

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY REPORT

MORNINGSIDE ACRES TRACTS 5001, 5015, AND 5021 RAINIER AVENUE SOUTH SEATTLE, WASHINGTON

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ACRONYMS AND ABBREVIATIONS

1,2-DCA	1,2-dichloroethane
1,2-DCP	1,2-dichloropropane
AST	aboveground storage tank
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CFR	Code of Federal Regulations
cis-DCE	cis-1,2-dichloroethene
COC	constituent of concern
DCA	disproportionate cost analysis
DRO	total petroleum hydrocarbons as diesel-range organics
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
Farallon	Farallon Consulting, L.L.C.
FS	Feasibility Study
G-Logics	G-Logics, Inc.
GRO	total petroleum hydrocarbons as gasoline-range organics
HVAC	heating, ventilation, and air conditioning
ID	identification
ISCR	in-situ chemical reduction
Kleinfelder	Kleinfelder, Inc.
LNAPL	light nonaqueous-phase liquid
LUST	leaking underground storage tank
µg/l	micrograms per liter
µg/m ³	micrograms per cubic meter
mg/kg	milligrams per kilogram
MTCA	Washington State Model Toxics Control Act Cleanup Regulation
NFA	No Further Action
ORO	total petroleum hydrocarbons as oil-range organics



PCBs	polychlorinated biphenyls
PID	photoionization detector
PQL	practical quantitation limit
Property	Morningside Acres Tracts at 5001, 5015, and 5021 Rainier Avenue South in Seattle, Washington
RCW	Revised Code of Washington
RI	Remedial Investigation
RI/FS Report	<i>Remedial Investigation and Feasibility Study Report, Morningside Acres Tracts, 5001, 5015, and 5021 Rainier Avenue South, Seattle, Washington</i> dated January 12, 2022, prepared by Farallon Consulting, L.L.C. (this document)
Riley Group	The Riley Group, Inc.
SMC	Seattle Municipal Code
SVE	soil vapor extraction
TCE	trichloroethene
TEE	terrestrial ecological evaluation
TPH	total petroleum hydrocarbons
UST	underground storage tank
VOC	volatile organic compound
WAC	Washington Administrative Code
Wolfe Environmental	Wolfe Environmental Consulting, Inc.



1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this Remedial Investigation (RI) and Feasibility Study (FS) Report (RI/FS Report) to document the nature and extent of hazardous substances in soil and groundwater on the Morningside Acres Tracts at 5001, 5015, and 5021 Rainier Avenue South in Seattle, Washington (herein referred to as the Property) (Figures 1 and 2). This RI/FS Report evaluates the potential impacts of the contamination on human health and the environment, identifies applicable cleanup standards, analyzes and develops technically feasible cleanup alternatives for the affected media of concern, and presents the two preferred cleanup action alternatives, with and without redevelopment of the Property, to be performed under the Washington Department of Ecology (Ecology) Voluntary Cleanup Program. The RI/FS Report was prepared in accordance with the Washington State Model Toxics Control Act Cleanup Regulation (MTCA), as established in Chapter 173-340 of the Washington Administrative Code (WAC 173-340).

The Property is impacted by hazardous substances associated with prior releases of volatile organic compounds (VOCs) and petroleum-related compounds associated with a former automotive repair facility in the warehouse building on the southern parcel at 5021 Rainier Avenue South, and former gasoline service stations on the northern parcel at 5001 Rainier Avenue South. In accordance with the requirements for performing an RI/FS per WAC 173-340-350, Farallon has evaluated the nature and extent of this contamination at and surrounding the Property. The releases include chemical concentrations of trichloroethene (TCE) and/or 1,2-dichloropropane (1,2-DCP) at the southern parcel, and benzene and total petroleum hydrocarbons (TPH) as diesel-range organics (DRO), as oil-range organics (ORO), and as gasoline-range organics (GRO) at the northern parcel, which individually exceed the MTCA Method A or B cleanup levels for soil and/or groundwater. Cis-1,2-dichloroethene (cis-DCE), 1,2-dichloroethane (1,2-DCA), and vinyl chloride are present on the southern parcel as a result of naturally occurring breakdown of TCE (Figure 2).

The selected cleanup action will be conducted in accordance with MTCA and implemented as a permanent and final remedy for the contaminated soil and groundwater at the Property to meet the requirements for cleanup specified in WAC 173-340-360(2) sufficient to obtain an unrestricted No Further Action (NFA) determination from Ecology.

1.1 PURPOSE AND OBJECTIVE

The purpose of an RI is to collect the site characterization data necessary to develop and evaluate technically feasible cleanup action alternatives in accordance with WAC 173-340-360 through 173-340-390. The RI conducted by Farallon and summarized in this RI/FS Report provided the data needed to evaluate technically feasible cleanup action alternatives.

The purpose of an FS is to develop and evaluate cleanup action alternatives to enable a cleanup action to be selected in accordance with WAC 173-340-350(8). The overall objective of the FS is to identify a preferred cleanup action alternative that will protect human health and the environment and constitute a permanent remedy for the Property pursuant to WAC 173-340-



360(2). The FS conducted by Farallon and summarized in this RI/FS Report identifies the preferred permanent cleanup action associated with the releases at the Property, which will protect human health and the environment, comply with the applicable soil, groundwater, and indoor air cleanup standards established at WAC 173-340-700 through 760, and comply with all applicable state and federal laws and other cleanup action requirements set forth in WAC 173-340-360(2).

1.2 REPORT ORGANIZATION

The remainder of this report is organized into the following sections:

- **Section 2, Property Description and Background**, provides a summary of the Property features, current and historical uses, geology and hydrogeology, and regulatory status.
- **Section 3, Remedial Investigation Activities**, describes the field investigations that were conducted to assess the presence, nature, and extent of hazardous substances in soil, groundwater, and air on and off the Property.
- **Section 4, Remedial Investigation Results**, presents groundwater-level data and describes the nature and extent of hazardous substances in soil, groundwater, and air on the Property.
- **Section 5, Conceptual Site Model**, presents the conceptual site model for the Property, including sources of contamination, contaminants and media of concern, and exposure pathways and receptors.
- **Section 6, Proposed Cleanup Standards**, identifies laws, regulations, and other requirements that are applicable or relevant and appropriate for the cleanup action to be conducted on the Property; summarizes the terrestrial ecological evaluation (TEE) conducted for the Property; and presents cleanup standards applicable to the constituents of concern (COCs) identified in soil and groundwater.
- **Section 7, Feasibility Study**, presents the cleanup action objectives for the Property, a screening evaluation of potentially applicable remediation technologies, a detailed evaluation of cleanup action alternatives, and the preferred cleanup action alternative for the Property.
- **Section 8, References**, lists the documents cited in this report.
- **Section 9, Limitations**, presents Farallon's standard limitations pertaining to the information and conclusions presented in this report.



2.0 PROPERTY DESCRIPTION AND BACKGROUND

This section provides a summary of the Property features, current and historical uses, geology and hydrogeology, and regulatory status. The documents relied upon for the following summary are cited below and listed in Section 8, References.

2.1 PROPERTY FEATURES

The Property, which has been owned by Washin and Kathleen Murakami since 1964, consists of three contiguous tax parcels in Seattle, Washington (Figures 1 and 2): King County Parcel Nos. 5649600130 (5021 Rainier Avenue South), 5649600133 (5015 Rainier Avenue South), and 5649600135 (5001 Rainier Avenue South). The combined area of the three parcels is 0.51 acre (King County Department of Assessments 2019). The Property is situated in a mixed-use area of Rainier Valley at an elevation of approximately 115 feet above mean sea level (U.S. Geological Survey 2017) and is relatively flat and level. The portion of Rainier Valley in which the Property is located is surrounded by hills to the east, south, and west. The hills rise to elevations ranging from approximately 220 to 340 feet above mean sea level. Drinking water for the Property and surrounding community is supplied by the City of Seattle.

The property is zoned Neighborhood Commercial (NC2), which allows for commercial, residential and mixed uses pursuant to the Seattle Municipal Code (SMC 23.47A.004; Table A), subject to the historic building design review criteria established by the Columbia City Application Review Committee and the City of Seattle Landmarks Preservation Board, as discussed in Section 7.0. Both the 5015 and 5021 buildings appear on the Seattle Neighborhoods Historical Sites Survey and are eligible for Landmark status, as described in a report prepared by BOLA Architecture + Planning (BOLA 2007).

The entire footprint of the southern parcel (at 5021 Rainier Avenue South) is developed with a one-story warehouse building constructed of brick, stucco, and wood constructed in the 1920s (City of Seattle, No Date). The original western portion of the building is configured as warehouse and large shop area with a vehicle ramp to a basement for vehicle parking and storage (formerly used by car dealerships); the warehouse building's eastern addition, adjacent to Rainier Avenue South, is configured as office space and a separately accessed commercial space that is currently leased as a bookstore (Figure 2). The middle parcel (at 5015 Rainier Avenue South) contains a one-story commercial building constructed of wood in approximately 1926 and an unpaved parking area to the south. The northern parcel (at 5001 Rainier Avenue South) was operated as one or more gasoline service stations until the 1970s; it currently is an asphalt-paved commercial parking lot.

Stormwater runoff from the three parcels and building roofs drains to the ground and enters catch basins that are connected to the City of Seattle stormwater drainage system along Rainier Avenue South. Additionally, some stormwater may infiltrate the subsurface in the unpaved parking lot on the middle parcel.



Adjacent properties to the south and west of the Property, to the north across South Hudson Street, and to the east across Rainier Avenue South are developed with commercial and residential buildings and parking lots.

2.2 CURRENT AND HISTORICAL USES OF THE PROPERTY

The current and historical uses of the Property's three tax parcels are summarized below.

2.2.1 Southern Parcel

The warehouse building, which occupies the entire southern parcel, has been largely vacant for over 10 years and currently is in disrepair. The building is 72 by 74 feet with a partial basement, main floor, and a flat roof that is approximately 16 feet high (BOLA 2007). A hazardous building materials survey was performed by Med-Tox Northwest of Auburn, Washington (2019) from August 1 through 6, 2019 (Appendix A) to assist with Farallon's analysis of the feasibility for implementing the potential alternative remedial actions identified in the FS. The original western portion of the warehouse building was constructed in 1924; the building's eastern addition was constructed in 1926 (City of Seattle, No Date). Historically, the warehouse building has been used as an automotive maintenance and repair facility further described below, automobile and boat dealerships, a plumbing supply business, a pool hall, a fitness center, and a bookstore, which is currently the only tenant. (The Riley Group, Inc. [Riley Group] 2013; Ecology 2015b).

An automotive maintenance and repair facility (Wash's Auto Repair) operated in the western portion of the building from approximately 1964 until 2012 (Wolfe Environmental Consulting, Inc. [Wolfe Environmental] 2005; G-Logics, Inc. [G-Logics] 2007; Riley Group 2013). This facility reportedly included a paint shop, a car wash, and a mechanics' parts-washing sink with an associated cleaning solvent aboveground storage tank (AST) on the first floor. In addition, a used-oil AST, hydraulic-oil AST, heating-oil underground storage tank (UST), fuel-oil-burning furnace, floor-drain sump and an oil-water separator were present in the eastern portion of the basement (Kleinfelder, Inc. [Kleinfelder] 2006a; G-Logics 2007; Riley Group 2013).

2.2.2 Middle Parcel

The middle parcel currently is occupied by a wooden construction building that is currently operated as a convenience store. The southern half of the middle parcel is an unpaved lot that is fenced off. The building was constructed in 1926 by the Columbia Lumber Company and used as a lumberyard office from 1926 until approximately 1965, an insurance agent office between approximately 1966 and 1980, and a convenience store since approximately 1980 until the present. During the time the building was used as a lumber yard office, the lumberyard was located on the adjacent property (or properties) to the west (Wolfe Environmental 2005; BOLA 2007).

2.2.3 Northern Parcel

The northern parcel currently is used as a commercial parking lot operated by Diamond Parking Service. No buildings are present on the parcel. Historically, two generations of gasoline service stations occupied the northern parcel from at least 1927 until the early 1970s. Both service stations



were leased and operated by Standard Oil of California and were branded as Standard or Chevron stations (Riley Group 2013).

The first-generation gasoline service station occupied the parcel from at least 1927 until approximately 1953. Gasoline USTs for the first-generation service station were on the eastern exterior of the station building, near Rainier Avenue South (Riley Group 2014). The second-generation gasoline service station occupied the parcel from 1954 until approximately 1972 and included at least three USTs (including one 2,000-gallon UST and one 6,000-gallon UST), four fuel dispensers, and a hydraulic hoist (Riley Group 2014). The second-generation service station building was on the southwestern portion of the northern parcel and the fuel dispensers were east-northeast of the station building, near Rainier Avenue South (Riley Group 2014) (Figure 2). The previous Phase I due diligence reports include Polk Directory and Yellow Pages references to the service station ownership and operations through the 1970s (Wolfe Environmental 2005). The second-generation service station reportedly was closed in the 1970s and the USTs were closed in-place and filled with sand at that time (Wolfe Environmental 2005; Riley Group 2014). The property subsequently was occupied by other businesses, including several automotive repair businesses in the mid- to late-1970s, before it was converted to a commercial parking lot (Wolfe Environmental 2005).

2.3 GEOLOGY AND HYDROGEOLOGY

Based on the field investigations conducted from 2006 through 2019, subsurface soil on the Property generally consists of interbedded silt, clay, silty sand, sand with fine gravel, and gravel. The lithology encountered during the subsurface investigations varied both laterally and vertically. Boring logs from the field investigations indicate that the silts and clays encountered during drilling generally were stiff to hard, and the sands were dense to very dense.

In most borings completed on the Property, shallow groundwater was encountered at depths between 6 and 20 feet below ground surface (bgs) during drilling. Measured depths to groundwater in the monitoring wells on the Property generally have ranged from approximately 6 to 11 feet bgs. However, the measured depths to groundwater in monitoring wells installed in the basement of the warehouse building on the southern parcel have ranged from approximately 0.5 foot to 3 feet below the basement floor. Groundwater elevation data indicate that the direction of groundwater flow on the Property varies spatially and temporally, ranging from south to north on the southern and middle parcels and from northeast to southwest on the northern parcel.

2.4 REGULATORY STATUS

The environmental investigations completed to date on the Property have been conducted as independent actions consistent with MTCA.

Ecology maintains information pertaining to properties with confirmed or suspected environmental contamination in various lists, databases, and reports. According to Ecology (2015a, 2015b) records, a release report of the discovery of contamination at the Property was



submitted to Ecology in 2013 pursuant to WAC 173-340-300(2). Upon being reported to Ecology, the middle and southern parcels were placed on the Confirmed and Suspected Contaminated Sites List and identified as Cleanup Site ID No. 12408 and the northern parcel was identified as Cleanup Site ID No. 12406. According to the Ecology (2019a, 2019b) Toxics Cleanup Program database, the status of both cleanup sites is “Awaiting Cleanup.”

The following documentation of Property activities and completion dates were provided in the Ecology (2019b) Toxics Cleanup Program database for the Morningside Acres Tracts South cleanup site:

- Site Discovery/Release Report Received (October 23, 2013);
- Initial Investigation (October 31, 2013);
- Early Notice Letter (February 27, 2015);
- Site Hazard Assessment (August 19, 2015);
- Hazardous Sites Listing (August 19, 2015); and
- Ecology Letter: Request for Evaluation of TCE Risks (June 18, 2019).

The following documentation of Property activities and completion dates were provided in the Ecology (2019a) Toxics Cleanup Program database for the Morningside Acres Tracts North cleanup site:

- LUST – Report Received (October 23, 2013);
- LUST – Notification (October 23, 2013);
- Site Discovery/Release Report Received (October 23, 2013);
- Initial Investigation (October 31, 2013);
- Early Notice Letter (February 27, 2015);
- Site Hazard Assessment (August 19, 2015); and
- Hazardous Sites Listing (August 19, 2015).

The Site Hazard Assessments were completed by Ecology for the southern, middle, and northern parcels on August 19, 2015. Ecology estimates the potential threat to human health and/or the environment on a scale of 1 to 5, relative to all other Washington State sites assessed at the time the Site Hazard Assessments were completed. Based on the Site Hazard Assessment results, Ecology (2015a, 2015b) assigned a hazard ranking of 3 (i.e., “moderate risk”) for the Property, where a hazard ranking of 1 represents the highest relative risk and 5 represents the lowest relative risk.



3.0 REMEDIAL INVESTIGATION ACTIVITIES

Prior to the field investigation activities conducted from 2006 through 2021, a Phase I Environmental Site Assessment (ESA) of the Property was conducted by Wolfe Environmental in 2005. The Phase I ESA consisted of a review of available records and interviews with the Property owner and local authorities regarding past activities on the Property. Wolfe Environmental's conclusions from the Phase I ESA (2005) are summarized below.

- Based on the presence (at the time the Phase I ESA was conducted) of an automotive maintenance and repair facility and associated ASTs, a basement floor-drain sump, an oil-water separator, and hazardous materials (e.g., automotive lubricants and fuels) on the southern parcel, Wolfe Environmental concluded that the Property may have been impacted by releases of hazardous substances associated with the automotive maintenance and repair facility;
- Based on the historical presence of USTs on the northern parcel that may have been closed in-place when the former gasoline service stations on the northern parcel were closed, and the historical presence of a lumberyard on and adjacent to the middle parcel, Wolfe Environmental concluded that the Property may have been impacted by releases of hazardous substances associated with the former gasoline service stations or the lumberyard; and
- Based on the presence (at the time the Phase I ESA was conducted) of a plastics manufacturing facility immediately west of the Property and a used car lot south of the Property, and the historical presence of a former dry cleaning facility across Rainier Avenue South to the east-southeast of the Property, Wolfe Environmental concluded that the Property may have been impacted by releases of hazardous substances associated with these off-Property facilities.

Wolfe Environmental (2005) recommended sampling and analyzing soil near the southeastern corner of the Property for the presence of VOCs and groundwater for the presence of petroleum hydrocarbons on the northern parcel and adjacent to the automotive maintenance and repair facility on the southern parcel.

