to subangular gray gravel. Air Knife to 3.0' bgs to clear for utilities.	SM		100				Monument Concrete
		3.0-5.0': Well-graded GRAVEL with sand and silt (50% gravel, 40% sand, 10% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel. Subrounded gray cobbles.	GW-GM						
5		5.0-10.0': Well-graded GRAVEL with sand and silt (50% gravel, 40% sand, 10% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel.	GW-GM		100	0.2			Bentonite
10		10.0-13.0': Well-graded GRAVEL with sand and silt (60% gravel, 30% sand, 10% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel. Subrounded gray cobbles.	GW-GM		100	1.9			
		13.0-15.0': Well-graded SAND with gravel and silt (65% sand, 25% gravel,10% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel.	SW-SM						Sand
15		15.0-17.0': Well-graded SAND with gravel and silt (65% sand, 25% gravel,10% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel.	SW-SM		100	0.4			
		17.0-20.0': Gravelly SILT (60% silt, 30% gravel,10% sand), fine sand, fine and coarse gravel, gray, wet, no odor, no sheen. Subrounded gray gravel.	ML						Water Level
20		20.0-22.0': Gravelly SILT (60% silt, 30% gravel,10% sand), fine sand, fine and coarse gravel, gray, moist, no odor, no sheen. Subrounded gray gravel.	ML		100	1.0			Screen
		22.0-25.0': Gravelly SILT with sand (55% silt, 30% gravel,15% sand), fine sand, fine and coarse gravel, gray, dry, no odor, no sheen. Subrounded gray gravel.	ML						End Cap
25						1.3			

Well Construction Information

Monument Type: Morris
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 15 to 25

Filter Pack: 10/20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: X: NA **Y:** NA
Unique Well ID: BME-520

Log of Boring: MW-16R

Client: Woodworth Capital, Inc.
Project: Woodworth Lakeview Facility
Location: 2800 104th St Ct S, Lakewood

Farallon PN: 188-002

Logged By: R. Ostrom / M. Gehring

Date/Time Started:	12/19/19 @ 1520	**Sampler Type:**	5' Corebarrel
Date/Time Completed:	12/20/19 @ 1035	**Drive Hammer (lbs.):**	Auto
Equipment:	Terra Sonic TC-150	**Depth of Water ATD (ft bgs):**	31.0
Drilling Company:	HOLT Drilling	**Total Boring Depth (ft bgs):**	40.0
Drilling Foreman:	Arthur Wisehart	**Total Well Depth (ft bgs):**	38.5
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-3.0': Silty SAND with gravel Fill (60% sand, 20% silt, 20% gravel), fine to coarse sand, fine to coarse gravel, brown, moist, no odor, no sheen. Subrounded to subangular gray gravel. Air Knife to 5.0' bgs to clear for utilities.	SM		100				Monument Concrete
		3.0-5.0': Well-graded GRAVEL with sand and silt (50% gravel, 40% sand, 10% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel. Subrounded gray cobbles.	GW-GM						
5		5.0-10.0': Well-graded GRAVEL with sand and silt (50% gravel, 40% sand, 10% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel.	GW-GM		100	0.4			
10		10.0-15.0': Well-graded GRAVEL with sand and silt (60% gravel, 30% sand, 10% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel. Subrounded gray cobbles.	GW-GM		100	0.6			
15		15.0-20.0': Well-graded SAND with gravel and silt (65% sand, 25% gravel,10% silt), fine to coarse sand, fine and coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel and cobbles.	SW-SM		100	0.3			Bentonite
20									

Well Construction Information

Monument Type:	Morris	**Filter Pack:**	10/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** NA **Y:** NA
Screened Interval (ft bgs):	28.5 to 38.5	**Boring Abandonment:**	NA	**Unique Well ID:**	BME-519

FARALLON CONSULTING

Log of Boring: MW-16R

Client: Woodworth Capital, Inc.	**Date/Time Started:** 12/19/19 @ 1520	**Sampler Type:** 5' Corebarrel	
Project: Woodworth Lakeview Facility	**Date/Time Completed:** 12/20/19 @ 1035	**Drive Hammer (lbs.):**	Auto
Location: 2800 104th St Ct S, Lakewood	**Equipment:** Terra Sonic TC-150	**Depth of Water ATD (ft bgs):**	31.0
Farallon PN: 188-002	**Drilling Company:** HOLT Drilling	**Total Boring Depth (ft bgs):**	40.0
Logged By: R. Ostrom / M. Gehring	**Drilling Foreman:** Arthur Wisehart	**Total Well Depth (ft bgs):**	38.5
	Drilling Method: Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		20.0-22.0': Gravelly SILT (60% silt, 30% gravel,10% sand), fine sand, fine and coarse gravel, gray, moist, no odor, no sheen. Subrounded gray gravel.	ML		100	0.4			
		20.0-24.0': Well-graded SAND with gravel and silt (65% sand, 25% gravel,10% silt), fine to coarse sand, fine and coarse gravel, brown, wet, no odor, no sheen. Subrounded gray gravel.	SW-SM						
		22.0-25.0': Gravelly SILT with sand (55% silt, 30% gravel,15% sand), fine sand, fine and coarse gravel, gray, dry, no odor, no sheen. Subrounded gray gravel.	ML						
25		24.0-25.0': Gravelly SILT (60% silt, 30% gravel,10% sand), fine sand, fine gravel, gray, wet, no odor, no sheen. Subrounded gray gravel.	ML		100	0.7			
		25.0-30.0': Silty GRAVEL (60% gravel, 30% silt, 10% sand), fine to coarse sand, fine and coarse gravel, brown, wet, no odor, no sheen. Subrounded gray gravel.	GM						Sand
30		30.0-35.0': Silty GRAVEL (60% gravel, 30% silt, 10% sand), fine to coarse sand, fine and coarse gravel, brown, wet, no odor, no sheen. Subrounded gray gravel.	GM		100	0.8			Water Level
35		35.0-40.0': Well-graded SAND with gravel and silt (70% sand, 20% gravel,10% silt), fine to coarse sand, fine and coarse gravel, gray, wet, no odor, no sheen. Subrounded gray gravel.	SW-SM		100	0.7			Screen
									End Cap
40									

Well Construction Information

Monument Type:	Morris	**Filter Pack:**	10/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** NA **Y:** NA
Screened Interval (ft bgs):	28.5 to 38.5	**Boring Abandonment:**	NA	**Unique Well ID:**	BME-519

FARALLON CONSULTING

Log of Boring: MW-36

Client: Woodworth Capital Inc.
Project: Woodworth Lakeview Facility
Location: Lakewood, WA

Farallon PN: 188-002

Logged By: Emi Smith

Date/Time Started: 02/18/2021 @ 1130
Date/Time Completed: 02/18/2021 @ 1520
Equipment: Terrasonic TSI 150 CC
Drilling Company: Cascade
Drilling Foreman: Rico Rodriguez
Drilling Method: Sonic

Sampler Type: 5' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 15.0
Total Boring Depth (ft bgs): 20.0
Total Well Depth (ft bgs): 16.5

Depth (feet bgs.)	Lithologic Description	USCS	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-0.5': Asphalt. Hand clear to 5.0' bgs to clear for utitlies.	AS	100				Monument
	0.5-5.0': Well-graded GRAVEL with sand (60% gravel, 40% sand), fine to coarse sand, fine and coarse gravel, brown, moist, no odor.	GW					Bentonite; Casing
5	5.0-10.0': Well-graded GRAVEL with sand (60% gravel, 40% sand), fine to coarse sand, fine and coarse gravel, brown, moist, no odor.	GW	100	0.0	MW-36-5.0	X	Sand Pack
10	10.0-10.5': Silty SAND with gravel (70% sand, 15% silt, 15% gravel), fine to coarse sand, fine gravel, brown, moist, no odor.	SM	100	0.0	MW-36-10.0	X	Screen
	10.5-15.0': Well-graded GRAVEL with silt and sand (50% gravel, 40% sand, 10% silt), fine to coarse sand, fine and coarse gravel, grayish brown, dry, no odor.	GW-GM					
15	15.0-16.5': Silty SAND with gravel (65% sand, 20% silt, 15% gravel), fine to caorse sand, fine gravel, gray, wet, no odor.	SM	100	20.0	MW-36-15.0	X	Water Level
	16.5-20.0': Well-graded SAND with silt and gravel (65% sand, 25% gravel, 10% silt), fine to coarse sand, fine gravel, grayish brown, moist, no odor.	SW-SM					Bentonite
20				0.0	MW-36-20.0	X	

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NM
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NM
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** **Y:**
Screened Interval (ft bgs):	6.5-16.5	**Boring Abandonment:**	NA	**Unique Well ID:**	BLC 380

ATTACHMENT C
WORKSHEETS FOR SITE-SPECIFIC
GROUNDWATER CLEANUP LEVELS

RESPONSE TO AUGUST 30, 2019 LETTER REGARDING FURTHER ACTION AT THE WOODWORTH & CO INC. LAKEVIEW PLANT
2800 104th Street Court South
Lakewood, Washington

Farallon PN: 188-002

B. Worksheet for Calculating Potable Ground Water Cleanup Levels (Method B only) WAC 173-340-720

1. Enter Site Information

Date: 1/12/2021
Site Name: Woodworth Lakeview Facility 188-002;VPH and EPH data analysis; ND = zero out
Sample info: GW sample: MW-9R