Following the 2005 Phase I ESA, several field investigations were conducted during 2006 and 2007 (Kleinfelder 2006; G-Logics 2007) for a potential purchaser to assess subsurface conditions on and off the Property. The sale was terminated when the real estate market crashed in 2008; the Phase II ESA reports and data were not disclosed to the Property owner at that time. A second round of field investigations were conducted by the Property owner beginning in 2013 through the time of completion of this RI/FS. The field investigations are summarized below. The locations of borings and groundwater monitoring wells installed, and air samples collected during the field investigations are shown on Figure 3. The boring logs and groundwater monitoring well construction logs are provided in Appendix B.

Soil samples collected for VOC analysis were collected in accordance with U.S. Environmental Protection Agency (EPA) Method 5035A. Groundwater sampling generally was performed using a peristaltic pump and low-flow purging and sampling procedures. Soil and groundwater samples



were delivered to the analytical laboratories in iced coolers using standard chain-of-custody protocols. Additional information regarding the field investigation procedures is provided in the referenced reports.

3.1 GEOPHYSICAL INVESTIGATION (2006)

A geophysical investigation was conducted in March 2006 (Kleinfelder 2006a) to search for potential undocumented, abandoned USTs and/or areas of previous significant excavation work on the Property. The investigation area included the parking lot, sidewalks, and accessible landscaped areas of the northern parcel and the unpaved parking lot on the middle parcel. No geophysical investigations were performed in buildings on the Property.

The investigation consisted of a reconnaissance survey using a magnetometer to identify possible conductive (e.g., ferrous metallic) subsurface materials, and a ground-penetrating radar survey to identify and estimate the dimensions and depth of possible subsurface objects and disturbed soil such as USTs, underground utilities, and historical excavation areas.

The geophysical investigation identified three anomalies on the northern parcel:

- An anomaly measuring approximately 20 by 35 feet was identified on the northwestern corner of the parking lot. This anomaly was interpreted to possibly represent the location of closed-in-place USTs. However, because the anomaly was identified by ground-penetrating radar but not the magnetometer, this interpretation was considered uncertain.
- An anomaly measuring approximately 5 by 7 feet was identified near the northeastern corner of the parking lot. This anomaly was interpreted to possibly represent buried debris such as metal plating and/or reinforcing steel, concrete, or other types of construction debris. Kleinfelder (2006a) speculated that the anomaly may coincide with the location of former fuel dispensers or a sign foundation associated with the former gasoline service station(s).
- An anomaly measuring approximately 5 by 19 feet was identified on the eastern portion of the parking lot. This anomaly was interpreted to possibly represent buried debris such as metal plating and/or reinforcing steel, concrete, or other types of construction debris. Kleinfelder (2006a) speculated that the anomaly may coincide with the location of former fuel dispensers associated with the former gasoline service station(s).

The geophysical investigation did not identify any anomalies on the middle parcel.

3.2 LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT (2006)

As noted, a limited Phase II ESA was conducted in May and June 2006 in connection with a potential sale of the Property to assess the potential presence of GRO, DRO, ORO, mineral oil,



VOCs, and lead in soil and shallow groundwater (Kleinfelder 2006b). The limited Phase II ESA included the following activities:

- Advancing six borings (SB-1 through SB-4, GP-1, and GP-2) to total depths ranging from 13 to 29 feet bgs. Three borings were completed on the northern parcel and three were completed on the middle parcel.
- Completing five of the six borings as groundwater monitoring wells (MW-1 through MW-5). Two monitoring wells were installed on the northern parcel and three were installed on the middle parcel.
- Field screening soil encountered in the borings for potential indications of VOC and/or petroleum hydrocarbon contamination. Field screening consisted of observing soil for evidence of staining and screening for the presence of VOC vapors using a hand-held photoionization detector (PID).
- Collecting two soil samples from two borings (one sample each from borings GP-1 and GP-2) and analyzing the samples for VOCs by EPA Method 8260; GRO by Northwest Method NWTPH-Gx; DRO, ORO, and mineral oil by Northwest Method NWTPH-Dx; and/or lead by EPA Method 7420.
- Collecting four groundwater samples from three monitoring wells (MW-1, MW-4, and MW-5) (groundwater was not encountered in monitoring wells MW-2 or MW-3), and analyzing the samples for VOCs by EPA Method 8260, GRO by Northwest Method NWTPH-Gx, DRO and ORO by Northwest Method NWTPH-Dx, and/or dissolved lead by EPA Method 7421.
- Surveying the top-of-casing elevations of monitoring wells MW-1 through MW-5 relative to an arbitrary benchmark with an assumed elevation of 100 feet above mean sea level.

Drilling services were performed by Boart Longyear/Holt Drilling, Inc. of Fife, Washington. Laboratory analytical services were performed by ESN Northwest of Olympia, Washington and Advanced Analytical Laboratory of Redmond, Washington.

3.3 SUPPLEMENTAL PHASE II ENVIRONMENTAL SITE ASSESSMENT (2006)

A supplemental Phase II ESA was conducted in August 2006 (Kleinfelder 2006c) to further assess the potential presence of VOCs, GRO, DRO, ORO, mineral oil, and lead in soil and shallow groundwater on the Property. The supplemental Phase II ESA included the following activities:

- Advancing three borings (GP-3 through GP-5) to total depths ranging from 12 to 17 feet bgs. Two borings were completed on the southern parcel and one was completed on the northern parcel.
- Completing the three borings as groundwater monitoring wells (MW-6 through MW-8). Two monitoring wells were installed on the southern parcel and one was installed on the northern parcel.



- Field screening soil encountered in the borings for potential indications of VOC and/or petroleum hydrocarbon contamination. Field screening consisted of sheen testing, observing soil for evidence of staining or odors, and screening for the presence of VOC vapors using a hand-held PID.
- Collecting three soil samples from three borings (one sample each from borings GP-3 through GP-5) and analyzing the samples for VOCs by EPA Method 8260; GRO by Northwest Method NWTPH-Gx; DRO, ORO, and mineral oil by Northwest Method NWTPH-Dx; and lead by EPA Method 7420.
- Collecting four groundwater samples from four monitoring wells (MW-3 and MW-6 through MW-8) and analyzing the samples for VOCs by EPA Method 8260, GRO by Northwest Method NWTPH-Gx, DRO and ORO by Northwest Method NWTPH-Dx, and/or dissolved lead by EPA Method 7421.
- Surveying the top-of-casing elevations of monitoring wells MW-6 through MW-8 relative to an arbitrary benchmark with an assumed elevation of 100 feet above mean sea level.

Drilling services were performed by Boart Longyear/Holt Drilling, Inc. Laboratory analytical services were performed by ESN Northwest and Spectra Laboratories of Tacoma, Washington.

3.4 ADDITIONAL SUBSURFACE EXPLORATION (2007)

Additional subsurface exploration was conducted in January and February 2007 by G-Logics (2007) for the potential purchaser to further characterize the nature and extent of chlorinated VOC and petroleum hydrocarbon contamination identified on the Property during the limited and supplemental Phase II ESAs conducted in 2006. The additional subsurface exploration included the following activities:

- Advancing 18 borings (GLP-01 through GLP-18) to total depths ranging from 6 to 26 feet bgs. Seven borings were completed on the southern parcel, two were completed on the middle parcel, seven were completed on the northern parcel, and two were completed immediately south of the southern parcel. A UST was encountered at a depth of approximately 18 inches below the basement floor of the warehouse building on the southern parcel, at the location of boring GLP-07 (Figure 3). The UST appeared to be used for the storage of heating oil.
- Completing 10 of the 18 borings as groundwater monitoring wells (MW-9 through MW-18). Three monitoring wells were installed on the southern parcel, two were installed on the middle parcel, three were installed on the northern parcel, and two were installed immediately south of the southern parcel.
- Field screening soil encountered in the borings for potential indications of VOC and/or petroleum hydrocarbon contamination. Field screening consisted of sheen testing and observing soil for evidence of staining or odors.



- Collecting 35 soil samples from 17 borings (1 to 3 samples each from borings GLP-01 through GLP-06 and GLP-08 through GLP-18) and analyzing the samples for VOCs by EPA Method 8260B; GRO by Northwest Method NWTPH-Gx; DRO and ORO by Northwest Method NWTPH-Dx; and/or benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B.
- Collecting a sediment sample from the floor-drain sump in the basement of the warehouse building on the southern parcel and analyzing the sample for VOCs by EPA Method 8260B; GRO by Northwest Method NWTPH-Gx; DRO and ORO by Northwest Method NWTPH-Dx; polychlorinated biphenyls (PCBs) by EPA Method 8082; and arsenic, cadmium, chromium, lead, and mercury by EPA 7000 Series Methods.
- Collecting one reconnaissance groundwater sample from boring GLP-07 and analyzing the sample for VOCs by EPA Method 8260B; GRO by Northwest Method NWTPH-Gx; and DRO, ORO, and mineral oil by Northwest Method NWTPH-Dx.
- Collecting 17 groundwater samples from 17 monitoring wells (MW-1 through MW-4 and MW-6 through MW-18) and analyzing the samples for VOCs by EPA Method 8260B; GRO by Northwest Method NWTPH-Gx; and/or DRO, ORO, and mineral oil by Northwest Method NWTPH-Dx.
- Surveying the top-of-casing elevations of monitoring wells MW-1 through MW-18 relative to a benchmark with a known elevation above mean sea level (North American Vertical Datum of 1988).

Drilling services were performed by Cascade Drilling of Woodinville, Washington and Pacific Northwest Probe and Drilling of Milton, Washington. Laboratory analytical services were performed by Libby Environmental, Inc. of Olympia, Washington, and Advanced Analytical Laboratory.

3.5 GROUNDWATER SAMPLING (2013)

Groundwater samples were collected on behalf of the Property owner by the Riley Group in February 2013 from the existing monitoring wells on the Property (Kleinfelder 2006; G-Logics 2007) to obtain current groundwater quality data following the previous groundwater sampling in 2006 and 2007. The February 2013 sampling event (Riley Group 2013) consisted of collecting 17 groundwater samples from 17 monitoring wells (MW-1 through MW-4 and MW-6 through MW-18; monitoring well MW-5 could not be located) and analyzing the samples for VOCs by EPA Method 8260C, GRO by Northwest Method NWTPH-Gx, and DRO and ORO by Northwest Method NWTPH-Dx.

In accordance with the Ecology (2011) *Guidance for Remediation of Petroleum Contaminated Sites*, a silica gel cleanup procedure was not used to remove non-petroleum organics from most of the groundwater samples analyzed by Northwest Method NWTPH-Dx. However, for comparison purposes, the groundwater samples collected from monitoring wells MW-6 and MW-9 on the northern parcel were analyzed both with and without silica gel cleanup, due to the potential



presence of buried wood debris on the northern and middle parcels (associated with the former lumberyard on and adjacent to the middle parcel) that could bias the NWTPH-Dx results.

Laboratory analytical services were performed by Friedman & Bruya, Inc. of Seattle, Washington.

3.6 SUPPLEMENTAL SOIL AND GROUNDWATER SAMPLING (2017 AND 2018)

In December 2017 and April, May, August, and October 2018, Farallon conducted supplemental soil and groundwater sampling on and off the Property. The purpose of the supplemental sampling was to further characterize the nature and extent of chlorinated VOC and petroleum hydrocarbon contamination identified on the Property during the previous field investigations. The supplemental soil and groundwater sampling included the following activities:

- Advancing five borings (MW-19 through MW-21, FB-22, and FB-23) to total depths ranging from 20 to 45 feet bgs. Borings FB-22 and FB-23 were completed on the northern parcel, borings MW-19 and MW-21 were completed as groundwater monitoring wells on the middle parcel, and boring MW-20 was completed as a groundwater monitoring well to the east of the Property on the sidewalk along the eastern side of Rainier Avenue South across from the middle parcel.
- Field screening soil encountered in the borings for potential indications of VOC and/or petroleum hydrocarbon contamination. Field screening consisted of observing soil for evidence of staining or odors and screening for the presence of VOC vapors using a hand-held PID.
- Collecting 19 soil samples from 5 borings (3 to 4 samples each from borings MW-19 through MW-21, FB-22, and FB-23) and analyzing the samples for GRO by Northwest Method NWTPH-Gx, DRO and ORO by Northwest Method NWTPH-Dx, BTEX by EPA Method 8021B, and/or VOCs by EPA Method 8260C.
- Collecting 35 groundwater samples from 18 monitoring wells (MW-2 through MW-4, MW-6 through MW-9, and MW-11 through MW-21) and analyzing the samples for VOCs by EPA Method 8260C, GRO by Northwest Method NWTPH-Gx, DRO and ORO by Northwest Method NWTPH-Dx, BTEX by EPA Method 8021B, and/or 1,2-dibromoethane by EPA Method 8011. Sixteen groundwater samples were collected in December 2017, one was collected in May 2018, and eighteen were collected in October 2018.

Drilling services were performed by Holt Services, Inc. of Edgewood, Washington. Laboratory analytical services were performed by OnSite Environmental Inc. of Redmond, Washington. Farallon surveyed the top-of-casing elevations of monitoring wells MW-19 through MW-21 relative to a previously established benchmark with a known elevation above mean sea level (North American Vertical Datum of 1988) on May 9, 2019.



3.7 INDOOR AND OUTDOOR AIR SAMPLING (2019)

On July 16, 2019, pursuant to a request by Ecology (2019c), Farallon conducted crawl space, basement, indoor, and outdoor air sampling to evaluate potential impacts to indoor air quality due to the vapor intrusion risk posed by the soil and groundwater contamination. The investigation is summarized in Farallon's 2019 letter report submitted to Ecology, which was accepted and approved.

As described in Farallon's letter report, on the day of sampling, none of the buildings on the Property had operational heating, ventilating, and air conditioning (HVAC) systems. The absence of a working HVAC system has the potential to bias results higher than those obtained under typical working conditions. Weather conditions, including barometric pressure, precipitation, and wind speed and direction, were monitored before and during sampling. These conditions also have the potential to affect the interpretation of sample results.

As depicted on Figure 3, indoor air sample IA-1 was collected from the first floor of the convenience store storage room at 5015 Rainier Avenue South. Indoor air samples IA-2 and IA-6 were collected from the first floor in the front and back of the commercially leased portion of the warehouse building at 5021 Rainier Avenue South, respectively. Indoor air samples IA-3 through IA-5 were collected from the basement crawl space at the front of the commercially leased portion of the warehouse building, the former automotive maintenance and repair facility basement, and the basement crawl space at the back of the commercially leased portion of the warehouse building, respectively (Figure 3). Indoor air samples IA-1 through IA-6 were collected within the typical average worker's breathing space at an elevation of approximately 4 to 6 feet above the floor.

Outdoor air sample OA-1 was collected at a central location at the Property between the convenience store and warehouse building at an elevation of approximately 4 feet above the ground surface to assess background ambient air concentrations (Figure 3). During the vapor intrusion assessment, concentrations of COCs detected in outdoor ambient air typically are subtracted from indoor air sampling data as background concentrations. Sampling was performed using 6-liter Summa canisters with flow controllers calibrated to collect an air sample over a period of approximately 8 hours, the equivalent of a typical work shift for a commercial business employee. Evaluation of vapor intrusion risk typically targets worker exposure under a commercial setting because the duration of a worker's time at a site usually is considerably longer than that of visitors and patrons. Sampling was discontinued after approximately 8 hours as intended. The final pressure measured in each Summa canister had the recommended vacuum in each canister that is necessary to ensure sample integrity.

Upon conclusion of indoor and outdoor air sample collection, the Summa canisters were labeled, sealed, packed into their original shipping containers, and returned to Friedman & Bruya, Inc. for laboratory analysis. The indoor and outdoor air samples were analyzed for volatile constituents of concern detected in groundwater samples at concentrations exceeding MTCA Method B screening levels for indoor air, including TCE, vinyl chloride, 1,2-DCA, and 1,2-DCP by EPA Method TO-15 Selective Ion Mode, and extractable petroleum hydrocarbons by Massachusetts Department of



Environmental Protection Method MA-APH to achieve the reporting limits necessary for comparison to regulatory action levels for indoor air.

According to weather data obtained from the University of Washington Department of Atmospheric Sciences and the NASA Information Infrastructure Technology and Applications Program (no date), weather conditions during sampling consisted of overcast clouds, with an average temperature of 78 degrees Fahrenheit. According to the Seattle-Tacoma International Airport weather station data for July 16, 2019, winds from the north to the south were estimated at approximately 5 miles per hour. Barometric pressure at the time of arrival at the Property and at the conclusion of sampling was approximately 30.0 inches of mercury with minor fluctuating trends throughout the day. Weather conditions during sampling were recorded to assist in the evaluation of factors that may affect sampling results. Weather conditions at the time of sampling were conducive to collecting representative indoor air samples and are not anticipated to have biased sample results.

3.8 HAZARDOUS BUILDING MATERIALS SURVEY

Med-Tox Northwest (2019) conducted a building materials survey from August 1 through 6, 2019 to identify potential hazardous materials present in the two buildings on the southern and middle parcels. In part, this survey was used to assist in the FS analysis for selection of the preferred cleanup alternative for the Property. The survey included identification and testing for asbestos, lead-based paint, chlorofluorocarbons, PCBs, and mercury-containing materials that may be released during the proposed cleanup actions at or beneath the two buildings on the Property (Appendix A). WAC 296-155-775 requires identification and abatement of asbestos and hazardous materials and potential associated hazards prior to any renovation or building demolition activities. Asbestos was identified on duct insulation and flooring in the warehouse building on the southern parcel and assumed to be in the roofing material of the building. No asbestos-containing materials were identified in the building on the middle parcel.

Lead-based paint was identified on interior and exterior walls, ceiling, or trim at both buildings present on the Property. Chlorofluorocarbons were not identified but potentially may be present in one window-mounted air-conditioning unit observed in the middle parcel building. All light fixtures are assumed to contain PCBs and light tubes are assumed to contain mercury. PCBs were confirmed in paint present on surfaces at the southern parcel warehouse building, but not in the middle parcel building. Some areas of the buildings (e.g., attics and crawl spaces) and interiors of the walls were not accessible during the survey.

3.9 SUPPLEMENT SOIL AND GROUNDWATER SAMPLING (2021)

In April and August 2021, Farallon conducted supplemental soil and groundwater sampling on and off the Property. The purpose of the supplemental sampling was to further characterize the nature and extent of chlorinated VOC and petroleum hydrocarbon contamination identified on the Property during previous field investigations and to facilitate the planning and design of an interim



remedial action to clean up the primary source of chlorinated VOCs. The supplemental soil and groundwater sampling including the following activities:

- Advancing six borings (FB-24 through FB-29) to total depths ranging from 8.5 to 15 feet below the basement floor on April 13 and 14, 2021. Borings FB-24 through FB-29 were completed on the southern parcel in the basement of the warehouse building proximate to the former floor-drain sump.
- Field screening soil encountered in the borings for potential indications of VOC and/or petroleum hydrocarbon contamination. Field screening consisted of observing soil for evidence of staining or odors and screening for the presence of VOC vapors using a hand-held PID.
- Collecting 12 soil samples from 5 borings (2 to 3 samples each from borings FB-24 through FB-28) and analyzing the samples for VOCs by EPA Method 8260D. Soil samples from contingency boring FB-29 were not analyzed as the results from boring FB-25 provided sufficient information to define the extent of VOC contamination in soil in northerly direction.
- Collecting 17 groundwater samples from monitoring wells MW-2, MW-3, MW-6 through MW-9, and MW-11 through MW-21 and analyzing the samples for VOCs by EPA Method 8260D, GRO by Northwest Method NWTPH-Gx, DRO and ORO by Northwest Method NWTPH-Dx, and BTEX by EPA Method 8260D on August 9 and 10, 2021.

Drilling services were performed by Cascade Drilling of Woodinville, Washington. Laboratory analytical services were performed by OnSite Environmental Inc. of Redmond, Washington.



4.0 REMEDIAL INVESTIGATION RESULTS

This section presents groundwater-level elevation data, describes the nature and extent of chlorinated VOC and petroleum contamination in soil and groundwater on the Property, and provides the results from the air sampling to evaluate the vapor intrusion pathway. The information presented in this section is based on the results of the previous sampling and investigation activities described in Section 3.0, Remedial Investigation Results, including the laboratory analytical results for the 71 soil samples, 100 groundwater samples, and 7 air samples analyzed since 2006.

The nature and extent of chlorinated VOC and petroleum contamination was evaluated by screening the soil and groundwater analytical data against MTCA Method A and standard Method B (direct-contact pathway) cleanup levels (WAC 173-340-704 and 173-340-705). The nature and extent of these contaminants in soil and groundwater are described in Sections 4.2 and 4.3.

Four soil samples and five groundwater samples were analyzed for lead. Lead was not detected at concentrations exceeding the MTCA Method A cleanup level in soil and was not detected in groundwater.

Laboratory analytical reports from the supplemental soil, groundwater, and air sampling conducted by Farallon in 2017 through 2019 and in 2021 are provided in Appendix C. Laboratory analytical reports from the field investigations conducted prior to 2017 are provided in previous reports prepared by Kleinfelder (2006b, 2006c), G-Logics (2007), and Riley Group (2013).

4.1 GROUNDWATER LEVELS AND FLOW DIRECTION

Depth to groundwater was measured at monitoring wells during the field investigations using an electronic water-level meter (Table 1). Groundwater elevations were calculated by subtracting the measured depths to groundwater from the surveyed elevations of the tops of the monitoring well casings.

Figure 4A presents a groundwater elevation contour map prepared using the groundwater-level data collected by Farallon in October 2018. The groundwater elevation contours indicate that groundwater generally flows from south to north on the southern parcel, from southwest to northwest on the middle parcel, and from northeast to southwest on the northern parcel. The horizontal hydraulic gradient in October 2018 ranged from approximately 0.02 to 0.06 foot per foot. Groundwater elevations and flow direction calculated from the August 2021 groundwater monitoring and sampling event were consistent with the October 2018 flow direction and are presented on Figure 4B.



4.2 NATURE AND EXTENT OF CONTAMINATION IN SOIL

4.2.1 Chlorinated Volatile Organic Compounds

TCE or its breakdown product, vinyl chloride, were detected at concentrations exceeding MTCA Method A or B cleanup levels in soil samples collected from beneath the warehouse basement floor on the southern parcel in boring GP-4 at a depth of 8 feet, boring GLP-13 at a depth of 4 feet, boring FB-26 at a depth of 10 feet, and boring FB-28 at a depth of 6 feet adjacent to the floor-drain sump (Table 2, Figure 5). TCE also was detected at a concentration exceeding the MTCA Method A cleanup level in a soil sample collected from boring MW-19 at a depth of 15 feet bgs in the unpaved parking lot on the middle parcel (Table 2). At other depths within these five borings and at other boring locations, chlorinated VOCs either were not detected in soil or were detected at concentrations less than MTCA Method A or B cleanup levels. The maximum concentration of TCE detected in soil was 0.88 milligrams per kilogram (mg/kg) in boring FB-26 and the maximum concentration of vinyl chloride detected in soil was 0.77 mg/kg in boring GLP-13. No odors were noted on the boring logs for borings GP-4, GLP-13, FB-26, FB-28, or MW-19 (Appendix B). Figure 5 shows the estimated areal extent of TCE and vinyl chloride in soil at concentrations exceeding MTCA Method A cleanup levels.

The soil analytical data from borings GP-4, GLP-13, FB-26, and FB-28 suggest that TCE and vinyl chloride concentrations exceeding the MTCA Method A cleanup levels are present in soil at depths up to 10 feet beneath the basement floor and concentrations less than the MTCA Method A cleanup levels are present at depths greater than 10 feet below the basement floor. The basement floor is approximately 4 to 8 feet below the ground surface surrounding the warehouse. At boring MW-19, located in the gravel parking area of the middle parcel, TCE was detected at a concentration exceeding the MTCA Method A cleanup level in the soil sample collected at 15 feet bgs, likely due to the elevated TCE concentrations in contaminated groundwater at this location (Table 2, Figure 5). Cross-sections depicting the general lithology and hydrogeology of the Property and the estimated vertical extent of chlorinated VOC concentrations exceeding MTCA cleanup levels in soil and/or groundwater are presented on Figures 6 and 7. The locations of the cross-sections are shown on Figure 3.

4.2.2 Petroleum Hydrocarbons

DRO, ORO, GRO, and/or benzene were detected at concentrations exceeding MTCA Method A cleanup levels in soil samples collected from borings GP-3, GLP-05, GLP-18, and FB-23 on the northern parcel (Table 3). At other boring locations, petroleum hydrocarbons either were not detected in soil or were detected at concentrations less than MTCA Method A cleanup levels. Figure 8 shows the estimated areal extent of DRO, ORO, and GRO in soil at concentrations exceeding MTCA Method A cleanup levels.

The highest petroleum hydrocarbon concentrations in soil were detected in 2007 in boring GLP-05 at depths between 5 and 12 feet bgs. The maximum concentrations of DRO, ORO, GRO, and benzene detected in soil at this location were 3,520; 6,800; 4,800; and 1.15 mg/kg, respectively. Boring GLP-05 was completed as monitoring MW-10, which is likely within the footprint of the



former first-generation service station building on the northern parcel that operated from at least 1927 until approximately 1953. The boring log for boring GLP-05 and monitoring well MW-10, completed in 2007, noted that a sheen and petroleum-like odors were observed at depths between 4 and 20 feet bgs (Appendix B). The GRO concentration detected in the soil sample collected from boring GLP-05 at a depth of 18 feet bgs (Table 3) suggests that GRO concentrations exceeding the MTCA Method A cleanup level may be present at depths greater than 18 feet bgs at this location. Cross-sections depicting the general lithology and hydrogeology of the Property and the estimated vertical extent of DRO, ORO, GRO, and/or benzene concentrations exceeding MTCA cleanup levels in soil and/or groundwater are presented on Figures 9 and 10. The locations of the cross-sections are shown on Figure 3.

GRO and benzene concentrations were previously detected in the soil sample collected from boring GP-3 at a depth of 10 feet bgs (Table 3). However, more recent soil sampling results at boring FB-22 proximate to boring GP-3 indicate that DRO, ORO, and GRO are not present at concentrations exceeding MTCA Method A cleanup levels in soil samples collected from depths of 10, 15, and 20 feet bgs.

The GRO concentration detected in the soil sample collected from boring GLP-18 at a depth of 15 feet bgs (Table 3) suggests that GRO concentrations exceeding the MTCA Method A cleanup level may be present at depths greater than 15 feet bgs at this location.

The soil analytical data from boring FB-23 indicate that GRO concentrations exceeding the MTCA Method A cleanup level in soil are limited to the vertical interval ranging from 10 to 17 feet bgs at this location (Table 3).

4.3 NATURE AND EXTENT OF CONTAMINATION IN GROUNDWATER

4.3.1 Chlorinated Volatile Organic Compounds

The chlorinated VOCs TCE, cis-DCE, 1,2-DCA, vinyl chloride, and/or 1,2-DCP were detected at concentrations exceeding MTCA Method A or B cleanup levels in groundwater samples collected from boring FB-22 on the northern parcel and groundwater monitoring wells MW-3 through MW-5, MW-7, MW-11, MW-12, MW-16, MW-17, MW-19, and MW-21 on the southern and middle parcels (Table 4). Chlorinated VOCs were not detected in groundwater samples from any other borings or monitoring wells, including monitoring well MW-20, installed east of the Property across Rainier Avenue South. Figure 11 shows the estimated areal extent of chlorinated VOCs in groundwater at concentrations exceeding MTCA Method A or B cleanup levels based on the groundwater sampling conducted in 2017, 2018, and 2021.

The highest chlorinated VOC concentrations in groundwater were detected at monitoring well MW-7 in the basement of the warehouse building on the southern parcel, adjacent to the floor-drain sump. The maximum concentrations detected in groundwater at monitoring well MW-7 were 51 micrograms per liter ($\mu\text{g}/\text{l}$) of TCE and 11 $\mu\text{g}/\text{l}$ of 1,2-DCA in 2006; 220 $\mu\text{g}/\text{l}$ of cis-DCE and 593 $\mu\text{g}/\text{l}$ of vinyl chloride in 2013; and 3.9 $\mu\text{g}/\text{l}$ of 1,2-DCP in 2018 (Table 4).



The groundwater analytical data from monitoring wells on the Property indicate that chlorinated VOC concentrations exceeding MTCA Method A or B cleanup levels extend from the vicinity of monitoring well MW-12 near the southern Property boundary north-northwestward to the northern boundary of the middle parcel (Figure 11). The chlorinated VOC vinyl chloride was detected in 2018 in a reconnaissance groundwater sample collected by Farallon at approximately 13 feet bgs in boring FB-22 on the northern parcel. Vinyl chloride or other chlorinated VOCs were not detected in groundwater samples collected from adjacent monitoring well MW-6 screened from 9 to 14 feet bgs or in any other monitoring wells or borings constructed on the northern parcel.

Although most of the groundwater monitoring wells on the Property are less than 20 feet deep, monitoring well MW-21, on the middle parcel, was screened from 35 to 45 feet bgs. Monitoring well MW-21 is the deepest monitoring well at the Property and was installed to evaluate the depth of groundwater contamination. Vinyl chloride was detected at a concentration of 7.9 $\mu\text{g/l}$ in a groundwater sample collected from monitoring well MW-21 in October 2018, which exceeds the MTCA Method A cleanup level (Table 4; Figure 11). This indicates that chlorinated VOC concentrations exceeding MTCA cleanup levels are present in groundwater to a depth of at least 35 to 45 feet bgs. The estimated vertical extent of chlorinated VOC concentrations exceeding MTCA cleanup levels in soil and groundwater is depicted on Figures 9 and 10. The locations of the cross-sections are shown on Figure 3.

4.3.2 Petroleum Hydrocarbons

DRO, ORO, and/or GRO were detected at concentrations exceeding MTCA Method A cleanup levels in reconnaissance groundwater samples collected from boring FB-22 on the northern parcel and boring GLP-07 on the southern parcel, and in groundwater samples collected from monitoring wells MW-6 and MW-10 on the northern parcel (Table 5). In addition, benzene was detected at a concentration exceeding the MTCA Method A cleanup level in a groundwater sample collected from monitoring well MW-19 in October 2018 but was less than the MTCA Method A cleanup level in August 2021. At other boring and monitoring well locations, petroleum hydrocarbons either were not detected in groundwater or were detected at concentrations less than MTCA Method A cleanup levels. Figure 12 shows the estimated areal extent of DRO, ORO, GRO, and benzene in groundwater at concentrations exceeding MTCA Method A cleanup levels.

The highest petroleum hydrocarbon concentrations in groundwater were detected at monitoring well MW-10, which is likely within the footprint of the former first-generation service station building that existed on the northern parcel. The maximum concentrations of DRO, ORO, and GRO detected in groundwater at monitoring well MW-10 in January 2007 were 283,000; 230,000; and 298,000 $\mu\text{g/l}$, respectively. In February 2013, DRO, ORO, and GRO were detected in groundwater at monitoring well MW-10 at significantly lower concentrations of 39,000; 53,000; and 1,700 $\mu\text{g/l}$, respectively (Table 5).

Light nonaqueous-phase liquid (LNAPL) was observed in monitoring well MW-10 during groundwater monitoring events in February 2007, December 2017, October 2018, and August 2021. In addition, LNAPL globules were observed in groundwater at boring GLP-07 in 2007 at



the location of the fuel-oil UST in the basement of the warehouse building on the southern parcel (Appendix B).

The groundwater analytical data from reconnaissance borings and monitoring wells advanced on the Property demonstrate that DRO, ORO, GRO, and/or benzene concentrations exceed MTCA Method A cleanup levels for groundwater in the immediate vicinity of monitoring wells MW-10 and MW-19 and borings FB-22 and GLP-07 (Figure 12). Petroleum compounds did not exceed MTCA cleanup levels in groundwater samples collected from monitoring well MW-20, east of the Property across Rainier Avenue South. Cross-sections depicting the general lithology and hydrogeology of the Property and the estimated vertical extent of DRO, ORO, GRO, and/or benzene concentrations exceeding MTCA cleanup levels in soil and groundwater are presented on Figures 9 and 10. The locations of the cross-sections are shown on Figure 3.

DRO and ORO were detected at concentrations of 280 to 600 $\mu\text{g/l}$ in the groundwater samples collected from monitoring wells MW-6 and MW-9 that were analyzed without silica gel cleanup procedures, but DRO and ORO were not detected in the samples collected from these wells that were analyzed with silica gel cleanup (Table 4). This suggests that the results from the non-silica gel cleanup analyses of the groundwater samples collected from monitoring wells MW-6 and MW-9 may have been biased high by the presence of non-petroleum organics in the samples.

4.4 SUMP SEDIMENT SAMPLE ANALYTICAL RESULTS

Chlorinated VOCs, petroleum hydrocarbons, and several metals were detected in the sediment sample collected from the beneath the basement floor in the floor-drain sump of the warehouse building on the southern parcel in January 2007 (Tables 6 and 7). PCBs were not detected in the sump sediment sample.

4.5 INDOOR AND OUTDOOR AIR SAMPLE ANALYTICAL RESULTS

Concentrations of detected COCs in outdoor air were subtracted from indoor air concentrations. The corrected indoor air sampling results were then compared to MTCA Method B screening levels for indoor air for a commercial setting to evaluate whether the vapor intrusion is a complete pathway. The MTCA Method B screening levels modified for a commercial setting are the applicable screening levels to evaluate the vapor intrusion pathway under current use of the Property buildings.

4.5.1 Chlorinated Volatile Organic Compounds

1,2-DCA was detected at indoor-corrected concentrations of 0.36 and 0.59 micrograms per cubic meter ($\mu\text{g/m}^3$) in indoor air samples IA-1 (convenience store) and IA-6 (commercially leased portion of the warehouse building), respectively, which exceed the MTCA Method B indoor air screening level for commercial exposure calculated at 0.321 $\mu\text{g/m}^3$ (Table 8; Figure 3). 1,2-DCA also was detected at indoor-corrected concentration of 0.31 $\mu\text{g/m}^3$ in indoor air sample and IA-2 (commercially leased portion of the warehouse building), which is less than the MTCA Method B indoor air screening level for commercial exposure. 1,2-DCA was detected at an indoor-corrected



concentration of $0.0 \mu\text{g}/\text{m}^3$ in indoor air samples IA-3 through IA-5. 1,2-DCA was detected at a concentration of $0.057 \mu\text{g}/\text{m}^3$ in the outdoor air control sample.

TCE was detected in the basement crawl space of the commercially leased portion of the warehouse building at indoor-corrected concentrations of 0.62 , 0.59 , and $0.69 \mu\text{g}/\text{m}^3$ in indoor air samples IA-3, IA-4, and IA-5, respectively, which are less than the MTCA Method B indoor air screening level for commercial exposure of $1.1 \mu\text{g}/\text{m}^3$ ¹ (Table 8; Figure 3). TCE was not detected at a concentration exceeding the laboratory practical quantitation limit (PQL) in indoor air samples IA-1, IA-2, or IA-6, which were collected on the first floor of the commercially leased portion of the warehouse building and the convenience store, or in the outdoor air control sample.

Vinyl chloride was detected at an indoor-corrected concentration of $0.56 \mu\text{g}/\text{m}^3$ in indoor air sample IA-4 (basement crawl space of the commercially leased portion of the warehouse building), which is less than the MTCA Method B indoor air screening level for commercial exposure (Table 8; Figure 3). Vinyl chloride was not detected at a concentration exceeding the laboratory PQL in any of the remaining indoor air samples or the outdoor air control sample.

1,2-DCP was not detected at a concentration exceeding the laboratory PQL in any of the indoor air samples or the outdoor air control sample (Table 8; Figure 3).

4.5.2 Petroleum Hydrocarbons

C5-C8 and C9-C12 aliphatics were detected at concentrations less than the MTCA Method B indoor air cleanup level for residential exposure scenario in all the indoor air samples and the outdoor air control sample (Table 9; Figure 3). The MTCA Method B screening level for a commercial setting has not been calculated for these compounds because the MTCA Method B cleanup levels for residential exposure are more conservative and had not been exceeded in any air sampling results. C9-10 aromatics were detected a concentration of $33 \mu\text{g}/\text{m}^3$ in indoor air sample IA-4 (basement crawl space of the commercially leased portion of the warehouse building), which is less than the MTCA Method B indoor air cleanup level for residential exposure of $182 \mu\text{g}/\text{m}^3$. C9-C10 aromatics were not detected a concentration exceeding the laboratory PQL in the remaining indoor air samples or the outdoor air control sample. The total corrected TPH values, which are the sum of the C5-C8 and C9-C12 aliphatics and the C9-C10 aromatics, were compared to the Property-specific cleanup level calculated in accordance with Ecology (2018) Implementation Memorandum No. 18. Total indoor-corrected TPH concentrations for each air

¹ MTCA Method B cleanup level calculation with modified exposure parameters adjusted for commercial exposure per Section 750 of MTCA. MTCA Method B indoor air screening level for commercial use has been revised following issuance of Ecology's *Trichloroethylene (TCE): Deriving Cleanup Levels under the Model Toxics Control Act (MTCA), Supporting material for Cleanup Levels and Risk Calculation (CLARC)* dated January 2020. The calculated MTCA Method B indoor air screening level for commercial use of $1.9 \mu\text{g}/\text{m}^3$ referenced in the letter regarding Vapor Intrusion Assessment, Morningside Acres Tracts, 5001, 5015 and 5021 Rainier Avenue South, Seattle, Washington dated September 5, 2019, prepared by Farallon (2019) and submitted to Ecology, has been recalculated to $1.1 \mu\text{g}/\text{m}^3$ for this report.



sample were less than the calculated MTCA Method B site-specific cleanup level for residential exposure.