2. Enter Ground Water Concentration Measured

Notes for Data Entry

Chemical of Concern or EC Group	Measured GW Conc	GW Cleanup Level	Current Condition HQ	Current Condition RISK	Current Condition Pass or Fail?	Adjusted Condition GW Conc being tested	Adjusted Condition HQ	Adjusted Condition RISK	Adjusted Condition Pass or Fail?
	ug/L	ug/L	unitless	unitless		ug/L	unitless	unitless	
Petroleum EC Fraction									
AL_EC >5-6	25		1.84E-03			4.17E+04	3.06E+00		
AL_EC >6-8	25		1.84E-03			4.17E+04	3.06E+00		
AL_EC >8-10	25		1.04E-01			4.17E+04	1.74E+02		
AL_EC >10-12	25		1.04E-01			4.17E+04	1.74E+02		
AL_EC >12-16	25		5.21E-02			4.17E+04	8.68E+01		
AL_EC >16-21	25		7.81E-04			4.17E+04	1.30E+00		
AL_EC >21-34	25		7.81E-04			4.17E+04	1.30E+00		
AR_EC >8-10	25		3.13E-02			4.17E+04	5.21E+01		
AR_EC >10-12	25		1.56E-01			4.17E+04	2.60E+02		
AR_EC >12-16	25		3.13E-02			4.17E+04	5.21E+01		
AR_EC >16-21	25		5.21E-02			4.17E+04	8.68E+01		
AR_EC >21-34	25		3.91E-02			4.17E+04	6.51E+01		
Benzene	0.1	5	3.13E-03	1.26E-07		1.67E+02	5.21E+00	2.10E-04	***Fail***
Toluene	0.5	1000	7.81E-04			8.33E+02	1.30E+00		
Ethylbenzene	0.1	700	1.25E-04			1.67E+02	2.08E-01		
Total Xylenes	0.6	1000	3.75E-04			1.00E+03	6.25E-01		
Naphthalene	0.0475	160	2.97E-04			7.92E+01	4.95E-01		
1-Methyl Naphthalene	0.0475		1.19E-04			7.92E+01	1.98E-01		
2-Methyl Naphthalene	0.0475		1.48E-03			7.92E+01	2.47E+00		
n-Hexane									
MTBE		20							
Ethylene Dibromide (EDB)		0.01							
1,2 Dichloroethane (EDC)		5							
Benzo(a)anthracene	0.0475	for		3.96E-07	*for*	7.92E+01		6.60E-04	*for*
Benzo(b)fluoranthene	0.0475	all		3.96E-07	*all*	7.92E+01		6.60E-04	*all*
Benzo(k)fluoranthene	0.0475	cPAHs		3.96E-07	*cPAHs*	7.92E+01		6.60E-04	*cPAHs*
Benzo(a)pyrene	0.0475	Risk =		3.96E-06		7.92E+01		6.60E-03	***Fail***
Chrysene	0.0475	1E-05		3.96E-08		7.92E+01		6.60E-05	
Dibenz(a,h)anthracene	0.0475			3.96E-07	Σ Risk=	7.92E+01		6.60E-04	Σ Risk=
Indeno(1,2,3-cd)pyrene	0.0475			3.96E-07	5.98E-06	7.92E+01		6.60E-04	9.97E-03
Sum	**301.775**		5.82E-01	6.11E-06		5.03E+05	9.70E+02	1.02E-02	***Fail***

TEST CURRENT CONDITION

Measured TPH GW Conc, ug/L = 301.775
HI = 5.819E-01
RISK = 6.110E-06
Pass or Fail? Pass

CALCULATE PROTECTIVE CONDITION

This tool allows the user to calculate a protective TPH ground water concentration based on various ground water quality criteria. The Workbook uses the same composition ratio as for the measured data.

Calculate Protective TPH GW Conc

Selected Criterion: Total Risk = 1E-5
Most Stringent? YES

Protective TPH GW Conc, ug/L = 493.93
HI = 9.52E-01
RISK = 1.00E-05

SUMMARY OF PROTECTIVE GW CONCENTRATIONS

Protective GW TPH Conc, ug/L	**493.93**
Most Stringent Criterion	**Total Risk = 1E-5**

Ground Water Criteria	Most Stringent?	GW TPH, ug/L	RISK @	HI @
HI = 1	*NO*	5.19E+02	1.05E-05	1.00E+00
Total Risk = 1E-5	YES	4.94E+02	1.00E-05	9.52E-01
Total Risk = 1E-6	YES	4.94E+01	1.00E-06	9.52E-02
Benzene MCL = 5 ug/L	*NO*	1.51E+04	3.05E-04	2.91E+01
MTBE = 20 ug/L	NA	NA	NA	NA
Risk of cPAHs = 1E-5	*NO*	5.04E+02	1.02E-05	9.72E-01
Toluene =1000 ug/L	*NO*	6.04E+05	1.22E-02	1.16E+03
Ethylbenzene = 700 ug/L	*NO*	2.11E+06	4.28E-02	4.07E+03
Total Xylenes = 1000 ug/L	*NO*	5.03E+05	1.02E-02	9.70E+02

TEST ADJUSTED CONDITION

This tool allows the user to test whether a particular TPH soil concentration is protective of human health. The Workbook uses the same composition ratio as for the measured data.

Test Adjusted TPH GW Conc

Tested TPH GW Conc, ug/L=
HI=
RISK=
Pass or Fail?

B. Worksheet for Calculating Potable Ground Water Cleanup Levels (Method B only) WAC 173-340-720

1. Enter Site Information

Date: 1/12/2021

Site Name: Woodworth Lakeview Facility 188-002;VPH and EPH data analysis; ND = zero out

Sample info: GW sample: MW-13

2. Enter Ground Water Concentration Measured

Notes for Data Entry

Chemical of Concern or EC Group	Measured GW Conc	GW Cleanup Level	Current Condition: HQ	Current Condition: RISK	Current Condition: Pass or Fail?	Adjusted Condition: GW Conc being tested	Adjusted Condition: HQ	Adjusted Condition: RISK	Adjusted Condition: Pass or Fail?
	ug/L	ug/L	unitless	unitless		ug/L	unitless	unitless	
Petroleum EC Fraction									
AL_EC >5-6	25		1.84E-03			4.17E+04	3.06E+00		
AL_EC >6-8	25		1.84E-03			4.17E+04	3.06E+00		
AL_EC >8-10	25		1.04E-01			4.17E+04	1.74E+02		
AL_EC >10-12	25		1.04E-01			4.17E+04	1.74E+02		
AL_EC >12-16	25		5.21E-02			4.17E+04	8.68E+01		
AL_EC >16-21	25		7.81E-04			4.17E+04	1.30E+00		
AL_EC >21-34	72		2.25E-03			1.20E+05	3.75E+00		
AR_EC >8-10	25		3.13E-02			4.17E+04	5.21E+01		
AR_EC >10-12	25		1.56E-01			4.17E+04	2.60E+02		
AR_EC >12-16	25		3.13E-02			4.17E+04	5.21E+01		
AR_EC >16-21	25		5.21E-02			4.17E+04	8.68E+01		
AR_EC >21-34	150		2.34E-01			2.50E+05	3.91E+02		
Benzene	0.1	5	3.13E-03	1.26E-07		1.67E+02	5.21E+00	2.10E-04	*Fail*
Toluene	0.5	1000	7.81E-04			8.33E+02	1.30E+00		
Ethylbenzene	0.1	700	1.25E-04			1.67E+02	2.08E-01		
Total Xylenes	0.6	1000	3.75E-04			1.00E+03	6.25E-01		
Naphthalene	0.0475	160	2.97E-04			7.92E+01	4.95E-01		
1-Methyl Naphthalene	0.0475		1.19E-04			7.92E+01	1.98E-01		
2-Methyl Naphthalene	0.0475		1.48E-03			7.92E+01	2.47E+00		
n-Hexane									
MTBE	5	20				8.33E+03			*Fail*
Ethylene Dibromide (EDB)		0.01							
1,2 Dichloroethane (EDC)		5							
Benzo(a)anthracene	0.00475	for		3.96E-08	*for*	7.92E+00		6.60E-05	*for*
Benzo(b)fluoranthene	0.00475	all		3.96E-08	*all*	7.92E+00		6.60E-05	*all*
Benzo(k)fluoranthene	0.00475	cPAHs		3.96E-08	*cPAHs*	7.92E+00		6.60E-05	*cPAHs*
Benzo(a)pyrene	0.00475	Risk =		3.96E-07		7.92E+00		6.60E-04	*Fail*
Chrysene	0.00475	1E-05		3.96E-09		7.92E+00		6.60E-06	
Dibenz(a,h)anthracene	0.00475			3.96E-08	Σ Risk=	7.92E+00		6.60E-05	Σ Risk=
Indeno(1,2,3-cd)pyrene	0.00475			3.96E-08	5.98E-07	7.92E+00		6.60E-05	9.97E-04
Sum	478.47575		7.79E-01	7.24E-07		7.97E+05	1.30E+03	1.21E-03	*Fail*

TEST CURRENT CONDITION

Measured TPH GW Conc, ug/L = 478.47575

HI = 7.786E-01

RISK = 7.241E-07

Pass or Fail? Pass

CALCULATE PROTECTIVE CONDITION

This tool allows the user to calculate a protective TPH ground water concentration based on various ground water quality criteria. The Workbook uses the same composition ratio as for the measured data.

Calculate Protective TPH GW Conc

Selected Criterion: HI = 1

Most Stringent? YES

Protective TPH GW Conc, ug/L = 614.50

HI = 1.00E+00

RISK = 9.30E-07

SUMMARY OF PROTECTIVE GW CONCENTRATIONS

Protective GW TPH Conc, ug/L	**614.50**
Most Stringent Criterion	**HI = 1**

Ground Water Criteria	Most Stringent?	GW TPH, ug/L	RISK @	HI @
HI = 1	YES	6.15E+02	9.30E-07	1.00E+00
Total Risk = 1E-5	*NO*	6.61E+03	1.00E-05	1.08E+01
Total Risk = 1E-6	*NO*	6.61E+02	1.00E-06	1.08E+00
Benzene MCL = 5 ug/L	*NO*	2.39E+04	3.62E-05	3.89E+01
MTBE = 20 ug/L	*NO*	1.91E+03	2.90E-06	3.11E+00
Risk of cPAHs = 1E-5	*NO*	8.00E+03	1.21E-05	1.30E+01
Toluene =1000 ug/L	*NO*	9.57E+05	1.45E-03	1.56E+03
Ethylbenzene = 700 ug/L	*NO*	3.35E+06	5.07E-03	5.45E+03
Total Xylenes = 1000 ug/L	*NO*	7.97E+05	1.21E-03	1.30E+03

TEST ADJUSTED CONDITION

This tool allows the user to test whether a particular TPH soil concentration is protective of human health. The Workbook uses the same composition ratio as for the measured data.

Test Adjusted TPH GW Conc

Tested TPH GW Conc, ug/L=

HI=

RISK=

Pass or Fail?

B. Worksheet for Calculating Potable Ground Water Cleanup Levels (Method B only) WAC 173-340-720

1. Enter Site Information

Date: 1/12/2021

Site Name: Woodworth Lakeview Facility 188-002;VPH and EPH data analysis; ND = zero out

Sample info: GW sample: MW-16R

2. Enter Ground Water Concentration Measured

Notes for Data Entry

Chemical of Concern or EC Group	Measured GW Conc	GW Cleanup Level	Current Condition HQ	Current Condition RISK	Current Condition Pass or Fail?	Adjusted Condition GW Conc being tested	Adjusted Condition HQ	Adjusted Condition RISK	Adjusted Condition Pass or Fail?
	ug/L	ug/L	unitless	unitless		ug/L	unitless	unitless	
Petroleum EC Fraction									
AL_EC >5-6	25		1.84E-03			4.17E+04	3.06E+00		
AL_EC >6-8	25		1.84E-03			4.17E+04	3.06E+00		
AL_EC >8-10	25		1.04E-01			4.17E+04	1.74E+02		
AL_EC >10-12	25		1.04E-01			4.17E+04	1.74E+02		
AL_EC >12-16	25		5.21E-02			4.17E+04	8.68E+01		
AL_EC >16-21	25		7.81E-04			4.17E+04	1.30E+00		
AL_EC >21-34	62		1.94E-03			1.03E+05	3.23E+00		
AR_EC >8-10	25		3.13E-02			4.17E+04	5.21E+01		
AR_EC >10-12	25		1.56E-01			4.17E+04	2.60E+02		
AR_EC >12-16	25		3.13E-02			4.17E+04	5.21E+01		
AR_EC >16-21	25		5.21E-02			4.17E+04	8.68E+01		
AR_EC >21-34	56		8.75E-02			9.33E+04	1.46E+02		
Benzene	0.1	5	3.13E-03	1.26E-07		1.67E+02	5.21E+00	2.10E-04	***Fail***
Toluene	0.5	1000	7.81E-04			8.33E+02	1.30E+00		
Ethylbenzene	0.1	700	1.25E-04			1.67E+02	2.08E-01		
Total Xylenes	0.6	1000	3.75E-04			1.00E+03	6.25E-01		
Naphthalene	0.05	160	3.13E-04			8.33E+01	5.21E-01		
1-Methyl Naphthalene	0.05		1.25E-04			8.33E+01	2.08E-01		
2-Methyl Naphthalene	0.05		1.56E-03			8.33E+01	2.60E+00		
n-Hexane									
MTBE		20							
Ethylene Dibromide (EDB)		0.01							
1,2 Dichloroethane (EDC)		5							
Benzo(a)anthracene	0.005	for		4.17E-08	*for*	8.33E+00		6.95E-05	*for*
Benzo(b)fluoranthene	0.005	all		4.17E-08	*all*	8.33E+00		6.95E-05	*all*
Benzo(k)fluoranthene	0.005	cPAHs		4.17E-08	*cPAHs*	8.33E+00		6.95E-05	*cPAHs*
Benzo(a)pyrene	0.005	Risk =		4.17E-07		8.33E+00		6.95E-04	***Fail***
Chrysene	0.005	1E-05		4.17E-09		8.33E+00		6.95E-06	
Dibenz(a,h)anthracene	0.005			4.17E-08	Σ Risk=	8.33E+00		6.95E-05	Σ Risk=
Indeno(1,2,3-cd)pyrene	0.005			4.17E-08	6.30E-07	8.33E+00		6.95E-05	1.05E-03
Sum	**369.485**		6.32E-01	7.56E-07		6.16E+05	1.05E+03	1.26E-03	***Fail***

TEST CURRENT CONDITION

Measured TPH GW Conc, ug/L = 369.485

HI = 6.316E-01

RISK = 7.556E-07

Pass or Fail? Pass

CALCULATE PROTECTIVE CONDITION

This tool allows the user to calculate a protective TPH ground water concentration based on various ground water quality criteria. The Workbook uses the same composition ratio as for the measured data.

Calculate Protective TPH GW Conc

Selected Criterion: HI = 1

Most Stringent? YES

Protective TPH GW Conc, ug/L = 585.04

HI = 1.00E+00

RISK = 1.20E-06

SUMMARY OF PROTECTIVE GW CONCENTRATIONS

Protective GW TPH Conc, ug/L	**585.04**
Most Stringent Criterion	**HI = 1**

Ground Water Criteria	Most Stringent?	GW TPH, ug/L	RISK @	HI @
HI = 1	YES	5.85E+02	1.20E-06	1.00E+00
Total Risk = 1E-5	*NO*	4.89E+03	1.00E-05	8.36E+00
Total Risk = 1E-6	YES	4.89E+02	1.00E-06	8.36E-01
Benzene MCL = 5 ug/L	*NO*	1.85E+04	3.78E-05	3.16E+01
MTBE = 20 ug/L	NA	NA	NA	NA
Risk of cPAHs = 1E-5	*NO*	5.87E+03	1.20E-05	1.00E+01
Toluene =1000 ug/L	*NO*	7.39E+05	1.51E-03	1.26E+03
Ethylbenzene = 700 ug/L	*NO*	2.59E+06	5.29E-03	4.42E+03
Total Xylenes = 1000 ug/L	*NO*	6.16E+05	1.26E-03	1.05E+03

TEST ADJUSTED CONDITION

This tool allows the user to test whether a particular TPH soil concentration is protective of human health. The Workbook uses the same composition ratio as for the measured data.

Test Adjusted TPH GW Conc

Tested TPH GW Conc, ug/L=

HI=

RISK=

Pass or Fail?

B. Worksheet for Calculating Potable Ground Water Cleanup Levels (Method B only) WAC 173-340-720

1. Enter Site Information

Date: 1/12/2021

Site Name: Woodworth Lakeview Facility 188-002;VPH and EPH data analysis; ND = zero out

Sample info: GW sample: SVE-5

2. Enter Ground Water Concentration Measured

Notes for Data Entry

Chemical of Concern or EC Group	Measured GW Conc	GW Cleanup Level	Current Condition HQ	Current Condition RISK	Current Condition Pass or Fail?	Adjusted Condition GW Conc being tested	Adjusted Condition HQ	Adjusted Condition RISK	Adjusted Condition Pass or Fail?
	ug/L	ug/L	unitless	unitless		ug/L	unitless	unitless	
Petroleum EC Fraction									
AL_EC >5-6	25		1.84E-03			4.17E+04	3.06E+00		
AL_EC >6-8	25		1.84E-03			4.17E+04	3.06E+00		
AL_EC >8-10	25		1.04E-01			4.17E+04	1.74E+02		
AL_EC >10-12	85		3.54E-01			1.42E+05	5.90E+02		
AL_EC >12-16	420		8.75E-01			7.00E+05	1.46E+03		
AL_EC >16-21	470		1.47E-02			7.83E+05	2.45E+01		
AL_EC >21-34	340		1.06E-02			5.67E+05	1.77E+01		
AR_EC >8-10	25		3.13E-02			4.17E+04	5.21E+01		
AR_EC >10-12	25		1.56E-01			4.17E+04	2.60E+02		
AR_EC >12-16	110		1.38E-01			1.83E+05	2.29E+02		
AR_EC >16-21	290		6.04E-01			4.83E+05	1.01E+03		
AR_EC >21-34	25		3.91E-02			4.17E+04	6.51E+01		
Benzene	0.1	5	3.13E-03	1.26E-07		1.67E+02	5.21E+00	2.10E-04	*Fail*
Toluene	0.5	1000	7.81E-04			8.33E+02	1.30E+00		
Ethylbenzene	0.1	700	1.25E-04			1.67E+02	2.08E-01		
Total Xylenes	0.6	1000	3.75E-04			1.00E+03	6.25E-01		
Naphthalene	0.05	160	3.13E-04			8.33E+01	5.21E-01		
1-Methyl Naphthalene	0.05		1.25E-04			8.33E+01	2.08E-01		
2-Methyl Naphthalene	0.05		1.56E-03			8.33E+01	2.60E+00		
n-Hexane									
MTBE	0	20							
Ethylene Dibromide (EDB)		0.01							
1,2 Dichloroethane (EDC)		5							
Benzo(a)anthracene	0.005	for		5.84E-08	*for*	1.17E+01		9.73E-05	*for*
Benzo(b)fluoranthene	0.005	all		4.17E-08	*all*	8.33E+00		6.95E-05	*all*
Benzo(k)fluoranthene	0.005	cPAHs		4.17E-08	*cPAHs*	8.33E+00		6.95E-05	*cPAHs*
Benzo(a)pyrene	0.005	Risk =		4.17E-07		8.33E+00		6.95E-04	*Fail*
Chrysene	0.005	1E-05		4.17E-09		8.33E+00		6.95E-06	
Dibenz(a,h)anthracene	0.005			4.17E-08	Σ Risk=	8.33E+00		6.95E-05	Σ Risk=
Indeno(1,2,3-cd)pyrene	0.005			4.17E-08	6.47E-07	8.33E+00		6.95E-05	1.08E-03
Sum	1866.487		2.34E+00	7.72E-07	*Fail*	3.11E+06	3.89E+03	1.29E-03	*Fail*

TEST CURRENT CONDITION

Measured TPH GW Conc, ug/L = 1866.487

HI = 2.337E+00

RISK = 7.723E-07

Pass or Fail? ***Fail***

CALCULATE PROTECTIVE CONDITION

This tool allows the user to calculate a protective TPH ground water concentration based on various ground water quality criteria. The Workbook uses the same composition ratio as for the measured data.