The laboratory analytical data package was reviewed by Farallon; laboratory quality assurance and quality control testing results indicated that the reported data were representative. The laboratory analytical report is included in Appendix C.



5.0 CONCEPTUAL SITE MODEL

This section presents the conceptual site model for the Property. The conceptual site model was developed based on the current and historical uses of the Property, the results of the RI, and the current and potential future land and resource uses in the vicinity of the Property.

5.1 SOURCES OF CONTAMINATION

No known sources of soil or groundwater contamination were identified near or hydraulically up-gradient of the Property during the 2005 Phase I ESA or subsequent soil and groundwater sampling activities from 2006 through 2021. The inferred sources of contamination at the Property are described below.

5.1.1 Chlorinated Volatile Organic Compound Contamination

The chlorinated VOC contamination identified in soil and groundwater on the Property appear to be associated with historical releases of chlorinated solvents such as TCE and 1,2-DCP during the former automotive maintenance and repair operations in the warehouse building on the southern parcel, when industrial solvents were used for parts cleaning or other purposes. As discussed in Section 4.4, Sump Sediment Sample Analytical Results, chlorinated VOCs were detected in the sediment sample collected in 2007 from the basement subsurface floor-drain sump in the warehouse building and in soil and groundwater proximate to the floor-drain sump. This suggests that releases of chlorinated solvents to soil and groundwater originated from the floor-drain sump. The presence of the TCE breakdown products cis-DCE, 1,2-DCA, and vinyl chloride in soil and/or groundwater on the Property indicates that the chlorinated solvents have migrated from the floor-drain sump area and are undergoing natural degradation through reductive dechlorination as the solvents are transported away from the source areas via groundwater migration.

5.1.2 Petroleum Contamination

The likely sources of the petroleum hydrocarbon contamination identified in soil and groundwater on the Property are historical releases of petroleum fuels (e.g., diesel, gasoline, fuel oil) and lubricants (e.g., motor oil) associated with the former gasoline and vehicle service and repair station(s) and several underground petroleum fuel and heating oil storage tanks on one or more parcels comprising the Property.

5.2 CONSTITUENTS AND MEDIA OF CONCERN

For this RI/FS Report, the COCs are defined as those hazardous substances that were detected in soil and/or groundwater at concentrations exceeding MTCA Method A or B cleanup levels. In general, the COCs on the Property consist of chlorinated VOCs and petroleum hydrocarbons. The media of concern are defined as those environmental media in which the COCs were detected at concentrations exceeding MTCA Method A or B cleanup levels. The media of concern are soil and groundwater. The specific COCs in soil and groundwater are TCE, cis-DCE, 1,2-DCA, vinyl chloride, 1,2-DCP, DRO, ORO, GRO, and benzene.



5.3 EXPOSURE PATHWAYS AND RECEPTORS

Potential exposure pathways and receptors for the COCs identified in soil and groundwater include direct contact by humans and/or terrestrial ecological receptors (i.e., animals or plants) with contaminated soil or groundwater, and human contact with volatile COCs via vapor intrusion into occupied buildings on the Property. The potential human health and terrestrial ecological risks associated with the soil and groundwater contamination identified on the Property are discussed below.

5.3.1 Human Health Risks

The COCs identified in soil and groundwater on the Property do not pose a current risk to human health via direct contact, because currently there is no direct-contact exposure pathway to the COCs. The majority of the Property is covered by buildings or pavement, the COC concentrations exceeding MTCA cleanup levels were detected in subsurface soil at depths greater than 3 feet bgs. Drinking water for the Property and surrounding community is supplied by the City of Seattle, which obtains its municipal water supply from surface water sources at the Cedar River and Tolt River watersheds east of Seattle. Accordingly, there is no current risk of human exposure to the COCs in soil and groundwater via direct contact.

The chlorinated VOCs and volatile petroleum hydrocarbons identified in soil and groundwater potentially pose a vapor intrusion risk to occupants of current or future buildings on the Property. To assess the potential vapor intrusion risk, the concentrations of chlorinated VOCs and volatile petroleum hydrocarbons detected in shallow groundwater on the Property in 2017, 2018, and 2021 were compared to MTCA Method B groundwater screening levels for the vapor intrusion pathway (Ecology 2009), which are included in Tables 4 and 5 (soil screening levels for the vapor intrusion pathway have not been established under MTCA). The concentrations of TCE, 1,2-DCA, vinyl chloride, 1,2-DCP, and/or benzene detected in groundwater in one or more monitoring wells exceeded the MTCA Method B groundwater screening levels for vapor intrusion.

The results from the July 16, 2019 indoor and outdoor air sampling event demonstrate that concentrations of the COCs and total petroleum hydrocarbons in indoor air (corrected for contribution from the outside air) do not pose a current risk to occupants of the convenience store or bookstore in the leased portion of the warehouse. As shown on Tables 8 and 9, COC and total petroleum hydrocarbons concentrations in the indoor air samples do not exceed MTCA Method B indoor air cleanup levels for the commercial exposure scenario, with the exception of 1,2-DCA, which was detected in the back (west) room of the bookstore on the first floor of the warehouse and inside the convenience store. However, the 1,2-DCA corrected concentrations were not detected in the basement of the leased portion in the warehouse; therefore, a vapor intrusion pathway from the subsurface to the basement to the first-floor indoor air is incomplete under current commercial use of this portion of the warehouse building and no further action regarding the indoor air risk is required at this location under MTCA. In addition, the indoor air pathway for 1,2-DCA detected inside the convenience store is incomplete because the concentrations in groundwater proximate to the convenience store are an order of magnitude less than the MTCA Method B groundwater



screening level protective of indoor air. The 1,2-DCA concentrations in the convenience store are, more likely than not, also attributed to the same or similar source as the bookstore.

Existing data indicate that the vapor intrusion risk is minimal under the current commercial use of the warehouse and convenience store buildings, which Ecology (2019d) confirmed in its response to the sampling event, stating that no further assessment is needed regarding the short-term TCE toxicity at the Property. The selected cleanup action will focus on remediating soil and groundwater at the Property. The vapor intrusion pathway will be reevaluated following implementation of the cleanup action.

Potential future direct-contact risks to human health associated with the COCs identified in soil and groundwater include possible exposure of construction workers to COCs in soil or groundwater during future excavation activities, and possible exposure of local residents to COCs in groundwater, should local residents use groundwater as a drinking water source in the future. The latter exposure scenario is unlikely, as the City of Seattle is expected to continue supplying drinking water for the Property and surrounding community.

5.3.2 Terrestrial Ecological Risks

For sites where a hazardous substance has been released to soil, Ecology has developed procedures for evaluating the potential risk the release poses to terrestrial ecological receptors (WAC 173-340-7490). The purpose of the TEE is to (WAC 173-340-7490[1]):

- Determine whether a release of hazardous substances to soil may pose a threat to the terrestrial environment;
- Characterize existing or potential threats to terrestrial plants or animals exposed to hazardous substances in soil, as applicable; and
- Establish site-specific cleanup standards for the protection of terrestrial plants and animals, as necessary.

MTCA requires that one of the following actions be taken to address potential terrestrial ecological risks (WAC 173-340-7490[2]):

- Document a TEE exclusion using the criteria presented in WAC 173-340-7491;
- Conduct a simplified TEE in accordance with WAC 173-340-7492; or
- Conduct a site-specific TEE in accordance with WAC 173-340-7493.

Based on the criteria for TEE exclusion in WAC 173-340-7491(1)(c)(i), the releases at the Property are excluded from a TEE because there are less than 1.5 acres of contiguous undeveloped land within limits of the sites or within 500 feet of any area of the sites, as documented in Appendix D. No further consideration of terrestrial ecological risks is required under MTCA.



6.0 PROPOSED CLEANUP STANDARDS

MTCA requires that cleanup standards be established for sites where a release of a hazardous substance has been confirmed. As defined in WAC 173-340-200, establishing cleanup standards for a site requires specification of the following:

- Cleanup levels (i.e., hazardous substance concentrations in soil, water, air, or sediment that are determined to be protective of human health and the environment under specified exposure conditions).
- Points of compliance (i.e., the locations on the site where the cleanup levels must be attained).
- Additional regulatory requirements (if any) that apply to a cleanup action because of the type of action and/or the location of the site. These requirements are specified in applicable state and federal laws and are generally established in conjunction with the selection of a specific cleanup action.

Proposed cleanup standards for the COCs in groundwater and soil on the Property have been established in accordance with WAC 173-340-720 and 173-340-740, respectively.

6.1 PROPOSED SOIL CLEANUP STANDARDS

The following is a summary of the proposed cleanup standards for soil at the Property, including cleanup levels and points of compliance.

6.1.1 Soil Cleanup Levels

The proposed cleanup levels established for the majority of the COCs in soil are based on MTCA Method A soil cleanup levels for unrestricted land uses listed in accordance with WAC 173-340-740(2) and Table 740-1 of WAC 173-340-900. Table 740-1 does not include a Method A cleanup level for vinyl chloride. Accordingly, the proposed cleanup level established for vinyl chloride is based on the MTCA Method B cleanup level for direct-contact exposures (ingestion) (WAC 173-340-740[3][b][iii][B]).

The proposed MTCA cleanup levels for the COCs in soil at the Property are as follows:

- TCE – 0.03 mg/kg;
- Vinyl chloride – 0.67 mg/kg;
- DRO – 2,000 mg/kg;
- ORO – 2,000 mg/kg;
- GRO – 30 mg/kg; and
- Benzene – 0.03 mg/kg.



6.1.2 Point of Compliance for Soil

The proposed point of compliance for soil is throughout the Property from the ground surface to a depth of 15 feet bgs. This is the MTCA standard point of compliance for soil cleanup levels that are based on unrestricted land uses and human exposure via direct contact (WAC 173-340-740[6][d]).

6.2 PROPOSED GROUNDWATER CLEANUP STANDARDS

The following is a summary of the proposed cleanup standards for groundwater at the Property, including cleanup levels and points of compliance.

6.2.1 Groundwater Cleanup Levels

The proposed cleanup levels established for most of the COCs in groundwater are based on the MTCA Method A cleanup levels for groundwater listed in Table 720-1 of WAC 173-340-900. Table 720-1 does not include Method A cleanup levels for cis-DCE or 1,2-DCP. Accordingly, the proposed cleanup levels established for cis-DCE and 1,2-DCP are based on the MTCA standard Method B cleanup levels for direct-contact exposures (ingestion and inhalation) (WAC 173-340-720[4][b][iii]).

The proposed cleanup levels for the COCs in groundwater at the Property are as follows:

- TCE – 5 µg/l;
- cis-DCE – 16 µg/l;
- 1,2-DCA – 5 µg/l;
- Vinyl chloride – 0.2 µg/l;
- 1,2-DCP – 1.22 µg/l;
- DRO – 500 µg/l;
- ORO – 500 µg/l;
- GRO – 800 µg/l; and
- Benzene – 5 µg/l.

6.2.2 Point of Compliance for Groundwater

The proposed point of compliance for groundwater is throughout the Property from the uppermost level of the saturated zone (approximately 7 bgs) extending vertically to the lowest depth that could potentially be affected by the groundwater COCs. This is the MTCA standard point of compliance for groundwater defined in WAC 173-340-720(8)(b).



6.3 PROPOSED INDOOR AIR CLEANUP STANDARDS

The following is a summary of the proposed cleanup standards for indoor air at the Property, including cleanup levels and points of compliance.

6.3.1 Indoor Air Cleanup Levels

The proposed cleanup levels established for the COCs in indoor air are based on the MTCA Method B cleanup levels for indoor air. The COCs for indoor air include TCE, 1,2-DCA, vinyl chloride, and 1,2-DCP.

The proposed cleanup levels for the COCs in indoor air at the Property are as follows:

- TCE – 0.33 $\mu\text{g}/\text{m}^3$;
- 1,2-DCA – 0.0962 $\mu\text{g}/\text{m}^3$; and
- Vinyl chloride – 0.28 $\mu\text{g}/\text{m}^3$.

6.3.2 Point of Compliance for Indoor Air

The proposed point of compliance for indoor air is ambient air throughout the Property. This is the MTCA standard point of compliance for indoor air defined in WAC 173-340-750(6).



7.0 FEASIBILITY STUDY

This section presents the cleanup action objectives for the Property, applicable or relevant and appropriate requirements, a screening evaluation of potentially applicable remediation technologies, and a detailed evaluation of cleanup action alternatives developed for the Property. The preferred cleanup action alternative for the Property is identified in Section 7.6.

7.1 CLEANUP ACTION OBJECTIVES

The cleanup action objectives for the Property include the following:

- Protect human health by preventing exposure to concentrations of COCs in soil, groundwater, and indoor air that may pose unacceptable risks under certain exposure scenarios; and
- Satisfy Ecology requirements for a Property-specific No Further Action determination.

The proposed soil, groundwater, and indoor air cleanup levels presented in Section 6, Proposed Cleanup Standards, are based on MTCA Method A or B cleanup levels, which Ecology considers to be protective of human health under MTCA default reasonable maximum exposure scenario assumptions (i.e., unrestricted land uses and use of groundwater as drinking water). Accordingly, the cleanup action objectives will be met when the cleanup action achieves the proposed cleanup standards.

7.2 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

The evaluation of cleanup alternatives presented in this RI/FS Report considered potentially applicable chemical-, action-, and location-specific requirements. Cleanup actions conducted under MTCA must comply with applicable state and federal laws (WAC 173-340-710[1]). MTCA defines applicable state and federal laws to include legally applicable requirements and those requirements that Ecology determines are relevant and appropriate requirements.

The following laws, regulations, and other requirements are considered applicable or relevant and appropriate requirements for the cleanup action to be conducted on the Property because they encompass the cleanup action framework, including applicable or relevant cleanup standards, waste disposal criteria, documentation standards, and other applicable or relevant regulatory requirements.

- Model Toxics Control Act (Chapter 70.105D of the Revised Code of Washington [RCW 70.105D]);
- Washington State Model Toxics Control Act Cleanup Regulation (i.e., MTCA) (WAC 173-340);
- Water Quality Standards for Groundwaters of the State of Washington (WAC 173-200);
- Maximum Contaminant Levels (WAC 246-290-310);



- National Primary Drinking Water Regulations (Part 141 of Title 40 of the Code of Federal Regulations [40 CFR 141]);
- Hazardous Waste Management Act (RCW 70.105);
- Dangerous Waste Regulations (WAC 173-303);
- Solid Waste Management Laws and Regulations (RCW 70.95 and WAC 173-304, 173-350, and 173-351);
- Accreditation of Environmental Laboratories (WAC 173-50);
- State Environmental Policy Act (RCW 43.21C);
- State Environmental Policy Act Rules (WAC 197-11);
- Hazardous Waste Operations (WAC 296-843);
- Occupational Safety and Health Act (29 CFR 1910);
- Washington State General Occupational Health Standards (WAC 296-62);
- Safety Standards for Construction Work (WAC 296-155);
- Underground Storage Tanks (RCW 90.76);
- Underground Storage Tank Regulations (WAC 173-360A);
- Minimum Standards for Construction and Maintenance of Wells (WAC 173-160);
- Applicable local permits and ordinances required by the City of Seattle Municipal Code; and
- Seattle Municipal Code (SMC 25.12—Landmarks) requirements for alterations, demolition, restoration, or construction of designated ‘landmark’ buildings; or sites greater than 25 years old with significant value, heritage, or cultural significance, which require issuance of a “Certificate of Approval” by the City of Seattle Landmarks Preservation Board before or in conjunction with any construction permitting for redevelopments (SMC 25.12.670-700). A separate Certificate of Approval must also be issued by the Columbia City Application Review Committee consistent with the design review guidelines and procedures specified in SMC 25.20.050-100 for the Columbia City Landmark District.

The following guidance documents are considered relevant to the Property cleanup:

- *Guidance for Remediation of Petroleum Contaminated Sites* revised June 2016, prepared by Ecology (2011);
- *Guidance for Site Checks and Site Assessments for Underground Storage Tanks* revised April 2003, prepared by Ecology (1991);
- *Draft Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Interim Remedial Action* revised April 2018, prepared by Ecology (2009); and



- Implementation Memorandum No. 14 Regarding Updated Process for Initially Assessing the Potential for Petroleum Vapor Intrusion dated March 31, 2016 from Jeff Johnston of Ecology to Interested Persons;
- Implementation Memorandum No. 18 Regarding Petroleum Vapor Intrusion (PVI): Updated Screening Levels, Cleanup Levels, and Assessing PVI Threats to Future Buildings dated January 10, 2018 from Jeff Johnston of Ecology to Interested Persons; and
- Implementation Memorandum No. 22 Regarding Vapor Intrusion (VI) Investigations and Short-term Trichloroethene (TCE) Toxicity dated October 1, 2019 from Jeff Johnston of Ecology to Interested Persons.

7.3 REMEDIATION TECHNOLOGY SCREENING

In accordance with MTCA (WAC 173-340-350[8][b]), potentially applicable remediation technologies (cleanup action components) were screened with respect to Property-specific conditions and cleanup action requirements set forth in MTCA. The remediation technologies listed below were screened for their applicability to the soil and groundwater contamination identified on the Property. The planned cleanup of soil and groundwater contamination is expected to mitigate the potential for vapor intrusion.

- Institutional controls;
- Engineered controls;
- Monitored natural attenuation;
- Air sparging;
- Soil vapor extraction (SVE);
- In-situ chemical reduction (ISCR);
- In-situ chemical oxidation;
- In-situ enhanced bioremediation;
- In-situ thermal treatment; and
- Excavation and off-site disposal of soil.

Farallon screened each of these remediation technologies with respect to protectiveness, permanence, effectiveness, implementability, and cost (Table 10). For each technology, a numerical score was assigned to each screening criterion based on how favorably the technology was expected to perform relative to the other technologies. The technologies with the highest combined scores were retained and assembled into cleanup action alternatives. Lower-scoring technologies were not retained.



The technologies that were retained and assembled into cleanup action alternatives consist of:

- Air sparging;
- SVE;
- ISCR;
- In-situ enhanced bioremediation; and
- Excavation and off-site disposal of soil.

These technologies are briefly described below.

7.3.1 Air Sparging and Soil Vapor Extraction

Air sparging typically is used in combination with SVE. Air sparging and SVE involve the installation of a series of air sparge and SVE wells. An air compressor is used to inject air through the air sparge wells into groundwater and saturated soil in contaminant source areas and/or within the down-gradient contaminant plume to increase volatilization rates of dissolved and sorbed VOCs. An SVE blower is used to apply a vacuum to SVE wells installed in the vadose zone near the air sparge wells. The applied vacuum draws air containing VOC vapors into the SVE wells. The VOC vapors are extracted from the subsurface and treated, as necessary, prior to discharge to the atmosphere. SVE also can be effective in mitigating potential intrusion of VOC vapors into buildings above or near areas of subsurface VOC contamination.

7.3.2 In-Situ Chemical Reduction

ISCR involves injecting a reducing agent such as aqueous zero-valent iron into the subsurface through direct-push borings or injection wells. The reducing agent creates strong reducing conditions and abiotically degrades targeted contaminants to nonhazardous or less-toxic compounds by breaking chemical bonds in the contaminant's molecular structure. ISCR typically requires supporting equipment such as polyethylene mixing tanks, mixing and injection pumps, and a distribution system of manifolded pipes or hoses to convey the substrate to the injection borings or wells.

7.3.3 In-Situ Enhanced Bioremediation

In-situ enhanced bioremediation involves the injection of bioremediation-enhancing amendments into the subsurface. Typical amendments used for this application include materials that provide microbial nutrients such as hydrogen or oxygen and/or a microbial inoculum. The injected amendments stimulate microbial activity in contaminated zones and/or increase the population of microbes that degrade contaminants, thereby accelerating the rate of contaminant degradation to non-toxic compounds. The amendments typically are injected through a series of direct-push borings or injection wells. In-situ enhanced bioremediation typically requires supporting equipment such as polyethylene mixing tanks, mixing and injection pumps, and a distribution system of manifolded pipes or hoses to convey the amendments to the injection borings or wells.



7.3.4 Excavation and Off-Site Disposal of Soil

Excavation and off-site disposal of soil involves excavating and removing contaminated soil and disposing of the soil at a permitted facility off the Property. Excavation would require significant shoring, which may not be feasible unless the buildings are removed. Excavation of soil from the saturated soil zone below the groundwater table typically requires construction dewatering with temporary on-site storage and/or treatment of extracted groundwater. If contaminated groundwater is encountered during excavation of saturated-zone soil, it can be removed in conjunction with construction dewatering operations.

7.4 CLEANUP ACTION ALTERNATIVES

The technologies retained from the remediation technology screening were assembled into three cleanup action alternatives for the Property. Each cleanup action will achieve the MTCA cleanup action requirements. Alternatives 1 and 2 assume the buildings on the Property will remain and the cleanup would be conducted without any redevelopment of the Property. Alternative 3 assumes that the buildings on the Property would be demolished and cleanup would be conducted in conjunction with redevelopment. The three alternatives are described below.

7.4.1 Alternative 1 – Source Area Excavation with Air Sparging and Soil Vapor Extraction

Alternative 1 involves excavation and off-Property disposal of contaminated source area soil, combined with air sparging and SVE to treat contaminated groundwater. Excavation would require significant structural shoring of the existing buildings. Such construction and potential modifications to the existing buildings on the southern and middle parcels will require submittal and approval of an application to the Columbia City Application Review Committee, followed by a review by the City of Seattle Landmarks Preservation Board and issuance of Certificate of Approval, as described in detail in Alternative 3. Contaminated soil exceeding cleanup standards would be removed from the Property to the greatest degree technically feasible. Contaminated soil would be removed from three identified contaminant source areas: the area on the southern parcel affected by chlorinated VOCs and petroleum hydrocarbons and the two areas on the northern parcel affected by petroleum hydrocarbons (Figure 13). If contaminated groundwater (including petroleum LNAPL) is encountered in the excavations, it would be removed during the soil excavation and construction dewatering activities.

The excavation activities on the southern parcel would remove contaminated source area soil centered around the basement floor-drain sump and fuel-oil UST to a depth of approximately 20 feet bgs, or approximately 12 feet below the basement floor slab of the existing warehouse building (Figure 13). Due to limited access to the basement and low overhead clearance, there is a significant potential for structural damage to the main floor support system. Excavation activities on the southern parcel would require asbestos, lead, and PCB abatement as identified in the hazardous building materials report (Med-Tox Northwest 2019) (Appendix A). If the warehouse building is not removed, extensive structural shoring to support the building and excavation wall will be required to remove the contaminated soil under Alternative 1. Approximately 560 cubic yards of soil would be excavated from the southern parcel using a small, limited-access excavator



and a low-profile truck due to limited access to the basement. It is assumed that construction dewatering would be required, and that excavation and construction dewatering would remove all groundwater containing petroleum hydrocarbon concentrations exceeding cleanup levels proximate to the fuel-oil UST (including petroleum LNAPL, if present).

The excavation on the northern parcel would remove contaminated source area soil centered around monitoring wells MW-6 and MW-10 to depths of approximately 10 and 15 feet bgs, respectively (Figure 13). Approximately 1,830 cubic yards of soil would be excavated from the northern parcel. It is assumed that dewatering groundwater during the excavation work would be required, and structural shoring would be necessary to protect the sidewalk, the building on the middle parcel, and the building on the west-adjacent property. It also is assumed that excavation and construction dewatering would remove all groundwater on the northern parcel containing petroleum hydrocarbon and chlorinated VOC concentrations exceeding cleanup levels (including petroleum LNAPL, if present).

Excavated contaminated soil (and petroleum LNAPL, if encountered) would be disposed of at a permitted facility off the Property. The source area excavations would be backfilled with clean structural fill.

Following source area excavation and backfilling activities, an air sparging and SVE system would be installed and operated on the middle and southern parcels to treat VOC and benzene concentrations exceeding cleanup levels in groundwater over a depth interval of approximately 10 to 40 feet bgs (Figure 13). The air sparging and SVE conveyance piping would be routed underground to an on-Property air sparging and SVE system equipment compound. It is assumed that the air sparging and SVE system would operate for 5 years with periodic performance groundwater monitoring followed by 1 year of quarterly confirmation groundwater monitoring and issuance of an NFA determination by Ecology.

Alternative 1 assumes that performance groundwater monitoring would be conducted semiannually for 5 years (i.e., 10 monitoring events total), followed by 1 year of quarterly confirmational groundwater monitoring.

7.4.2 Alternative 2 – Source Area Excavation with In-Situ Chemical Reduction and In-Situ Enhanced Bioremediation

Alternative 2 is identical to Alternative 1 involving structural shoring to support existing buildings that will remain on the Property, except that ISCR and in-situ enhanced bioremediation would be used to treat contaminated groundwater instead of air sparging and SVE (Figure 14). Alternative 2 will also require approval from the City of Seattle Landmarks Preservation Board, and Columbia City Application Review Committee. Following the required permitting, extensive shoring, and source area excavations, an ISCR agent and a bioremediation reagent would be injected over a depth interval of approximately 10 to 40 feet bgs on the middle and southern parcels to treat chlorinated VOC and benzene concentrations exceeding cleanup levels in groundwater (Figure 14). It is assumed that the injections would be performed using direct-push methodology, and that two ISCR and enhanced bioremediation injection events would be conducted.



Alternative 2 assumes that performance groundwater monitoring would be conducted semiannually for 4 years (i.e., 8 monitoring events total), followed by 1 year of quarterly confirmational groundwater monitoring and issuance of an NFA determination by Ecology.

7.4.3 Alternative 3 – Source Area Excavation During Property Redevelopment, with In-Situ Chemical Reduction and In-Situ Enhanced Bioremediation

Alternative 3 involves demolition and removal of the existing buildings on the southern and middle parcels with source area soil excavation followed by ISCR and in-situ enhanced bioremediation to treat contaminated groundwater, similar to Alternative 2, following approval from the Columbia City Application Review Committee and City of Seattle Landmarks Preservation Board. The excavation and subsurface remedial work would be performed after demolition and in conjunction with the redevelopment of the Property rather than during a separate cleanup action construction effort (Figure 15). Additionally, it is assumed that ISCR and enhanced bioremediation injections on the southern and middle parcels would be performed using injection wells installed on the lowest level of a new building constructed during redevelopment, rather than using direct-push methodology.

Alternative 3 is contingent upon redevelopment of the Property, consistent with the building design review and approval procedures administered by the Columbia City Application Review Committee and City of Seattle Landmarks Preservation Board, as both the middle and southern parcel buildings are located within the Columbia City Landmark District. SMC 25.12.670-700 requires issuance of a Certificate of Approval by the Seattle Landmarks Preservation Board for any alterations, demolition, restoration, or construction of these designated significant buildings, following the review and recommendation by the Columbia City Application Review Committee consistent with the design review guidelines and procedures specified in SMC 25.20.050-100. The request and proposal for issuance of a Certificate of Approval for demolition of the buildings associated with this remedial action may be combined with, and likely will be required to be submitted with, a design proposal for construction and redevelopment of the Property, which will also be necessary before issuance of any construction permits by the City of Seattle.

The cleanup and removal of impacted soils or groundwater during redevelopment would allow for a faster, more effective, and more efficient cleanup. Building removal is also expected to eliminate or minimize future liability and reduce the future operation and maintenance costs associated with the ongoing treatment of the subsurface contamination beneath the buildings on the southern and middle parcels. This alternative also will resolve the additional costs and concerns associated with worker health and safety to perform Alternatives 1 and 2, along with the potential future building use and occupancy, due to the disrepair of the warehouse and exposure to hazardous substances in the buildings, including asbestos, PCBs, metals, and other contaminants.

Alternative 3 assumes the likely future development will include excavation throughout the Property to a depth of 12 feet bgs for one level of underground parking. The cost estimate for this alternative includes incremental costs for disposal of contaminated soil to a depth of 12 feet bgs, and full costs for excavation and disposal of contaminated soil between depths of 12 and 15 to



20 feet bgs. However, the necessary costs associated with structural shoring are not included in the cost estimate for this alternative, as structural shoring would be required and included as part of Property redevelopment.

Like Alternative 2, Alternative 3 assumes that performance groundwater monitoring would be conducted semiannually for 4 years (i.e., 8 monitoring events total), followed by 1 year of quarterly confirmational groundwater monitoring.

7.5 DETAILED EVALUATION OF CLEANUP ACTION ALTERNATIVES

Cleanup actions conducted under MTCA must meet certain minimum requirements specified in WAC 173-340-360(2). The MTCA threshold requirements for cleanup actions are as follows (WAC 173-340-360[2][a]):

- Protect human health and the environment;
- Comply with cleanup standards;
- Comply with applicable state and federal laws; and
- Provide for compliance monitoring.

In addition to the threshold requirements, WAC 173-340-360(2)(b) specifies that cleanup actions conducted under MTCA must meet the following other minimum requirements:

- Use permanent solutions to the maximum extent practicable, as defined in WAC 173-340-360(3).
- Provide for a reasonable restoration time frame, as defined in WAC 173-340-360(4).
- Consider public concerns. Public notice and participation provisions of MTCA are specified in WAC 173-340-600.

Farallon evaluated the three cleanup action alternatives with respect to the above MTCA requirements, in accordance with applicable procedures specified in WAC 173-340-350(8) and 173-340-360. Details of the evaluation are presented in Table 11. Results of the detailed evaluation of alternatives are summarized below.

7.5.1 Threshold and Other Requirements

As shown in Table 11, all three alternatives satisfy MTCA threshold requirements for cleanup actions specified in WAC 173-340-360(2). Under the stated assumptions of the alternatives, Alternatives 1 through 3 are expected to protect human health and the environment, comply with cleanup standards and applicable laws, and provide for compliance monitoring. Additionally, all three alternatives provide a reasonable restoration time frame. Potential public concerns associated with the alternatives are identified in Table 11.



To further evaluate Alternatives 1 through 3 and select a preferred alternative for the Property, a MTCA disproportionate cost analysis (DCA) was conducted in accordance with WAC 173-340-360(3). The DCA process facilitates selection of the cleanup action alternative that is permanent to the maximum extent practicable. According to MTCA (WAC 173-340-200), an alternative is not considered practicable if the incremental costs of the alternative are disproportionate to the incremental degree of benefits provided by the alternative over other lower-cost alternatives. The DCA used the evaluation criteria defined in WAC 173-340-360(3)(f). The DCA methods and results are summarized below.

7.5.2 MTCA Disproportionate Cost Analysis

The DCA was conducted according to the methodology outlined in WAC 173-340-360(3)(e). Alternatives 1 through 3 were scored relative to the following six MTCA criteria for evaluating whether a cleanup action is permanent to the maximum extent practicable (WAC 173-340-360[3][f]):

- Protectiveness;
- Permanence;
- Long-Term Effectiveness;
- Management of Short-Term Risks;
- Technical and Administrative Implementability; and
- Consideration of Public Concerns.

A numerical score ranging from 0 to 10 was assigned to each of the above criteria based on best professional judgment, with 0 being least favorable and 10 being most favorable. The individual criteria scores for each alternative were multiplied by weighting factors ranging from 10 to 30 percent according to the relative importance of each criterion for evaluating permanence to the maximum extent practicable. The weighted criteria scores were then summed to obtain a total composite (weighted average) benefit score as shown in Table 11.

The seventh DCA evaluation criterion is cost. Screening-level cost estimates for Alternatives 1 through 3 are shown in Table 11. A breakdown of the estimated costs for each cleanup action alternative is provided in Table 12.

A comparison of Alternatives 1 through 3 with respect to each of the MTCA evaluation criteria is presented below, along with a summary of the alternative costs versus total composite benefit scores.

7.5.2.1 Protectiveness

Alternative 1 would provide a high level of protectiveness by removing source area soil exceeding cleanup standards, stripping and extracting volatile COCs from groundwater and vadose zone soil, and mitigating potential vapor intrusion. Alternatives 2 and 3, which also



include removal of source area soil, would provide a slightly lower level of protectiveness associated with the subsequent use of ISCR and in-situ enhanced bioremediation for destruction of COCs in groundwater.

7.5.2.2 Permanence

All three alternatives would provide a high level of permanence by permanently removing source area soil exceeding cleanup standards and permanently reducing the mass and concentrations of COCs in groundwater through in-situ physical, chemical, and/or biological destructive processes. Excavated source area soil would be disposed of at a permitted facility off the Property.

7.5.2.3 Long-Term Effectiveness

All three alternatives would provide a high level of effectiveness over the long term by removing source area soil exceeding cleanup standards and reducing the mass and concentrations of COCs in groundwater.

7.5.2.4 Management of Short-Term Risks

All three alternatives would pose moderate short-term risk associated with the excavation, transport, and disposal of source area soil off the Property, and minor short-term risk associated with the installation and operation of the air sparging and SVE system or the injection of ISCR and enhanced bioremediation solutions into the subsurface. Alternative 3 would be implemented in conjunction with Property redevelopment activities that would present short-term risks due to the extensive Property clearing, building demolition, soil excavation, and trucking operations associated with redevelopment; however, these short-term risks are unrelated to the specific cleanup construction activities anticipated under Alternative 3.

7.5.2.5 Technical and Administrative Implementability

Although Alternatives 1 and 2 are technically feasible, implementing these alternatives would pose significant challenges. The source area excavation conducted on the southern parcel as part of Alternatives 1 and 2 would be difficult due to the low ceiling height in the existing warehouse building basement and unsafe conditions of the existing structure. This work would also require a comprehensive engineering analysis of the existing structural integrity of the warehouse building and public rights-of-way. Abatement of asbestos-containing material, lead-based paint, and PCBs in roofing material, light ballasts, paints, and/or caulking would need to be performed to keep the warehouse building on the southern parcel in place. The building on the middle parcel would also require abatement of lead-based paint, which would weaken the walls of the building, making it unsafe to inhabit. Additionally, Alternatives 1 and 2 would require drilling or trenching through the floor(s) of the existing warehouse building on the southern parcel to install air sparge and SVE wells or ISCR and enhanced bioremediation injection points. Alternatives 1 or 2 also will require significant alterations to the existing buildings on the southern and middle



parcel for ongoing and future use, and will therefore likely require approval from the Columbia City Application Review Committee and the City of Seattle Landmarks Preservation Board, and as described above in Section 7.2. Given these technical and administrative requirements, Alternative 3 would be the safest and easiest alternative to implement, as the cleanup can be performed in conjunction with the building demolition and construction for redevelopment of the Property—provided the Property can be redeveloped in a reasonable timeframe with a design that is compatible with the Columbia City Application Review Committee and the City of Seattle Landmarks Preservation Board design standards (SMC 25.12 and SMC 25.20, respectively).

7.5.2.6 Consideration of Public Concerns

Alternatives 1 and 2 would require temporarily closing the commercially operated parking lot on the northern parcel and convenience store on the middle parcel for soil excavation, air sparging and SVE system construction, and/or ISCR and enhanced bioremediation injections. The structural shoring, construction noise and vibration, soil loading operations, and truck traffic, and potential modifications and alterations of the buildings associated with these alternatives may generate public concerns and comments during review by the Columbia City Application Review Committee and the City of Seattle Landmarks Preservation Board. Public hearings associated with the review and approval process for issuance of a Certificate of Approval by the Columbia City Application Review Committee and the City of Seattle Landmarks Preservation Board may increase the level of public interest associated with redevelopment of the Property. Although Property redevelopment would require extensive structural shoring and generate significant construction noise, vibration, and truck traffic, public concerns about these construction impacts would primarily be associated with the redevelopment construction activities rather than the concurrent Alternative 3 cleanup action.