Calculate Protective TPH GW Conc

Selected Criterion: HI = 1

Most Stringent? YES

Protective TPH GW Conc, ug/L = 798.68

HI = 1.00E+00

RISK = 3.30E-07

SUMMARY OF PROTECTIVE GW CONCENTRATIONS

Protective GW TPH Conc, ug/L	**798.68**
Most Stringent Criterion	**HI = 1**

Ground Water Criteria	Most Stringent?	GW TPH, ug/L	RISK @	HI @
HI = 1	YES	7.99E+02	3.30E-07	1.00E+00
Total Risk = 1E-5	*NO*	2.42E+04	1.00E-05	3.03E+01
Total Risk = 1E-6	*NO*	2.42E+03	1.00E-06	3.03E+00
Benzene MCL = 5 ug/L	*NO*	9.33E+04	3.86E-05	1.17E+02
MTBE = 20 ug/L	NA	NA	NA	NA
Risk of cPAHs = 1E-5	*NO*	2.89E+04	1.19E-05	3.61E+01
Toluene =1000 ug/L	*NO*	3.73E+06	1.54E-03	4.67E+03
Ethylbenzene = 700 ug/L	*NO*	1.31E+07	5.41E-03	1.64E+04
Total Xylenes = 1000 ug/L	*NO*	3.11E+06	1.29E-03	3.89E+03

TEST ADJUSTED CONDITION

This tool allows the user to test whether a particular TPH soil concentration is protective of human health. The Workbook uses the same composition ratio as for the measured data.

Test Adjusted TPH GW Conc

Tested TPH GW Conc, ug/L=

HI=

RISK=

Pass or Fail?

ATTACHMENT D
WELL LOG FOR INDUSTRIAL SUPPLY WELL

RESPONSE TO AUGUST 30, 2019 LETTER REGARDING FURTHER ACTION AT THE WOODWORTH & CO INC. LAKEVIEW PLANT
2800 104th Street Court South
Lakewood, Washington

Farallon PN: 188-002

19/3E-6F

WOODWORTH WELL LOG

DRILLED BY BICHARDSON WELL DRILLING (RATH) SEPT.-OCT. 1969

LOCATED ON STEILACOOM GRAVEL EXCAVATION---IN PIT BUT NOT AT MAXIMUM DEPTH OF PIT.

12-INCH

Sand, gravel, some clay - Brown	0 - 47'
Sand and gravel, water - Brown	47 - 70'
Gray sand and gravel	70 - 83'
Gray sandy clay	83 - 91'
Gray sand	91 - 101'
Brown sand with some clay	101- 105'
Gray sand and gravel - water	105- 110'
Brown sand and gravel - water	110- 130'
Brown hardpan	130- 133'
Gray hardpan	133- 134'
Gray cemented sand	134- 150'
Green cemented sand and gravel	150- 164'
Brown sand and gravel	164- 187'
Brown hardpan	@ 187'

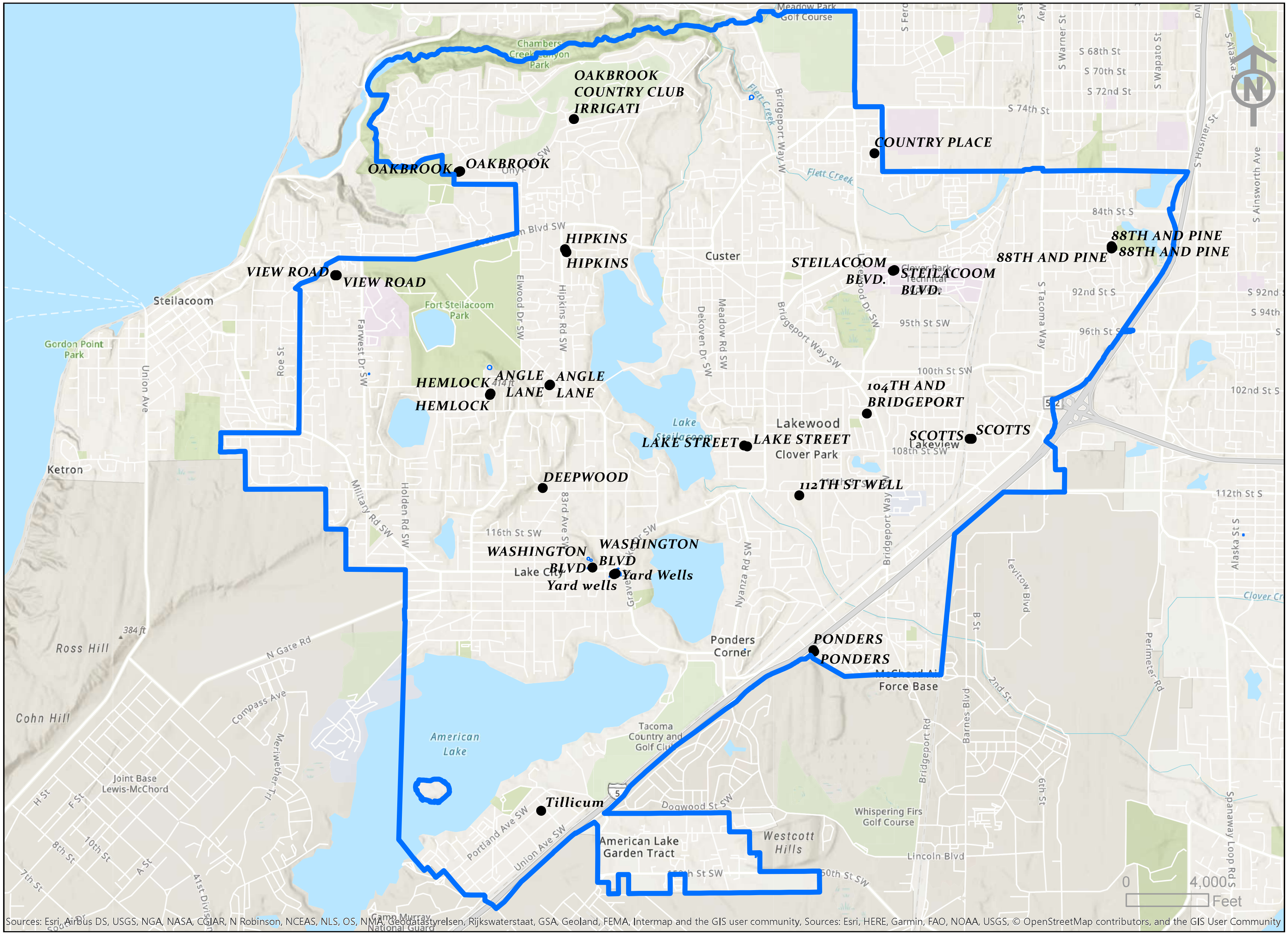
Screen: 20-slot 167-182'
50-slot 182-187'
Shoe approx 170'
} Static water level 40'
190 gpm @ PWL 161'
Q/s = 1.6

Later perforated 107-129'} Static water level 40.5'
503 gpm @ PWL 61.6'
Q/s = 24

ATTACHMENT E
LAKEWOOD WATER DISTRICT DOCUMENTATION

RESPONSE TO AUGUST 30, 2019 LETTER REGARDING FURTHER ACTION AT THE WOODWORTH & CO INC. LAKEVIEW PLANT
2800 104th Street Court South
Lakewood, Washington

Farallon PN: 188-002



LAKEWOOD WATER DISTRICT

11900 Gravelly Lake Dr SW
Lakewood, WA 98499
253-588-4423

Lakewood Water District Boundary Map

10/30/2019

fortress.wa.gov/doh/eh/portal/odw | Employee Scheduling Software | Farallon Consulting Intranet

https://fortress.wa.gov/doh/eh/portal/odw/si/ViewSampleDetail.aspx?SamId=3806243&Src=07&TP=29

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

View Sample Detail - WSID 45550C - LAKEWOOD WATER DISTRICT

Collect Date	6/21/2019
Lab Number	089
Lab Name	Water Management Laboratory Inc
Sample Number	06684
Source	07
Analyte Group	VOC-VOLATILE ORGANIC CONTAMINANTS
Test Panel	VOC1-VOLATILE ORGANIC
Sample Location	g1 ss
Sample Type	Post-Treatment / Finished

Analyte DOH Num	Analyte Name	Result Range	Result Quantity	Maximum Contaminant Level	State Reporting Limit	Units
0027	CHLOROFORM	LT	0.5000		0.5000	ug/L
0028	BROMODICHLOROMETHANE	LT	0.5000		0.5000	ug/L
0029	DIBROMOCHLOROMETHANE	LT	0.5000		0.5000	ug/L
0030	BROMOFORM	LT	0.5000		0.5000	ug/L
0045	VINYL CHLORIDE	LT	0.5000	2.0000	0.5000	ug/L
0046	1,1 DICHLOROETHYLENE	LT	0.5000	7.0000	0.5000	ug/L
0047	1,1,1 TRICHLOROETHANE	LT	0.5000	200.0000	0.5000	ug/L
0048	CARBON TETRACHLORIDE	LT	0.5000	5.0000	0.5000	ug/L
0049	BENZENE	LT	0.5000	5.0000	0.5000	ug/L
0050	1,2 DICHLOROETHANE	LT	0.5000	5.0000	0.5000	ug/L
0051	TRICHLOROETHYLENE	LT	0.5000	5.0000	0.5000	ug/L
0052	1,4 DICHLOROBENZENE	LT	0.5000	75.0000	0.5000	ug/L
0053	CHLOROMETHANE	LT	0.5000		0.5000	ug/L
0054	BROMOMETHANE	LT	0.5000		0.5000	ug/L
0056	METHYLENE CHLORIDE(DICHLOROMETHANE)	LT	0.5000	5.0000	0.5000	ug/L
0057	TRANS- 1,2 DICHLOROETHYLENE	LT	0.5000	100.0000	0.5000	ug/L
0058	1,1 DICHLOROETHANE	LT	0.5000		0.5000	ug/L
0060	CIS- 1,2 DICHLOROETHYLENE	LT	0.5000	70.0000	0.5000	ug/L
0062	1,1 DICHLOROPROPENE	LT	0.5000		0.5000	ug/L
0063	1,2 DICHLOROPROPANE	LT	0.5000	5.0000	0.5000	ug/L
0064	DIBROMOMETHANE	LT	0.5000		0.5000	ug/L
0066	TOLUENE	LT	0.5000	1000.0000	0.5000	ug/L
0067	1,1,2 TRICHLOROETHANE	LT	0.5000	5.0000	0.5000	ug/L
0068	TETRACHLOROETHYLENE	LT	0.5000	5.0000	0.5000	ug/L
0070	1,3 DICHLOROPROPANE	LT	0.5000		0.5000	ug/L

fortress.wa.gov/doh/eh/portal/odw | Employee Scheduling Software | Farallon Consulting Intranet

https://fortress.wa.gov/doh/eh/portal/odw/si/ViewSampleDetail.aspx?SamId=3806243&Src=07&TP=29