7.5.2.7 Cost

The estimated costs are \$2,441,000 for Alternative 1, \$2,510,000 for Alternative 2, and \$1,232,000 for Alternative 3.

7.5.2.8 Summary of Costs Versus Total Composite Benefit Scores

The estimated costs and total composite benefit scores for Alternatives 1 through 3 are plotted on Figure 16. Alternative 3 has the highest total composite benefit score of the alternatives, and its estimated cost is lower than the estimated costs of Alternatives 1 and 2. Accordingly, the cleanup action described in Alternative 3 is the most permanent (to the maximum extent practicable) when implemented in conjunction with Property redevelopment, pursuant to WAC 173-340-360(3). If the cleanup action cannot be implemented in conjunction with Property redevelopment, Alternative 1, which has a slightly higher total composite benefit score at a lower cost than Alternative 2, is the second-most-permanent practicable alternative.



7.6 PREFERRED CLEANUP ACTION ALTERNATIVE

The preferred alternative is Alternative 3 – Source Area Excavation During Property Redevelopment, with In-Situ Chemical Reduction and In-Situ Enhanced Bioremediation. Subject to the submittal and approval of a redevelopment plan which meets the Columbia City Application Review Committee and the City of Seattle Landmarks Preservation Board design requirements for issuance of a Certificate of Approval, as described in Section 7.2 above, Alternative 3 meets MTCA minimum requirements for cleanup actions, including the requirement to use permanent solutions to the maximum extent practicable, has the lowest estimated cost and will minimize risks to public health and safety. Alternative 3 includes the following components:

- Demolition of the buildings on the southern and middle parcels and source area excavation to a maximum depth of 20 feet bgs during Property redevelopment. Excavated contaminated soil would be disposed of at a permitted facility off the Property. If abandoned USTs are encountered during excavation activities, they would be removed and disposed of in accordance with WAC 173-360A.
- Treatment and disposal of contaminated groundwater extracted during construction dewatering operations. It is assumed that all groundwater on the northern parcel containing COC concentrations exceeding cleanup levels and all groundwater on the southern parcel containing petroleum hydrocarbon concentrations exceeding cleanup levels proximate to the fuel-oil UST would be removed and treated during construction dewatering (including petroleum LNAPL, if present).
- Installation of groundwater treatment injection wells on the middle and southern parcels during Property redevelopment.
- Two ISCR and enhanced bioremediation injection events on the middle and southern parcels to treat concentrations of chlorinated VOCs and benzene exceeding cleanup levels in groundwater over a depth interval of approximately 10 to 40 feet bgs.
- Semiannual performance groundwater monitoring for 4 years, followed by 1 year of quarterly confirmational groundwater monitoring.

In the event that the Alternative 3 cannot be implemented in a reasonable timeframe following the acceptance of the RI/FS report by Ecology, Alternative 1 – Source Area Excavation with Air Sparging and Soil Vapor Extraction will be the preferred alternative. Alternative 1 meets MTCA minimum requirements for cleanup actions and has a slightly higher MTCA composite benefit score at a lower cost compared to Alternative 2. Alternative 1 includes the following components:

- Source area excavation to a maximum depth of 20 feet bgs on the northern and southern parcels. Alterations for shoring and excavation below the basement of the warehouse building on the southern parcel likely would require approval from the Columbia City Application Review Committee and the City of Seattle Landmarks Preservation Board.
- Structural shoring and construction dewatering as necessary to protect existing deteriorating structures and facilitate source area excavation.



- Treatment and disposal of contaminated groundwater extracted during construction dewatering operations.
- Installation and operation of an air sparging and SVE system for 3 to 5 years (estimated) on the middle and southern parcels to treat concentrations of chlorinated VOCs and benzene exceeding cleanup levels in groundwater over a depth interval of approximately 10 to 40 feet bgs.
- Semiannual performance groundwater monitoring for 5 years, followed by 1 year of quarterly confirmational groundwater monitoring.

Cleanup of soil and groundwater contamination under either Alternative 3 or Alternative 1 is expected to result in mitigation of the vapor intrusion pathway. A follow-up vapor intrusion assessment will be conducted also, following completion of the cleanup action to confirm the vapor intrusion pathway is incomplete.



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9.0 LIMITATIONS

9.1 GENERAL LIMITATIONS

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

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

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

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

9.2 LIMITATION ON RELIANCE BY THIRD PARTIES

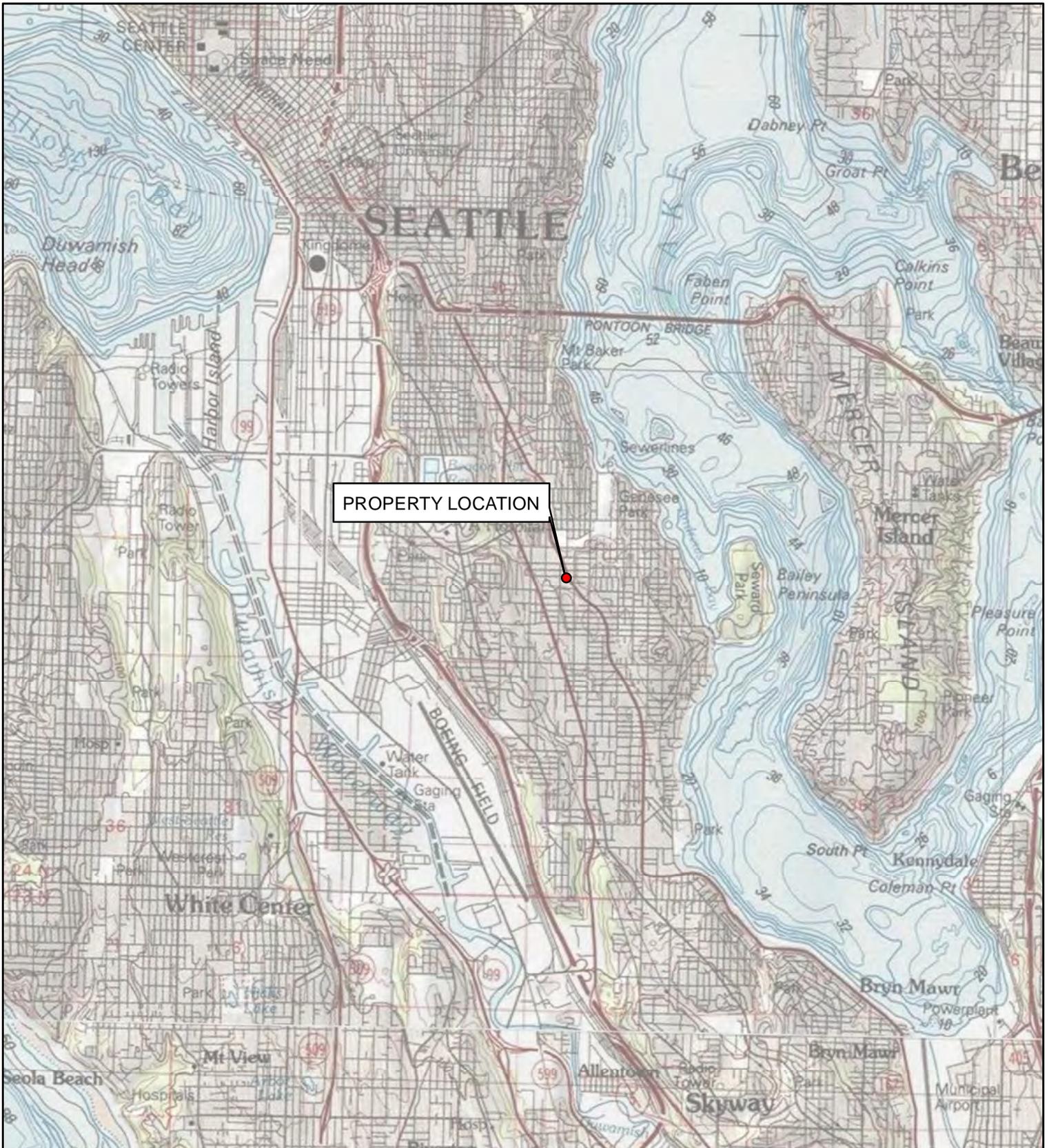
Reliance by third parties is prohibited. This report/assessment has been prepared for the exclusive use of Washin Murakami to address the unique needs of Washin Murakami at the Morningside Acres Tracts at a specific point in time. Ecology is recognized as an intended user of this report/assessment, subject to the same limitations as Mr. Murakami.

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

FIGURES

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY REPORT Morningside Acres Tracts 5001, 5015, and 5021 Rainier Avenue South Seattle, Washington

Farallon PN: 1355-001



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



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FIGURE 1

PROPERTY VICINITY MAP
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021
RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON

FARALLON PN: 1355-001

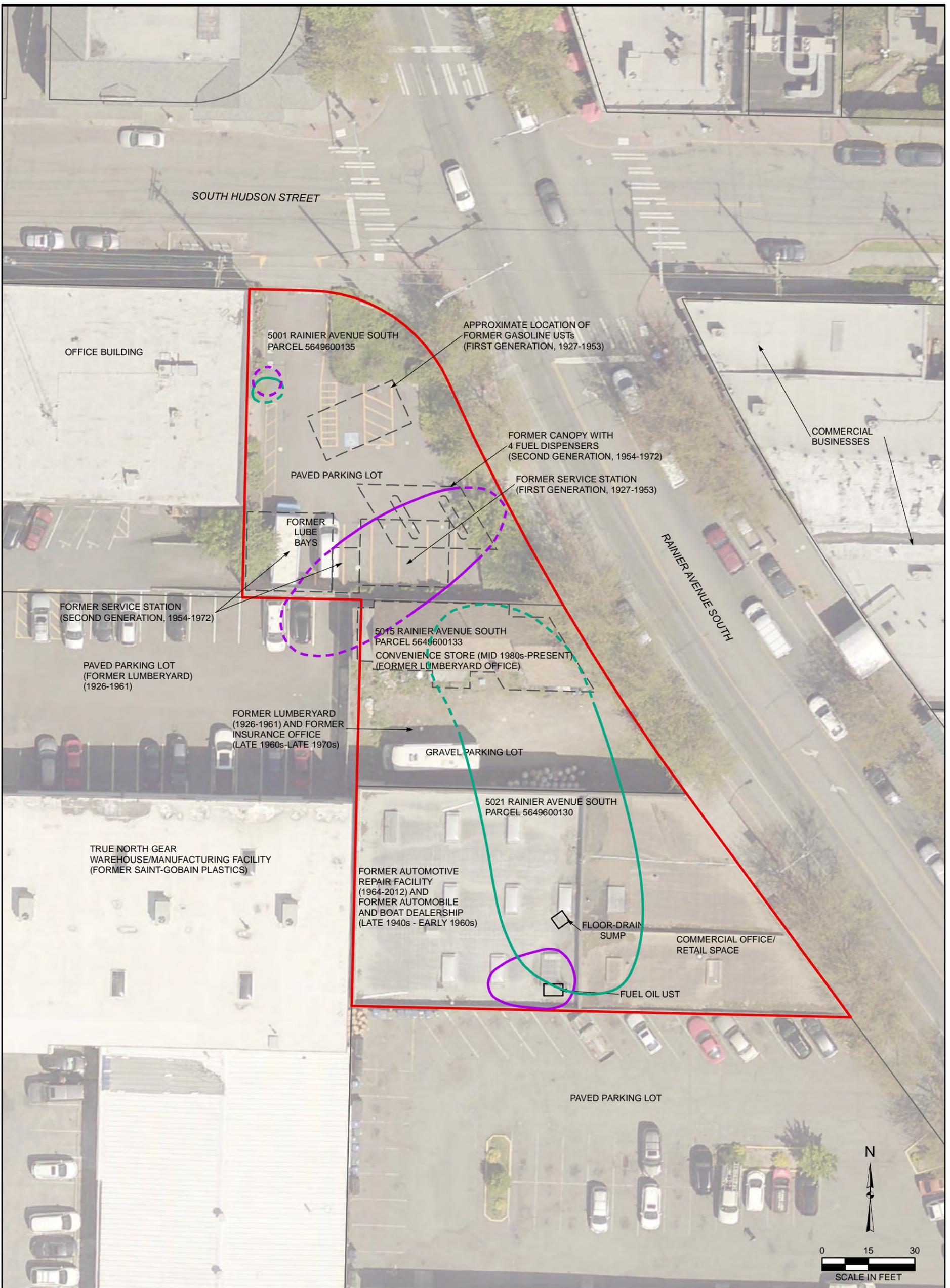
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Date: 12/7/2021

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LEGEND

- - - APPROXIMATE EXTENT OF CHLORINATED VOC CONTAMINATION, DASHED WHERE INFERRED
- - - APPROXIMATE EXTENT OF PETROLEUM CONTAMINATION, DASHED WHERE INFERRED
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY
- UST = UNDERGROUND STORAGE TANK
- VOC = VOLATILE ORGANIC COMPOUND

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



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FIGURE 2
 CURRENT AND HISTORICAL PROPERTY FEATURES
 MORNINGSIDE ACRES TRACTS
 5001, 5015, AND 5021
 RAINIER AVENUE SOUTH
 SEATTLE, WASHINGTON

FARALLON PN: 1355-001

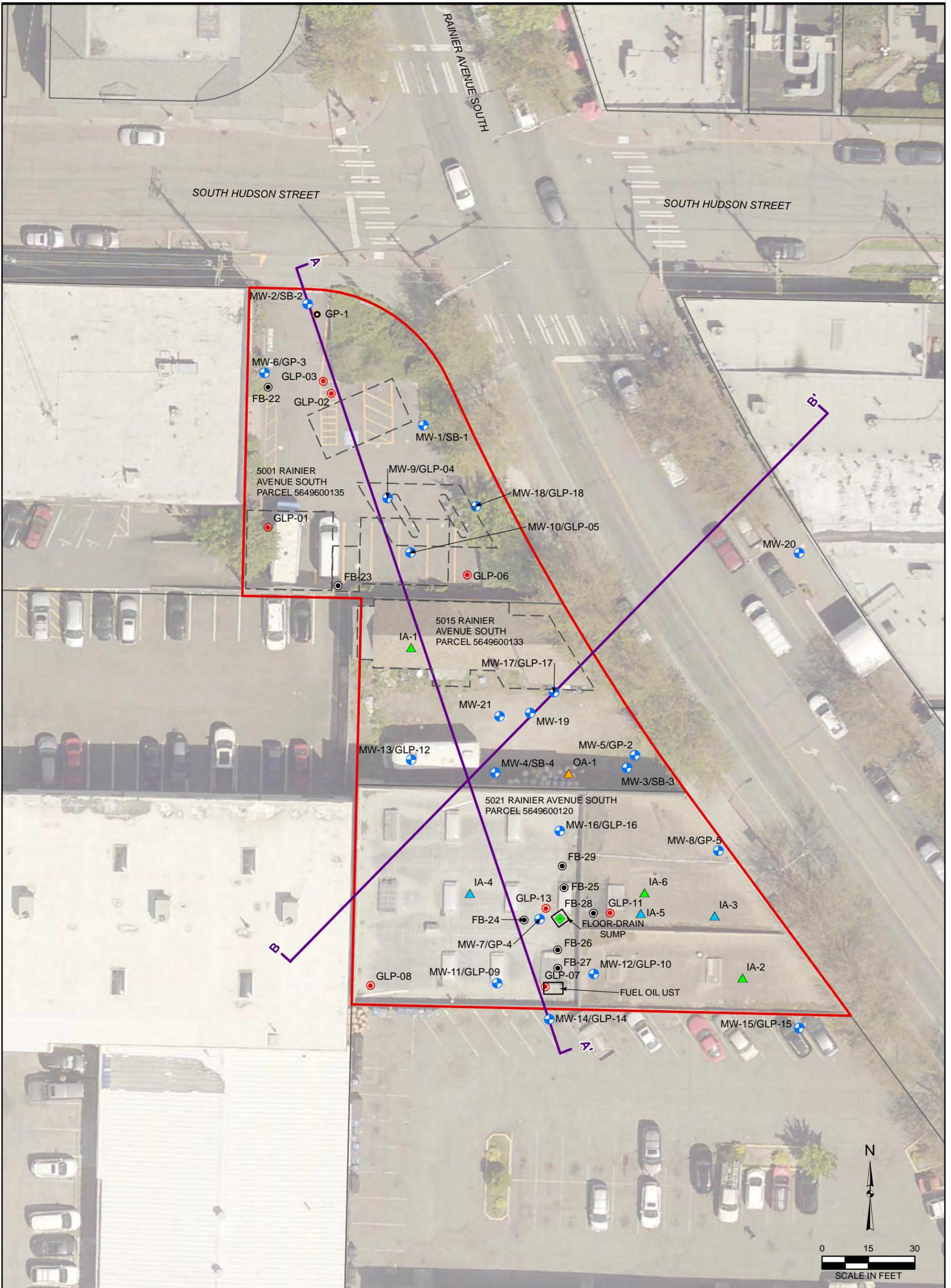
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LEGEND

- ▲ BASEMENT INDOOR AIR SAMPLING LOCATION
- ▲ FIRST FLOOR INDOOR AIR SAMPLING LOCATION
- ▲ OUTDOOR AIR SAMPLING LOCATION
- MONITORING WELL
- BORING (FARALLON)
- BORING (G-LOGICS)
- BORING (KLEINFELDER)
- ◆ SUMP SEDIMENT SAMPLE
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY
- LINE OF CROSS SECTION
- UST = UNDERGROUND STORAGE TANK