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

View Sample Detail - WSID 45550C - LAKEWOOD WATER DISTRICT

Collect Date	6/21/2019
Lab Number	089
Lab Name	Water Management Laboratory Inc
Sample Number	06684
Source	07
Analyte Group	VOC-VOLATILE ORGANIC CONTAMINANTS
Test Panel	VOC1-VOLATILE ORGANIC
Sample Location	g1 ss
Sample Type	Post-Treatment / Finished

Analyte DOH Num	Analyte Name	Result Range	Result Quantity	Maximum Contaminant Level	State Reporting Limit	Units
0071	CHLOROBENZENE	LT	0.5000	100.0000	0.5000	ug/L
0072	1,1,1,2 TETRACHLOROETHANE	LT	0.5000		0.5000	ug/L
0073	ETHYLBENZENE	LT	0.5000	700.0000	0.5000	ug/L
0074	M/P XYLENES (MCL FOR TOTAL)	LT	0.5000		0.5000	ug/L
0075	O- XYLENE (MCL FOR TOTAL)	LT	0.5000		0.5000	ug/L
0076	STYRENE	LT	0.5000	100.0000	0.5000	ug/L
0078	BROMOBENZENE	LT	0.5000		0.5000	ug/L
0079	1,2,3 TRICHLOROPROPANE	LT	0.5000		0.5000	ug/L
0080	1,1,2,2 TETRACHLOROETHANE	LT	0.5000		0.5000	ug/L
0081	O- CHLOROTOLUENE	LT	0.5000		0.5000	ug/L
0082	P- CHLOROTOLUENE	LT	0.5000		0.5000	ug/L
0083	M- DICHLOROBENZENE	LT	0.5000		0.5000	ug/L
0084	1,2 DICHLOROBENZENE	LT	0.5000	600.0000	0.5000	ug/L
0085	TRICHLOROFLUOROMETHANE	LT	0.5000		0.5000	ug/L
0086	BROMOCHLOROMETHANE	LT	0.5000		0.5000	ug/L
0087	ISOPROPYLBENZENE	LT	0.5000		0.5000	ug/L
0088	N-PROPYLBENZENE	LT	0.5000		0.5000	ug/L
0089	1,3,5 TRIMETHYLBENZENE	LT	0.5000		0.5000	ug/L
0090	TERT- BUTYLBENZENE	LT	0.5000		0.5000	ug/L
0091	1,2,4 TRIMETHYLBENZENE	LT	0.5000		0.5000	ug/L
0092	SEC- BUTYLBENZENE	LT	0.5000		0.5000	ug/L
0093	P-ISOPROPYLTOLUENE	LT	0.5000		0.5000	ug/L
0094	N-BUTYLBENZENE	LT	0.5000		0.5000	ug/L
0095	1,2,4 TRICHLOROBENZENE	LT	0.5000	70.0000	0.5000	ug/L
0096	NAPHTHALENE	LT	0.5000		0.5000	ug/L

Records 26 - 50 of 58

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

View Sample Detail - WSID 45550C - LAKEWOOD WATER DISTRICT

Collect Date	6/21/2019
Lab Number	089
Lab Name	Water Management Laboratory Inc
Sample Number	06684
Source	07
Analyte Group	VOC-VOLATILE ORGANIC CONTAMINANTS
Test Panel	VOC1-VOLATILE ORGANIC
Sample Location	g1 ss
Sample Type	Post-Treatment / Finished

Analyte DOH Num	Analyte Name	Result Range	Result Quantity	Maximum Contaminant Level	State Reporting Limit	Units
0097	HEXACHLOROBUTADIENE	LT	0.5000		0.5000	ug/L
0098	1,2,3 TRICHLOROBENZENE	LT	0.5000		0.5000	ug/L
0104	DICHLORODIFLUOROMETHANE	LT	0.5000		0.5000	ug/L
0154	1,3 DICHLOROPROPENE	LT	0.5000		0.5000	ug/L
0160	TOTAL XYLENES	LT	0.5000	10000.0000	0.5000	ug/L
0427	EDB (screening)	LT	0.5000		0.5000	ug/L
0428	DBCP (screening)	LT	0.5000		0.5000	mg/L
0031	TOTAL TRIHALOMETHANE	ND		80.0000		ug/L

Records 51 - 58 of 58

Department of Health, Office of Drinking Water

Street Address:
243 Israel Road S.E. 2nd floor
Tumwater, WA 98501

Mail:
PO BOX 47822
Olympia, WA 98504-7822

View Sample Detail - WSID 45550C - LAKEWOOD WATER DISTRICT

Collect Date	8/18/2017
Lab Number	089
Lab Name	Water Management Laboratory Inc
Sample Number	77193
Source	11
Analyte Group	VOC-VOLATILE ORGANIC CONTAMINANTS
Test Panel	VOC1-VOLATILE ORGANIC
Sample Location	88th/pine j-1 sample point
Sample Type	Post-Treatment / Finished

Analyte DOH Num	Analyte Name	Result Range	Result Quantity	Maximum Contaminant Level	State Reporting Limit	Units
0027	CHLOROFORM	EQ	1.3000		0.5000	ug/L
0031	TOTAL TRIHALOMETHANE	EQ	1.3000	80.0000		ug/L
0028	BROMODICHLOROMETHANE	LT	0.5000		0.5000	ug/L
0029	DIBROMOCHLOROMETHANE	LT	0.5000		0.5000	ug/L
0030	BROMOFORM	LT	0.5000		0.5000	ug/L
0045	VINYL CHLORIDE	LT	0.5000	2.0000	0.5000	ug/L
0046	1,1 DICHLOROETHYLENE	LT	0.5000	7.0000	0.5000	ug/L
0047	1,1,1 TRICHLOROETHANE	LT	0.5000	200.0000	0.5000	ug/L
0048	CARBON TETRACHLORIDE	LT	0.5000	5.0000	0.5000	ug/L
0049	BENZENE	LT	0.5000	5.0000	0.5000	ug/L
0050	1,2 DICHLOROETHANE	LT	0.5000	5.0000	0.5000	ug/L
0051	TRICHLOROETHYLENE	LT	0.5000	5.0000	0.5000	ug/L
0052	1,4 DICHLOROBENZENE	LT	0.5000	75.0000	0.5000	ug/L
0053	CHLOROMETHANE	LT	0.5000		0.5000	ug/L
0054	BROMOMETHANE	LT	0.5000		0.5000	ug/L
0056	METHYLENE CHLORIDE(DICHLOROMETHANE)	LT	0.5000	5.0000	0.5000	ug/L
0057	TRANS- 1,2 DICHLOROETHYLENE	LT	0.5000	100.0000	0.5000	ug/L
0058	1,1 DICHLOROETHANE	LT	0.5000		0.5000	ug/L
0060	CIS- 1,2 DICHLOROETHYLENE	LT	0.5000	70.0000	0.5000	ug/L
0063	1,2 DICHLOROPROPANE	LT	0.5000	5.0000	0.5000	ug/L
0066	TOLUENE	LT	0.5000	1000.0000	0.5000	ug/L
0067	1,1,2 TRICHLOROETHANE	LT	0.5000	5.0000	0.5000	ug/L
0068	TETRACHLOROETHYLENE	LT	0.5000	5.0000	0.5000	ug/L
0071	CHLOROBENZENE	LT	0.5000	100.0000	0.5000	ug/L
0072	1,1,1,2 TETRACHLOROETHANE	LT	0.5000		0.5000	ug/L

View Sample Detail - WSID 45550C - LAKEWOOD WATER DISTRICT

Collect Date	8/18/2017
Lab Number	089
Lab Name	Water Management Laboratory Inc
Sample Number	77193
Source	11
Analyte Group	VOC-VOLATILE ORGANIC CONTAMINANTS
Test Panel	VOC1-VOLATILE ORGANIC
Sample Location	88th/pine j-1 sample point
Sample Type	Post-Treatment / Finished

Analyte DOH Num	Analyte Name	Result Range	Result Quantity	Maximum Contaminant Level	State Reporting Limit	Units
0073	ETHYLBENZENE	LT	0.5000	700.0000	0.5000	ug/L
0074	M/P XYLENES (MCL FOR TOTAL)	LT	0.5000		0.5000	ug/L
0075	O- XYLENE (MCL FOR TOTAL)	LT	0.5000		0.5000	ug/L
0076	STYRENE	LT	0.5000	100.0000	0.5000	ug/L
0078	BROMOBENZENE	LT	0.5000		0.5000	ug/L
0079	1,2,3 TRICHLOROPROPANE	LT	0.5000		0.5000	ug/L
0081	O- CHLOROTOLUENE	LT	0.5000		0.5000	ug/L
0084	1,2 DICHLOROBENZENE	LT	0.5000	600.0000	0.5000	ug/L
0085	TRICHLOROFLUOROMETHANE	LT	0.5000		0.5000	ug/L
0086	BROMOCHLOROMETHANE	LT	0.5000		0.5000	ug/L
0089	1,3,5 TRIMETHYLBENZENE	LT	0.5000		0.5000	ug/L
0091	1,2,4 TRIMETHYLBENZENE	LT	0.5000		0.5000	ug/L
0092	SEC- BUTYLBENZENE	LT	0.5000		0.5000	ug/L
0093	P-ISOPROPYLTOLUENE	LT	0.5000		0.5000	ug/L
0094	N-BUTYLBENZENE	LT	0.5000		0.5000	ug/L
0095	1,2,4 TRICHLOROBENZENE	LT	0.5000	70.0000	0.5000	ug/L
0096	NAPHTHALENE	LT	0.5000		0.5000	ug/L
0104	DICHLORODIFLUOROMETHANE	LT	0.5000		0.5000	ug/L
0160	TOTAL XYLENES	LT	0.5000	10000.0000	0.5000	ug/L
0427	EDB (screening)	LT	0.5000		0.5000	ug/L
0428	DBCP (screening)	LT	0.5000		0.5000	mg/L

Records 26 - 46 of 46

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

View Sample Detail - WSID 45550C - LAKEWOOD WATER DISTRICT

Collect Date	7/30/2009
Lab Number	089
Lab Name	Water Management Laboratory Inc
Sample Number	78109
Source	12
Analyte Group	VOC-VOLATILE ORGANIC CONTAMINANTS
Test Panel	VOC1-VOLATILE ORGANIC
Sample Location	yard ss
Sample Type	Post-Treatment / Finished

Analyte DOH Num	Analyte Name	Result Range	Result Quantity	Maximum Contaminant Level	State Reporting Limit	Units
0027	CHLOROFORM	LT	0.5000		0.5000	ug/L
0028	BROMODICHLOROMETHANE	LT	0.5000		0.5000	ug/L
0029	DIBROMOCHLOROMETHANE	LT	0.5000		0.5000	ug/L
0030	BROMOFORM	LT	0.5000		0.5000	ug/L
0045	VINYL CHLORIDE	LT	0.5000	2.0000	0.5000	ug/L
0046	1,1 DICHLOROETHYLENE	LT	0.5000	7.0000	0.5000	ug/L
0047	1,1,1 TRICHLOROETHANE	LT	0.5000	200.0000	0.5000	ug/L
0048	CARBON TETRACHLORIDE	LT	0.5000	5.0000	0.5000	ug/L
0049	BENZENE	LT	0.5000	5.0000	0.5000	ug/L
0050	1,2 DICHLOROETHANE	LT	0.5000	5.0000	0.5000	ug/L
0051	TRICHLOROETHYLENE	LT	0.5000	5.0000	0.5000	ug/L
0052	1,4 DICHLOROBENZENE	LT	0.5000	75.0000	0.5000	ug/L
0053	CHLOROMETHANE	LT	0.5000		0.5000	ug/L
0054	BROMOMETHANE	LT	0.5000		0.5000	ug/L
0056	METHYLENE CHLORIDE(DICHLOROMETHANE)	LT	0.5000	5.0000	0.5000	ug/L
0057	TRANS- 1,2 DICHLOROETHYLENE	LT	0.5000	100.0000	0.5000	ug/L
0058	1,1 DICHLOROETHANE	LT	0.5000		0.5000	ug/L
0060	CIS- 1,2 DICHLOROETHYLENE	LT	0.5000	70.0000	0.5000	ug/L
0063	1,2 DICHLOROPROPANE	LT	0.5000	5.0000	0.5000	ug/L
0066	TOLUENE	LT	0.5000	1000.0000	0.5000	ug/L
0067	1,1,2 TRICHLOROETHANE	LT	0.5000	5.0000	0.5000	ug/L
0068	TETRACHLOROETHYLENE	LT	0.5000	5.0000	0.5000	ug/L
0071	CHLOROBENZENE	LT	0.5000	100.0000	0.5000	ug/L
0072	1,1,1,2 TETRACHLOROETHANE	LT	0.5000		0.5000	ug/L
0073	ETHYLBENZENE	LT	0.5000	700.0000	0.5000	ug/L

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

View Sample Detail - WSID 45550C - LAKEWOOD WATER DISTRICT

Collect Date	7/30/2009
Lab Number	089
Lab Name	Water Management Laboratory Inc
Sample Number	78109
Source	12
Analyte Group	VOC-VOLATILE ORGANIC CONTAMINANTS
Test Panel	VOC1-VOLATILE ORGANIC
Sample Location	yard ss
Sample Type	Post-Treatment / Finished

Analyte DOH Num	Analyte Name	Result Range	Result Quantity	Maximum Contaminant Level	State Reporting Limit	Units
0027	CHLOROFORM	LT	0.5000		0.5000	ug/L
0028	BROMODICHLOROMETHANE	LT	0.5000		0.5000	ug/L
0029	DIBROMOCHLOROMETHANE	LT	0.5000		0.5000	ug/L
0030	BROMOFORM	LT	0.5000		0.5000	ug/L
0045	VINYL CHLORIDE	LT	0.5000	2.0000	0.5000	ug/L
0046	1,1 DICHLOROETHYLENE	LT	0.5000	7.0000	0.5000	ug/L
0047	1,1,1 TRICHLOROETHANE	LT	0.5000	200.0000	0.5000	ug/L
0048	CARBON TETRACHLORIDE	LT	0.5000	5.0000	0.5000	ug/L
0049	BENZENE	LT	0.5000	5.0000	0.5000	ug/L
0050	1,2 DICHLOROETHANE	LT	0.5000	5.0000	0.5000	ug/L
0051	TRICHLOROETHYLENE	LT	0.5000	5.0000	0.5000	ug/L
0052	1,4 DICHLOROBENZENE	LT	0.5000	75.0000	0.5000	ug/L
0053	CHLOROMETHANE	LT	0.5000		0.5000	ug/L
0054	BROMOMETHANE	LT	0.5000		0.5000	ug/L
0056	METHYLENE CHLORIDE(DICHLOROMETHANE)	LT	0.5000	5.0000	0.5000	ug/L
0057	TRANS- 1,2 DICHLOROETHYLENE	LT	0.5000	100.0000	0.5000	ug/L
0058	1,1 DICHLOROETHANE	LT	0.5000		0.5000	ug/L
0060	CIS- 1,2 DICHLOROETHYLENE	LT	0.5000	70.0000	0.5000	ug/L
0063	1,2 DICHLOROPROPANE	LT	0.5000	5.0000	0.5000	ug/L
0066	TOLUENE	LT	0.5000	1000.0000	0.5000	ug/L
0067	1,1,2 TRICHLOROETHANE	LT	0.5000	5.0000	0.5000	ug/L
0068	TETRACHLOROETHYLENE	LT	0.5000	5.0000	0.5000	ug/L
0071	CHLOROBENZENE	LT	0.5000	100.0000	0.5000	ug/L
0072	1,1,1,2 TETRACHLOROETHANE	LT	0.5000		0.5000	ug/L
0073	ETHYLBENZENE	LT	0.5000	700.0000	0.5000	ug/L

Records 1 - 25 of 46

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

View Sample Detail - WSID 45550C - LAKEWOOD WATER DISTRICT

Collect Date	3/22/2018
Lab Number	089
Lab Name	Water Management Laboratory Inc
Sample Number	77603
Source	41
Analyte Group	VOC-VOLATILE ORGANIC CONTAMINANTS
Test Panel	VOC1-VOLATILE ORGANIC
Sample Location	J-3 sample point
Sample Type	Post-Treatment / Finished

Analyte DOH Num	Analyte Name	Result Range	Result Quantity	Maximum Contaminant Level	State Reporting Limit	Units
0027	CHLOROFORM	LT	0.5000		0.5000	ug/L
0028	BROMODICHLOROMETHANE	LT	0.5000		0.5000	ug/L
0029	DIBROMOCHLOROMETHANE	LT	0.5000		0.5000	ug/L
0030	BROMOFORM	LT	0.5000		0.5000	ug/L
0045	VINYL CHLORIDE	LT	0.5000	2.0000	0.5000	ug/L
0046	1,1 DICHLOROETHYLENE	LT	0.5000	7.0000	0.5000	ug/L
0047	1,1,1 TRICHLOROETHANE	LT	0.5000	200.0000	0.5000	ug/L
0048	CARBON TETRACHLORIDE	LT	0.5000	5.0000	0.5000	ug/L
0049	BENZENE	LT	0.5000	5.0000	0.5000	ug/L
0050	1,2 DICHLOROETHANE	LT	0.5000	5.0000	0.5000	ug/L
0051	TRICHLOROETHYLENE	LT	0.5000	5.0000	0.5000	ug/L
0052	1,4 DICHLOROBENZENE	LT	0.5000	75.0000	0.5000	ug/L
0053	CHLOROMETHANE	LT	0.5000		0.5000	ug/L
0054	BROMOMETHANE	LT	0.5000		0.5000	ug/L
0056	METHYLENE CHLORIDE(DICHLOROMETHANE)	LT	0.5000	5.0000	0.5000	ug/L
0057	TRANS- 1,2 DICHLOROETHYLENE	LT	0.5000	100.0000	0.5000	ug/L
0058	1,1 DICHLOROETHANE	LT	0.5000		0.5000	ug/L
0060	CIS- 1,2 DICHLOROETHYLENE	LT	0.5000	70.0000	0.5000	ug/L
0063	1,2 DICHLOROPROPANE	LT	0.5000	5.0000	0.5000	ug/L
0066	TOLUENE	LT	0.5000	1000.0000	0.5000	ug/L
0067	1,1,2 TRICHLOROETHANE	LT	0.5000	5.0000	0.5000	ug/L
0068	TETRACHLOROETHYLENE	LT	0.5000	5.0000	0.5000	ug/L
0071	CHLOROBENZENE	LT	0.5000	100.0000	0.5000	ug/L
0072	1,1,1,2 TETRACHLOROETHANE	LT	0.5000		0.5000	ug/L
0073	ETHYLBENZENE	LT	0.5000	700.0000	0.5000	ug/L

Records 1 - 25 of 46

What's new with Firefox - More | Google | Employee Scheduling Software | Farallon Consulting Intranet | fortress.wa.gov/doh/eh/portal/odw

https://fortress.wa.gov/doh/eh/portal/odw/si/ViewSampleDetail.aspx?SamId=3588884&Src=41&TP=29

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

View Sample Detail - WSID 45550C - LAKEWOOD WATER DISTRICT

Collect Date	3/22/2018
Lab Number	089
Lab Name	Water Management Laboratory Inc
Sample Number	77603
Source	41
Analyte Group	VOC-VOLATILE ORGANIC CONTAMINANTS
Test Panel	VOC1-VOLATILE ORGANIC
Sample Location	J-3 sample point
Sample Type	Post-Treatment / Finished

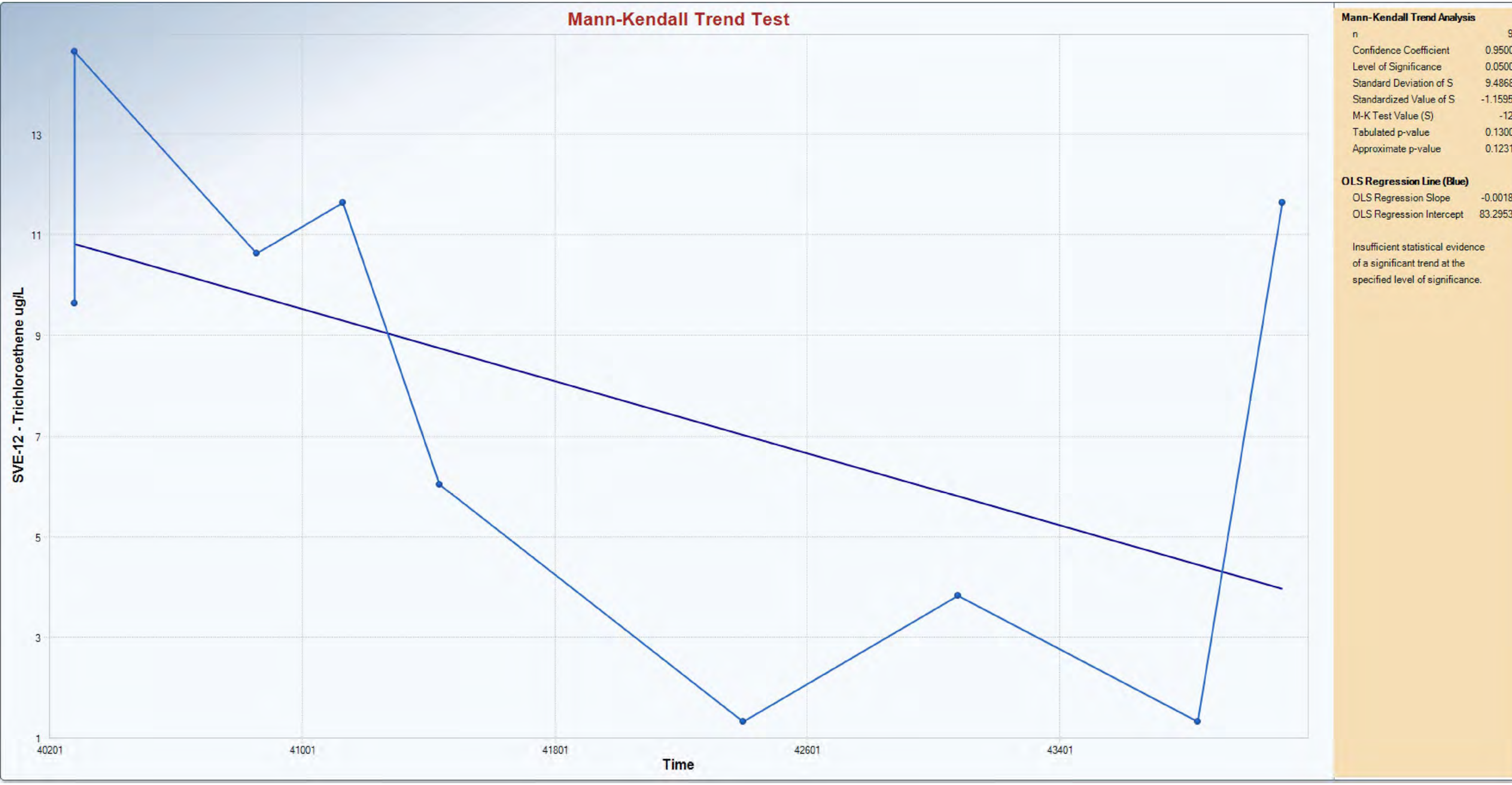
Analyte DOH Num	Analyte Name	Result Range	Result Quantity	Maximum Contaminant Level	State Reporting Limit	Units
0074	M/P XYLENES (MCL FOR TOTAL)	LT	0.5000		0.5000	ug/L
0075	O- XYLENE (MCL FOR TOTAL)	LT	0.5000		0.5000	ug/L
0076	STYRENE	LT	0.5000	100.0000	0.5000	ug/L
0078	BROMOBENZENE	LT	0.5000		0.5000	ug/L
0079	1,2,3 TRICHLOROPROPANE	LT	0.5000		0.5000	ug/L
0081	O- CHLOROTOLUENE	LT	0.5000		0.5000	ug/L
0084	1,2 DICHLOROBENZENE	LT	0.5000	600.0000	0.5000	ug/L
0085	TRICHLOROFLUOROMETHANE	LT	0.5000		0.5000	ug/L
0086	BROMOCHLOROMETHANE	LT	0.5000		0.5000	ug/L
0089	1,3,5 TRIMETHYLBENZENE	LT	0.5000		0.5000	ug/L
0091	1,2,4 TRIMETHYLBENZENE	LT	0.5000		0.5000	ug/L
0092	SEC- BUTYLBENZENE	LT	0.5000		0.5000	ug/L
0093	P-ISOPROPYLTOLUENE	LT	0.5000		0.5000	ug/L
0094	N-BUTYLBENZENE	LT	0.5000		0.5000	ug/L
0095	1,2,4 TRICHLOROBENZENE	LT	0.5000	70.0000	0.5000	ug/L
0096	NAPHTHALENE	LT	0.5000		0.5000	ug/L
0104	DICHLORODIFLUOROMETHANE	LT	0.5000		0.5000	ug/L
0160	TOTAL XYLENES	LT	0.5000	10000.0000	0.5000	ug/L
0427	EDB (screening)	LT	0.5000		0.5000	ug/L
0428	DBCP (screening)	LT	0.5000		0.5000	mg/L
0031	TOTAL TRIHALOMETHANE	ND		80.0000		ug/L

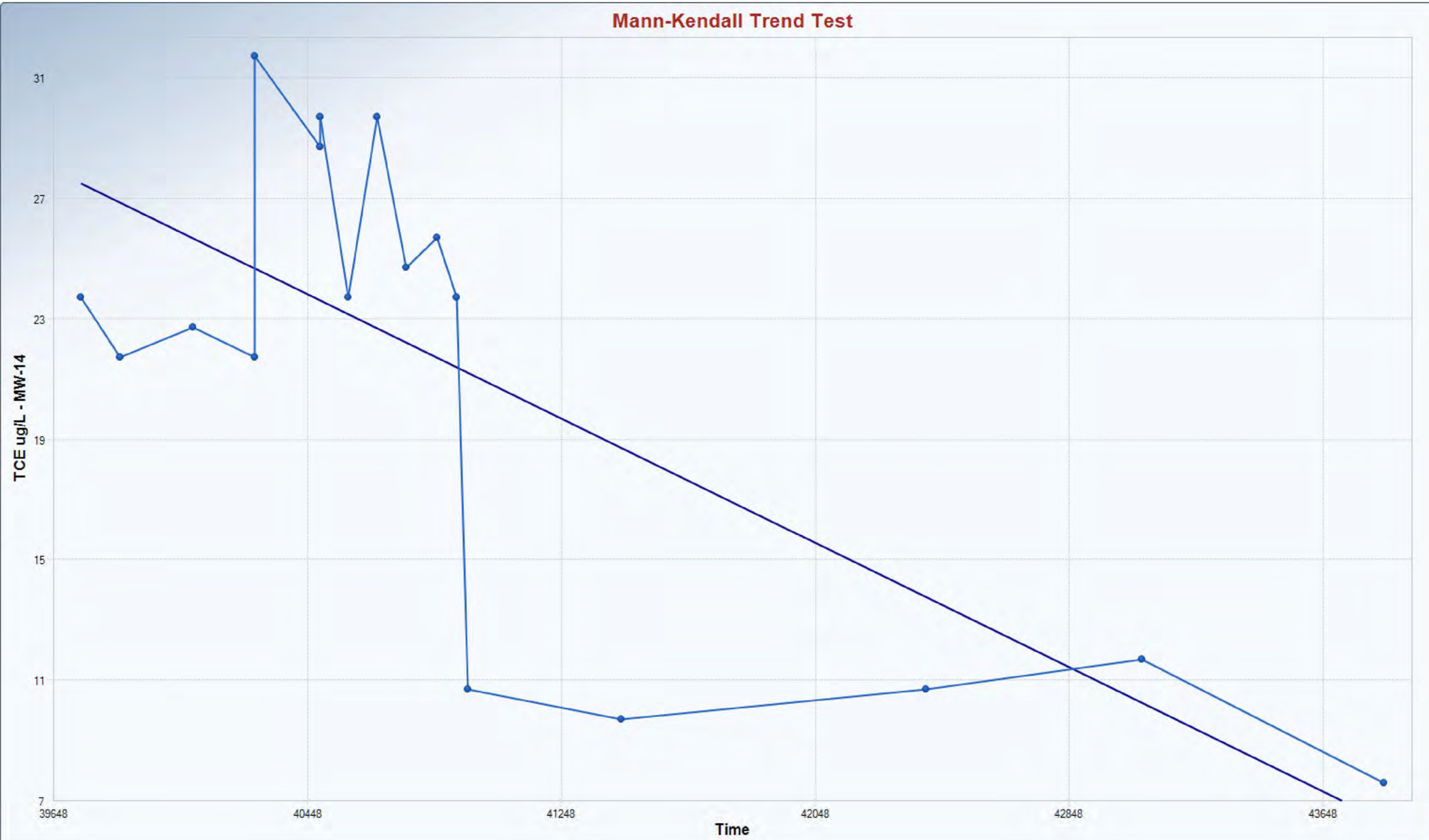
Records 26 - 46 of 46

ATTACHMENT F
MANN-KENDALL TREND ANALYSIS GRAPHS

RESPONSE TO AUGUST 30, 2019 LETTER REGARDING FURTHER ACTION AT THE WOODWORTH & CO INC. LAKEVIEW PLANT
2800 104th Street Court South
Lakewood, Washington

Farallon PN: 188-002


Mann-Kendall Trend Test
SVE-12 - Trichloroethene ug/L
Time
40201
41001
41801
42601
43401
1
3
5
7
9
11
13
Mann-Kendall Trend Analysis
n 9
Confidence Coefficient 0.9500
Level of Significance 0.0500
Standard Deviation of S 9.4868
Standardized Value of S -1.1595
M-K Test Value (S) -12
Tabulated p-value 0.1300
Approximate p-value 0.1231
OLS Regression Line (Blue)
OLS Regression Slope -0.0018
OLS Regression Intercept 83.2953
Insufficient statistical evidence of a significant trend at the specified level of significance.



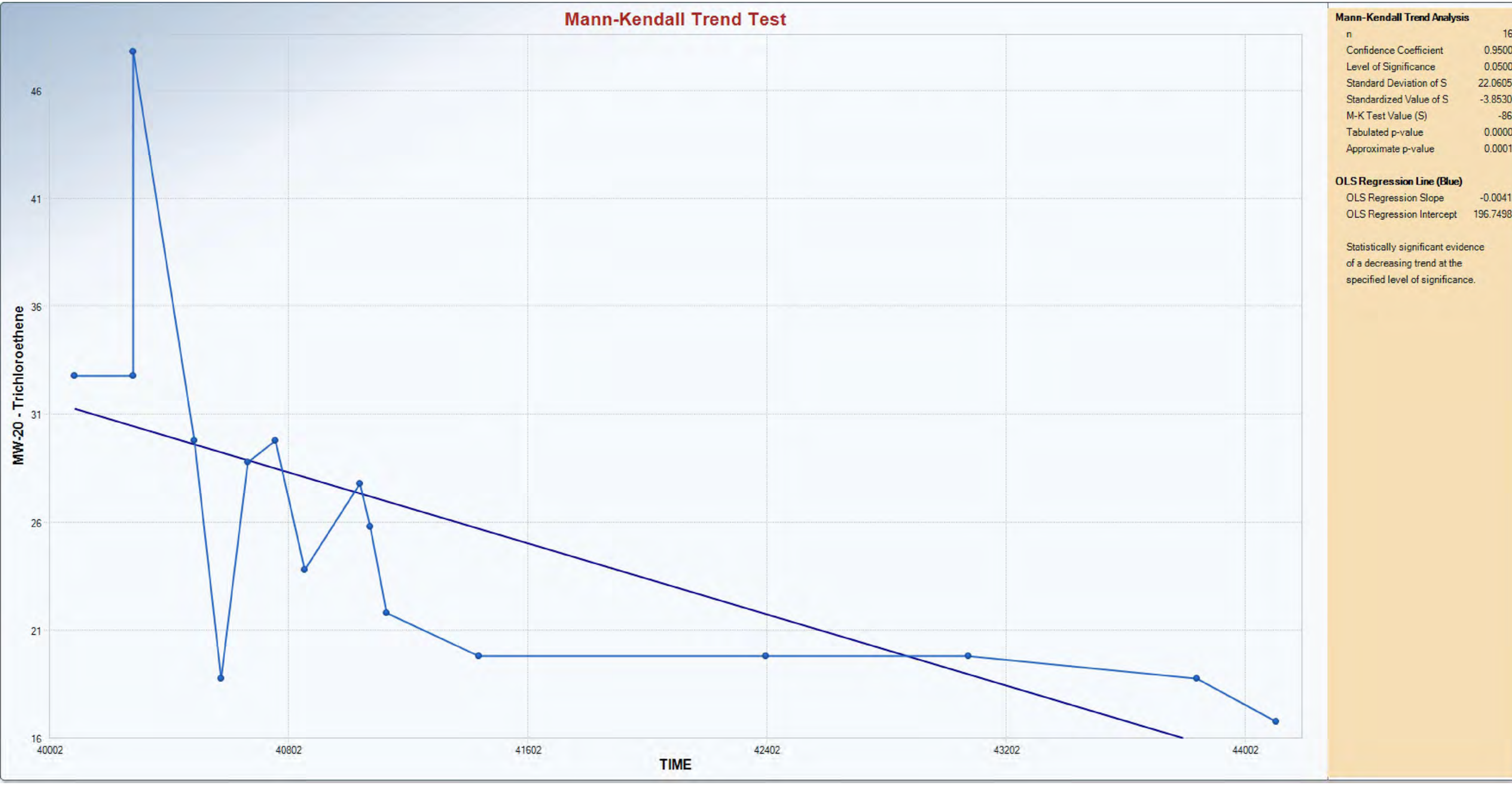
Mann-Kendall Trend Analysis

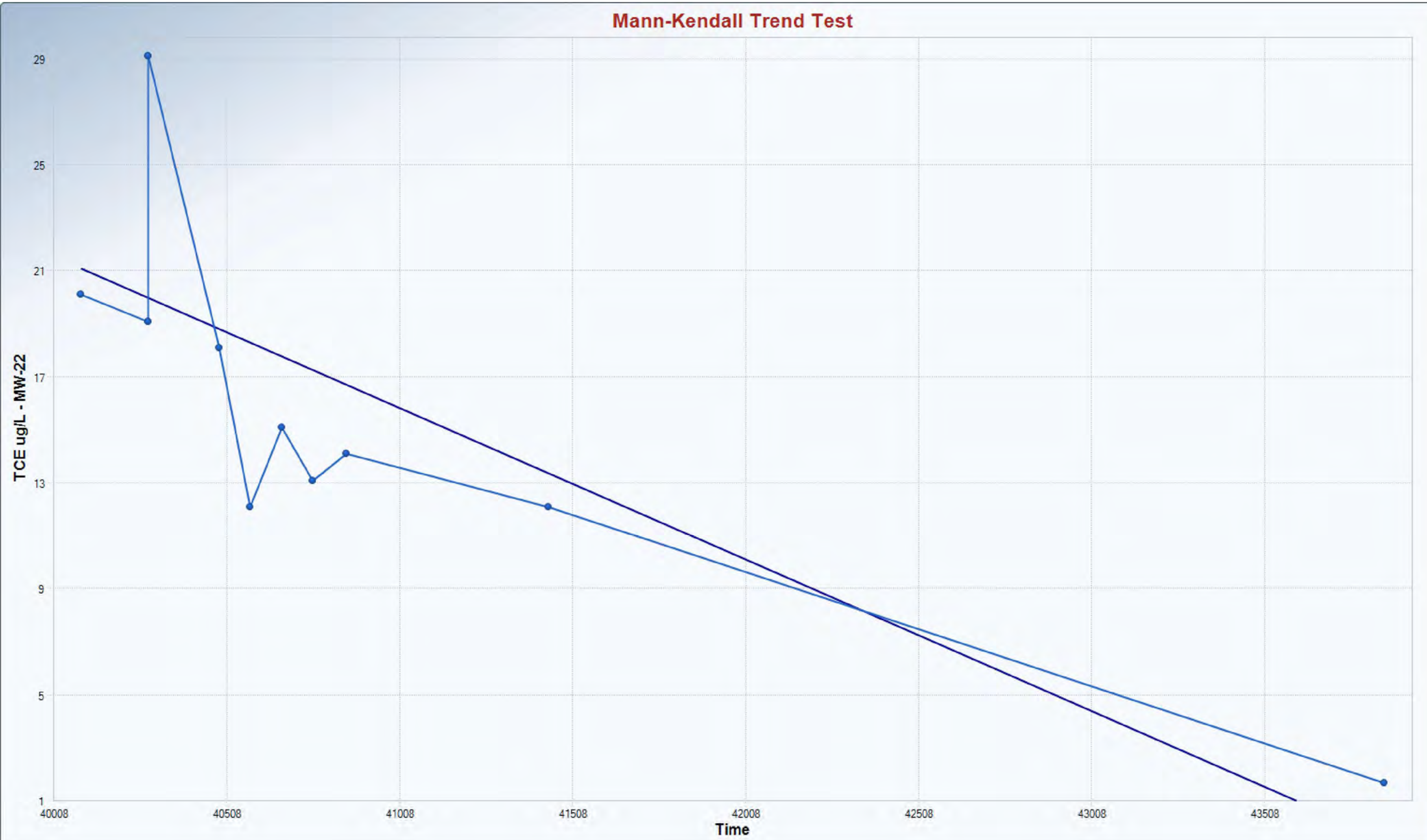
n	17
Confidence Coefficient	0.9500
Level of Significance	0.0500
Standard Deviation of S	24.1385
Standardized Value of S	-1.9471
M-K Test Value (S)	-48
Tabulated p-value	0.0230
Approximate p-value	0.0258

OLS Regression Line (Blue)

OLS Regression Slope	-0.0052
OLS Regression Intercept	233.1794

Statistically significant evidence of a decreasing trend at the specified level of significance.


Mann-Kendall Trend Test
MW-20 - Trichloroethene
TIME
46
41
36
31
26
21
16
40002
40802
41602
42402
43202
44002
Mann-Kendall Trend Analysis
n 16
Confidence Coefficient 0.9500
Level of Significance 0.0500
Standard Deviation of S 22.0605
Standardized Value of S -3.8530
M-K Test Value (S) -86
Tabulated p-value 0.0000
Approximate p-value 0.0001
OLS Regression Line (Blue)
OLS Regression Slope -0.0041
OLS Regression Intercept 196.7498
Statistically significant evidence
of a decreasing trend at the
specified level of significance.



Mann-Kendall Trend Analysis

n	12
Confidence Coefficient	0.9500
Level of Significance	0.0500
Standard Deviation of S	14.4799
Standardized Value of S	-2.9006
M-K Test Value (S)	-43
Tabulated p-value	0.0020
Approximate p-value	0.0019

OLS Regression Line (Blue)

OLS Regression Slope	-0.0057
OLS Regression Intercept	250.5816

Statistically significant evidence of a decreasing trend at the specified level of significance.