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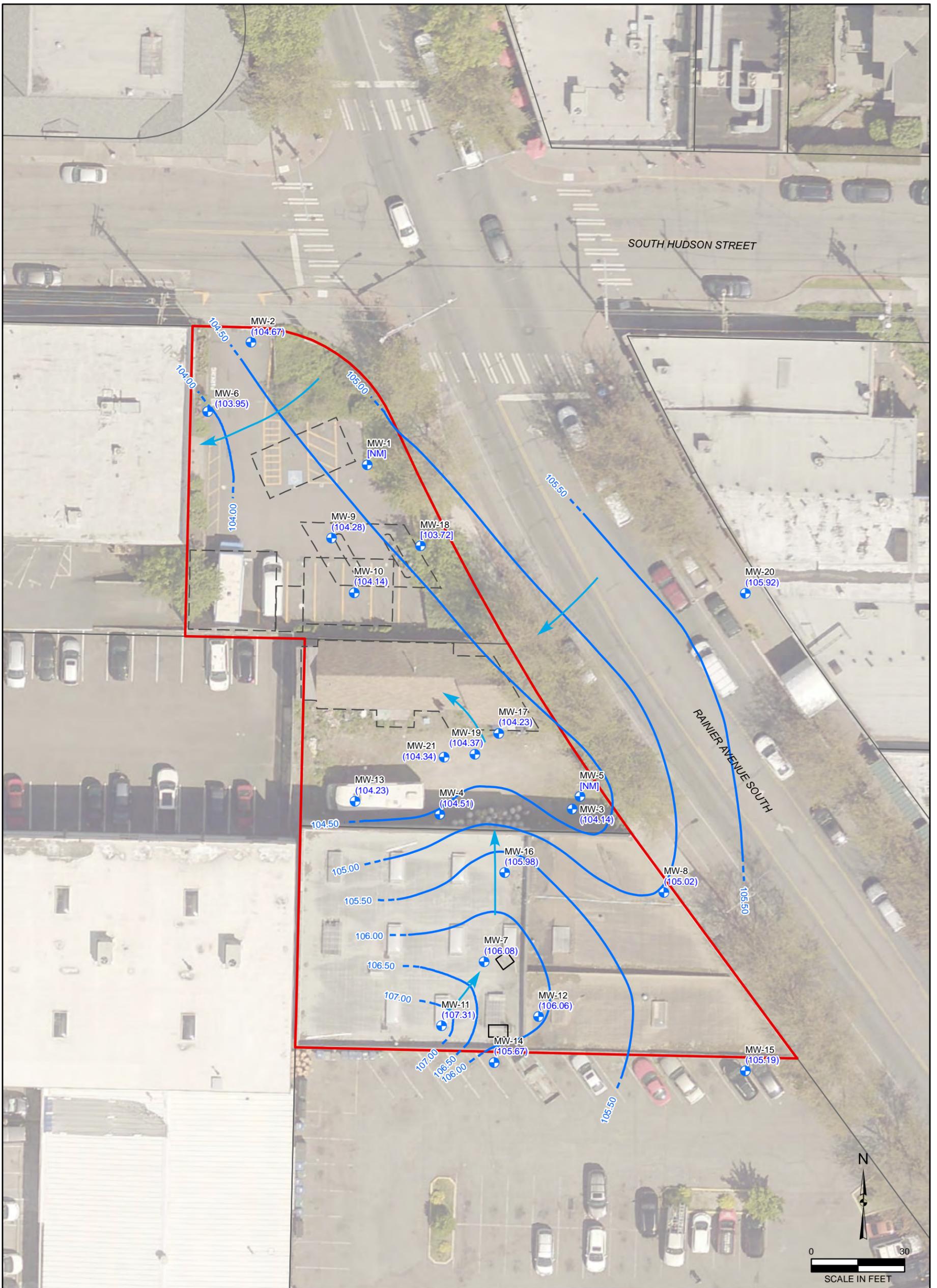
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FIGURE 3
 SAMPLING LOCATIONS
 MORNINGSIDE ACRES TRACTS
 5001, 5015, AND 5021
 RAINIER AVENUE SOUTH
 SEATTLE, WASHINGTON

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LEGEND

- ⊕ MONITORING WELL
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY
- APPROXIMATE GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- (105.67) GROUNDWATER ELEVATION (10/02/2018) MEASURED IN FEET ABOVE MEAN SEA LEVEL
- [103.72] GROUNDWATER ELEVATION NOT USED IN CONTOURING
- [NM] NOT MEASURED
- INFERRED GROUNDWATER FLOW DIRECTION

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FIGURE 4A
 GROUNDWATER ELEVATION CONTOUR MAP -
 OCTOBER 2018
 MORNINGSIDE ACRES TRACTS
 5001, 5015, AND 5021
 RAINIER AVENUE SOUTH
 SEATTLE, WASHINGTON

FARALLON PN: 1355-001

Drawn By: vpehlivan

Checked By: RL

Date: 1/5/2022

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LEGEND

- ⊕ MONITORING WELL
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY
- APPROXIMATE GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- (105.68) GROUNDWATER ELEVATION (8/09/2021) MEASURED IN FEET ABOVE MEAN SEA LEVEL
- [104.18] GROUNDWATER ELEVATION NOT USED IN CONTOURING
- [NM] NOT MEASURED
- INFERRED GROUNDWATER FLOW DIRECTION

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FIGURE 4B
 GROUNDWATER ELEVATION CONTOUR MAP -
 AUGUST 2021
 MORNINGSIDE ACRES TRACTS
 5001, 5015, AND 5021
 RAINIER AVENUE SOUTH
 SEATTLE, WASHINGTON

FARALLON PN: 1355-001

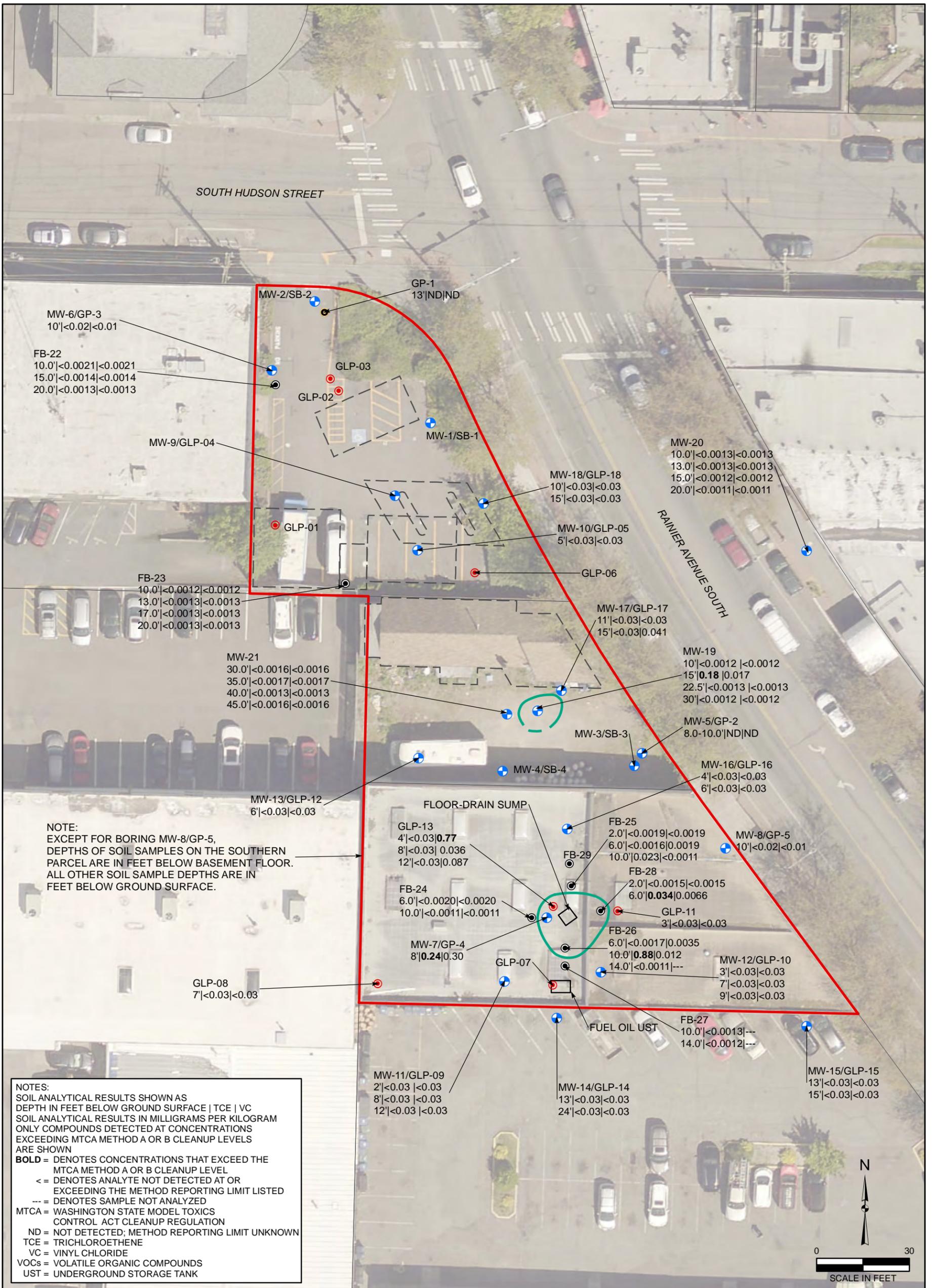
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Date: 1/5/2022

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NOTE:
EXCEPT FOR BORING MW-8/GP-5,
DEPTHS OF SOIL SAMPLES ON THE SOUTHERN
PARCEL ARE IN FEET BELOW BASEMENT FLOOR.
ALL OTHER SOIL SAMPLE DEPTHS ARE IN
FEET BELOW GROUND SURFACE.

LEGEND

- MONITORING WELL
- BORING (FARALLON)
- BORING (G-LOGICS)
- BORING (KLEINFELDER)
- ESTIMATED EXTENT OF CHLORINATED
VOCs IN SOIL EXCEEDING MTCA METHOD A
OR B CLEANUP LEVELS -
DASHED WHERE INFERRED
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY

NOTES:
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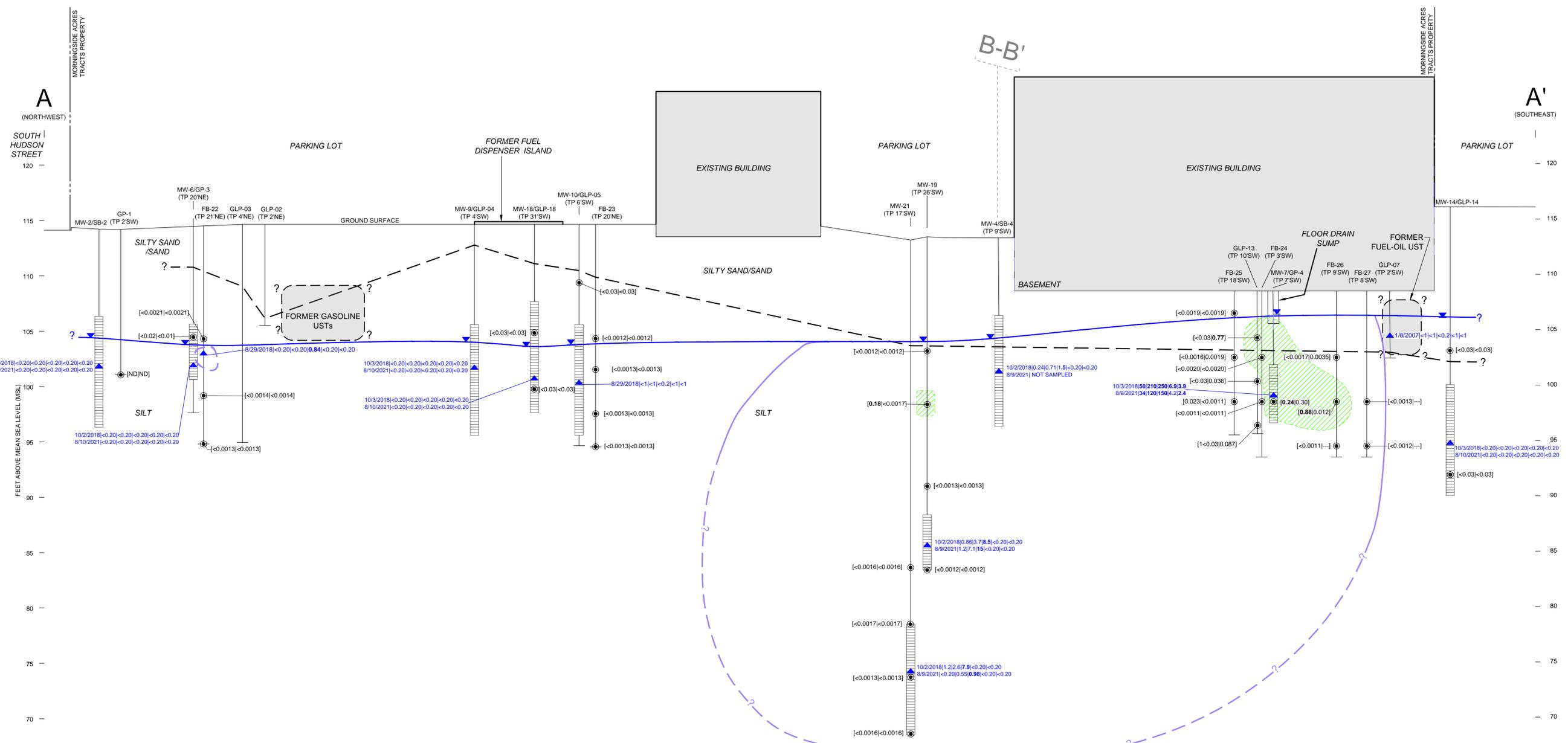
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FIGURE 5
ESTIMATED AREAL EXTENT OF
CHLORINATED VOCs IN SOIL
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021
RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON

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LEGEND

- | | |
|---|--|
| <p>MW-6/GP-3 (TP 20'SW)</p> <p>— BORING OR MONITORING WELL LOCATION</p> <p>— STRATIGRAPHIC CONTACT/DASHED WHERE INFERRED</p> <p>— GROUNDWATER LEVEL (10/2/2018)</p> <p>— SOIL SAMPLE</p> <p>— GROUNDWATER SAMPLE</p> <p>— WELL SCREEN INTERVAL</p> <p>— ESTIMATED EXTENT OF CHLORINATED VOCs IN SOIL EXCEEDING MTCA METHOD A OR B CLEANUP LEVELS</p> <p>— ESTIMATED EXTENT OF CHLORINATED VOCs IN GROUNDWATER EXCEEDING MTCA METHOD A OR B CLEANUP LEVELS</p> | <p>10/2/2018 <0.20 <0.20 <0.20 <0.20 <0.20</p> <p>[<0.03 <0.03]</p> <p><— DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED</p> <p>BOLD</p> <p>—SAMPLE NOT ANALYZED FOR CONSTITUENT</p> <p>UST</p> <p>MTCA</p> <p>VOC</p> <p>TCE</p> <p>CIS-1,2-DCE</p> <p>VC</p> <p>1,2-DCP</p> <p>1,2-DCA</p> <p>BORING OR MONITORING WELL LOCATION TRANPOSED (TP) IN FEET, NORTHWEST (NE) OR SOUTHWEST (SW), TO CROSS-SECTION LINE</p> <p>STRATIGRAPHIC CONTACT/DASHED WHERE INFERRED</p> <p>GROUNDWATER LEVEL (10/2/2018)</p> <p>SOIL SAMPLE</p> <p>GROUNDWATER SAMPLE</p> <p>WELL SCREEN INTERVAL</p> <p>ESTIMATED EXTENT OF CHLORINATED VOCs IN SOIL EXCEEDING MTCA METHOD A OR B CLEANUP LEVELS</p> <p>ESTIMATED EXTENT OF CHLORINATED VOCs IN GROUNDWATER EXCEEDING MTCA METHOD A OR B CLEANUP LEVELS</p> <p>GROUNDWATER RESULTS FOR (DATE TCE CIS-1,2-DCE VC 1,2-DCA 1,2-DCP) IN MICROGRAMS PER LITER (MOST RECENT RESULTS SHOWN AT EACH LOCATION)</p> <p>SOIL RESULTS FOR (TCE VC) IN MILLIGRAMS PER KILOGRAM</p> <p>DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED</p> <p>BOLD INDICATES CONCENTRATION EXCEEDS THE MTCA METHOD A OR B CLEANUP LEVEL</p> <p>SAMPLE NOT ANALYZED FOR CONSTITUENT</p> <p>UNDERGROUND STORAGE TANK</p> <p>WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION</p> <p>VOLATILE ORGANIC COMPOUND</p> <p>TRICHLOROETHENE</p> <p>CIS-1,2-DICHLOROETHENE</p> <p>VINYL CHLORIDE</p> <p>1,2-DICHLOROPROPANE</p> <p>1,2-DICHLOROETHANE</p> |
|---|--|

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FIGURE 6

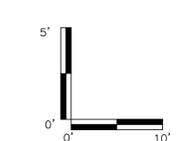
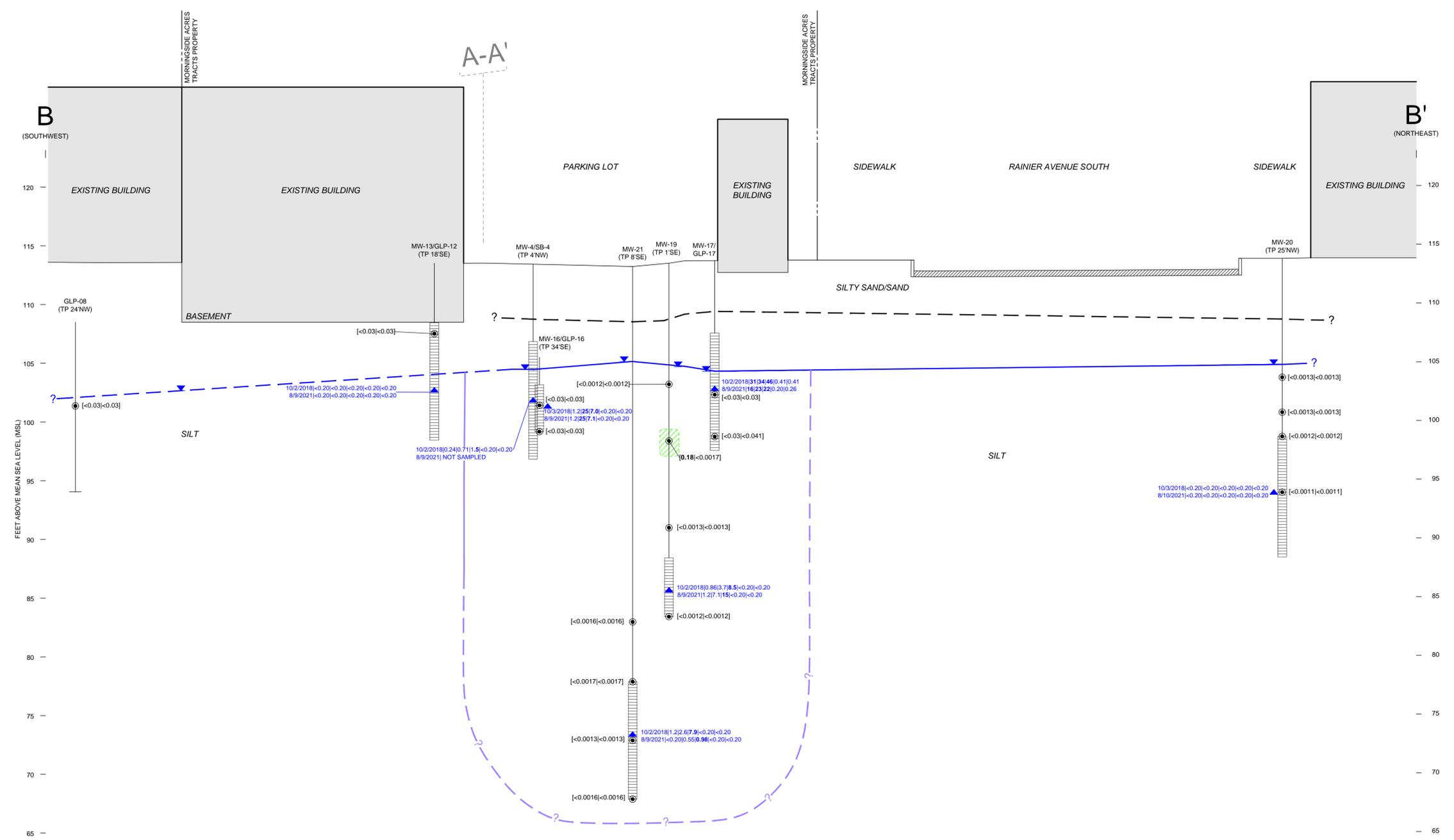
CROSS-SECTION A-A'
CHLORINATED VOCs
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021 RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON

FARALLON PN:1355-001

Date: 12/17/2021

Drawn By: NM/ROL Checked By: BJ

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LEGEND

- GLP-08 (TP 24SE) BORING OR MONITORING WELL LOCATION TRANSPROSED (TP) IN FEET, NORTHWEST (NW) OR SOUTHEAST (SE), TO CROSS-SECTION LINE
 - STRATIGRAPHIC CONTACT/DASHED WHERE INFERRED
 - GROUNDWATER LEVEL (10/2/2018)
 - SOIL SAMPLE
 - GROUNDWATER SAMPLE
 - WELL SCREEN INTERVAL
 - ESTIMATED EXTENT OF CHLORINATED VOCs IN SOIL EXCEEDING MTCA METHOD A OR B CLEANUP LEVELS
 - ESTIMATED EXTENT OF CHLORINATED VOCs IN GROUNDWATER EXCEEDING MTCA METHOD A OR B CLEANUP LEVELS
- | | |
|-----------------------------|--|
| (<0.20)<0.20<0.20<0.20<0.20 | GROUNDWATER RESULTS FOR (DATE TCE CIS-1,2-DCE VC 1,2-DCA 1,2-DCP) IN MICROGRAMS PER LITER (MOST RECENT RESULTS SHOWN AT EACH LOCATION) |
| [<0.03]<0.03 | SOIL RESULTS FOR (TCE VC) IN MILLIGRAMS PER KILOGRAM |
| - | DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED |
| BOLD | INDICATES CONCENTRATION EXCEEDS THE MTCA METHOD A OR B CLEANUP LEVELS |
| -- | SAMPLE NOT ANALYZED FOR CONSTITUENT |
| UST | UNDERGROUND STORAGE TANK |
| MTCA | WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION |
| VOC | VOLATILE ORGANIC COMPOUND |
| TCE | TRICHLOROETHENE |
| CIS-1,2-DCE | CIS-1,2-DICHLOROETHENE |
| VC | VINYL CHLORIDE |
| 1,2-DCP | 1,2-DICHLOROPROPANE |
| 1,2-DCA | 1,2-DICHLOROETHANE |

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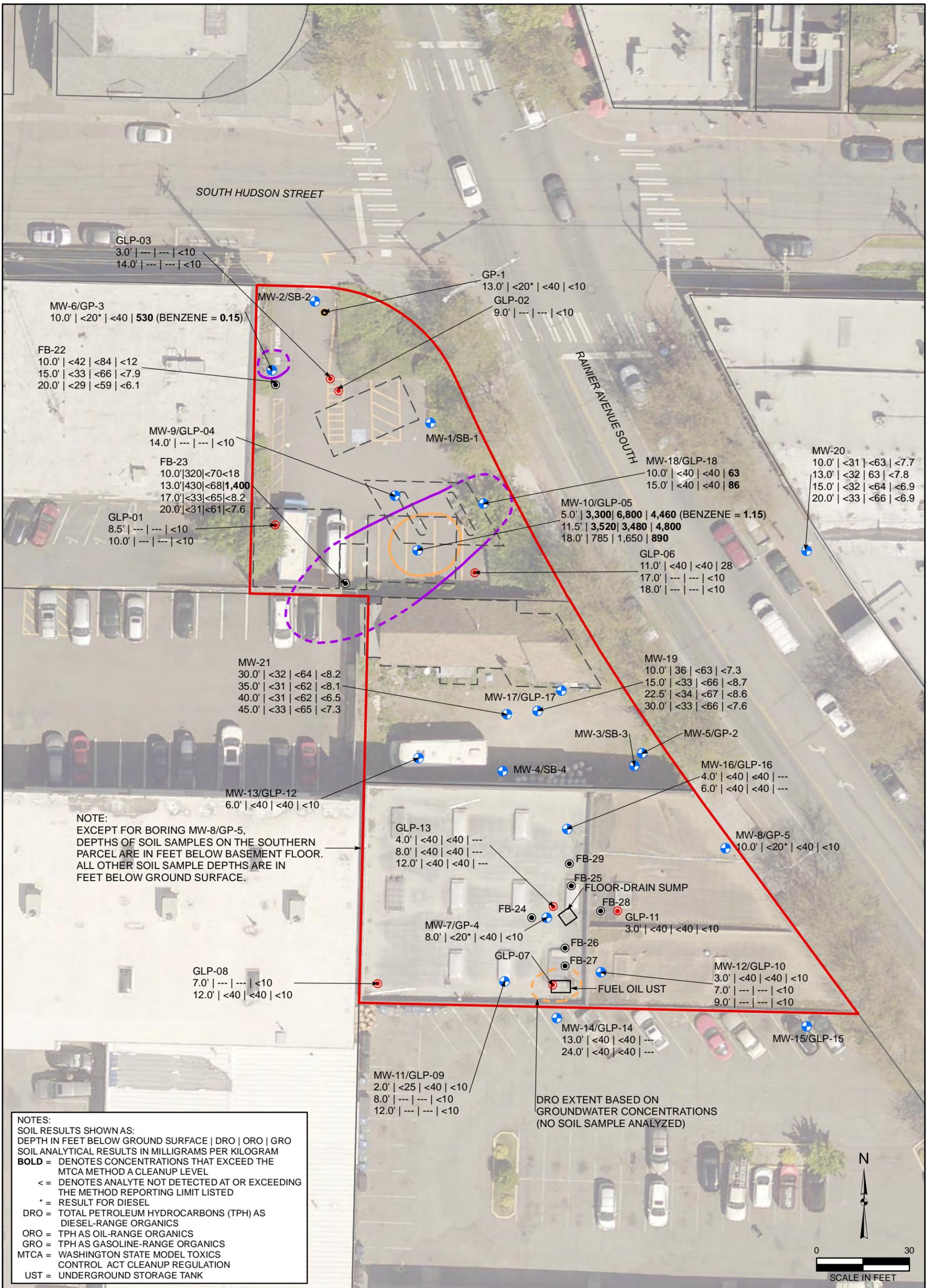
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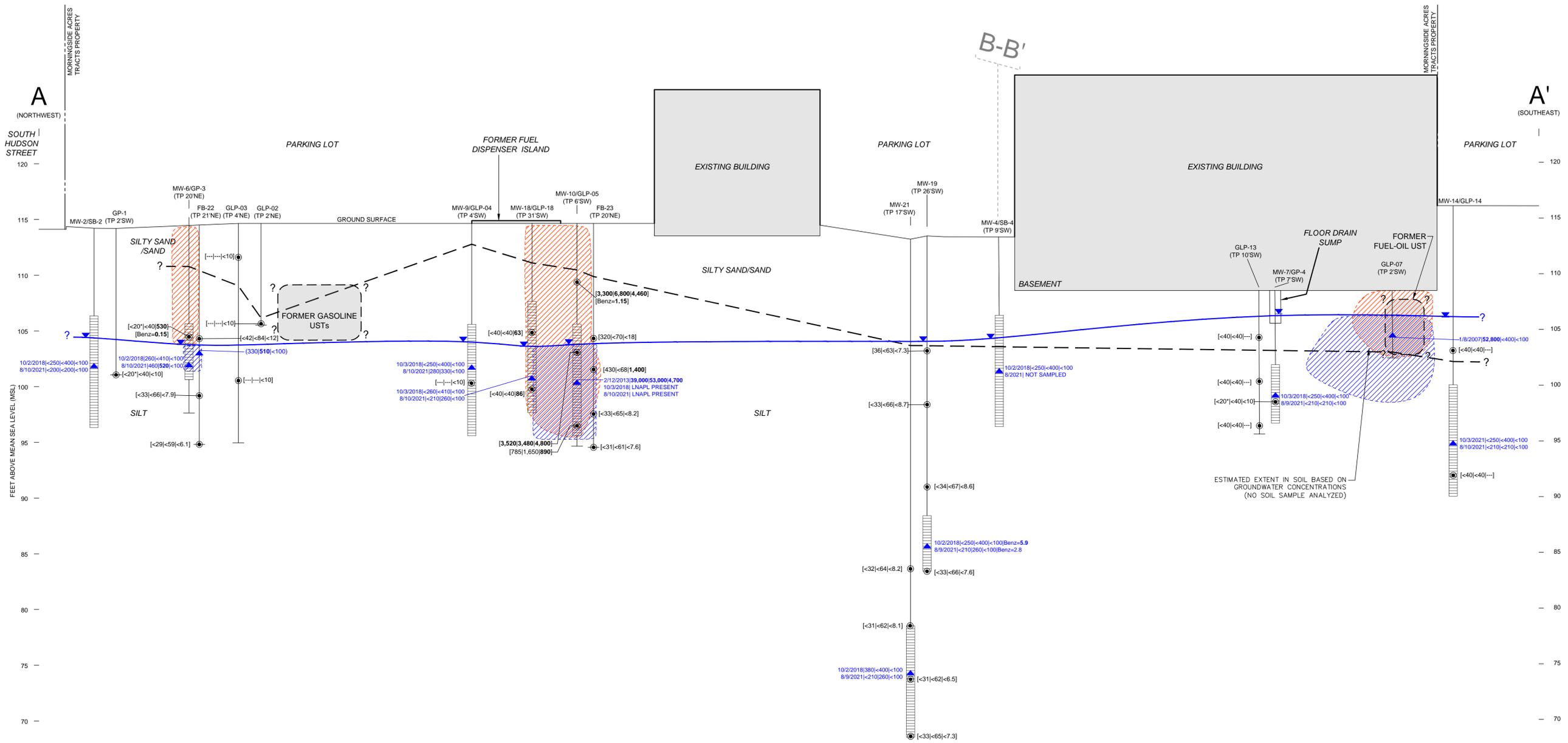
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FIGURE 7

CROSS-SECTION B-B'
CHLORINATED VOCs
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021 RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON
FARALLON PN:1355-001

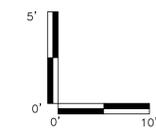
Drawn By: NM/ROL Checked By: BJ Date: 12/17/2021

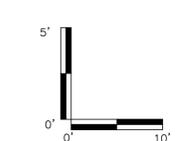
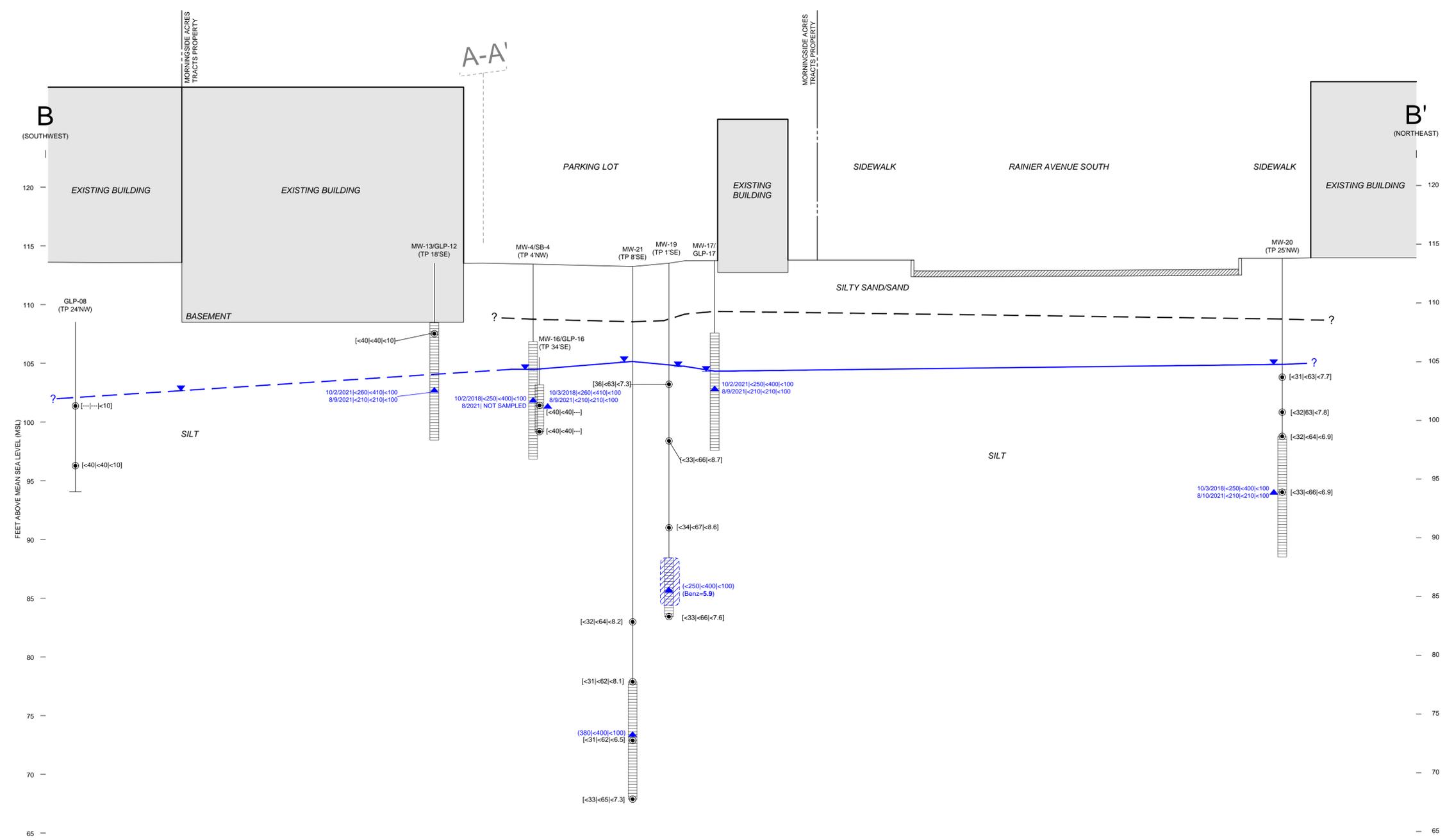




LEGEND

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> MW-6/GP-3 (TP 20/SW) — BORING OR MONITORING WELL LOCATION — STRATIGRAPHIC CONTACT/DASHED WHERE INFERRED — GROUNDWATER LEVEL (10/2/2018) — SOIL SAMPLE — GROUNDWATER SAMPLE — WELL SCREEN INTERVAL — ESTIMATED EXTENT OF PETROLEUM HYDROCARBONS IN SOIL EXCEEDING MTCA METHOD A CLEANUP LEVELS — ESTIMATED EXTENT OF PETROLEUM HYDROCARBONS IN GROUNDWATER EXCEEDING MTCA METHOD A CLEANUP LEVELS | <ul style="list-style-type: none"> 10/2/2021 260 <410 <100 <40 <40 <10 DRO ORO GRO BOLD UST MTCA Benz . < --- | <ul style="list-style-type: none"> GROUNDWATER RESULTS FOR (DATE DRO ORO GRO) IN MICROGRAMS PER LITER (MOST RECENT RESULTS SHOWN AT EACH LOCATION) SOIL RESULTS FOR (DRO ORO GRO) IN MILLIGRAMS PER KILOGRAM TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS TPH AS OIL-RANGE ORGANICS TPH AS GASOLINE-RANGE ORGANICS INDICATES CONCENTRATION EXCEEDS THE MTCA METHOD A CLEANUP LEVEL UNDERGROUND STORAGE TANK WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION BENZENE RESULTS FOR DIESEL DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED SAMPLE NOT ANALYZED FOR CONSTITUENT |
|---|--|--|





LEGEND	
	BORING OR MONITORING WELL LOCATION TRANSPOSED (TP) IN FEET, NORTHWEST (NW) OR SOUTHEAST (SE), TO CROSS-SECTION LINE
	STRATIGRAPHIC CONTACT/DASHED WHERE INFERRED
	GROUNDWATER LEVEL (10/2/2018)
	SOIL SAMPLE
	GROUNDWATER SAMPLE
	WELL SCREEN INTERVAL
	ESTIMATED EXTENT OF PETROLEUM HYDROCARBONS IN GROUNDWATER EXCEEDING MTCA METHOD A CLEANUP LEVELS
	10/2/2021 [260]<410<100
	[<40]<40<10]
	DRO
	ORO
	GRO
	TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS
	TPH AS OIL-RANGE ORGANICS
	TPH AS GASOLINE-RANGE ORGANICS
	BOLD INDICATES CONCENTRATION EXCEEDS THE MTCA METHOD A CLEANUP LEVEL
	UST UNDERGROUND STORAGE TANK
	WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION
	Benz BENZENE
	< DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED
	... SAMPLE NOT ANALYZED FOR CONSTITUENT

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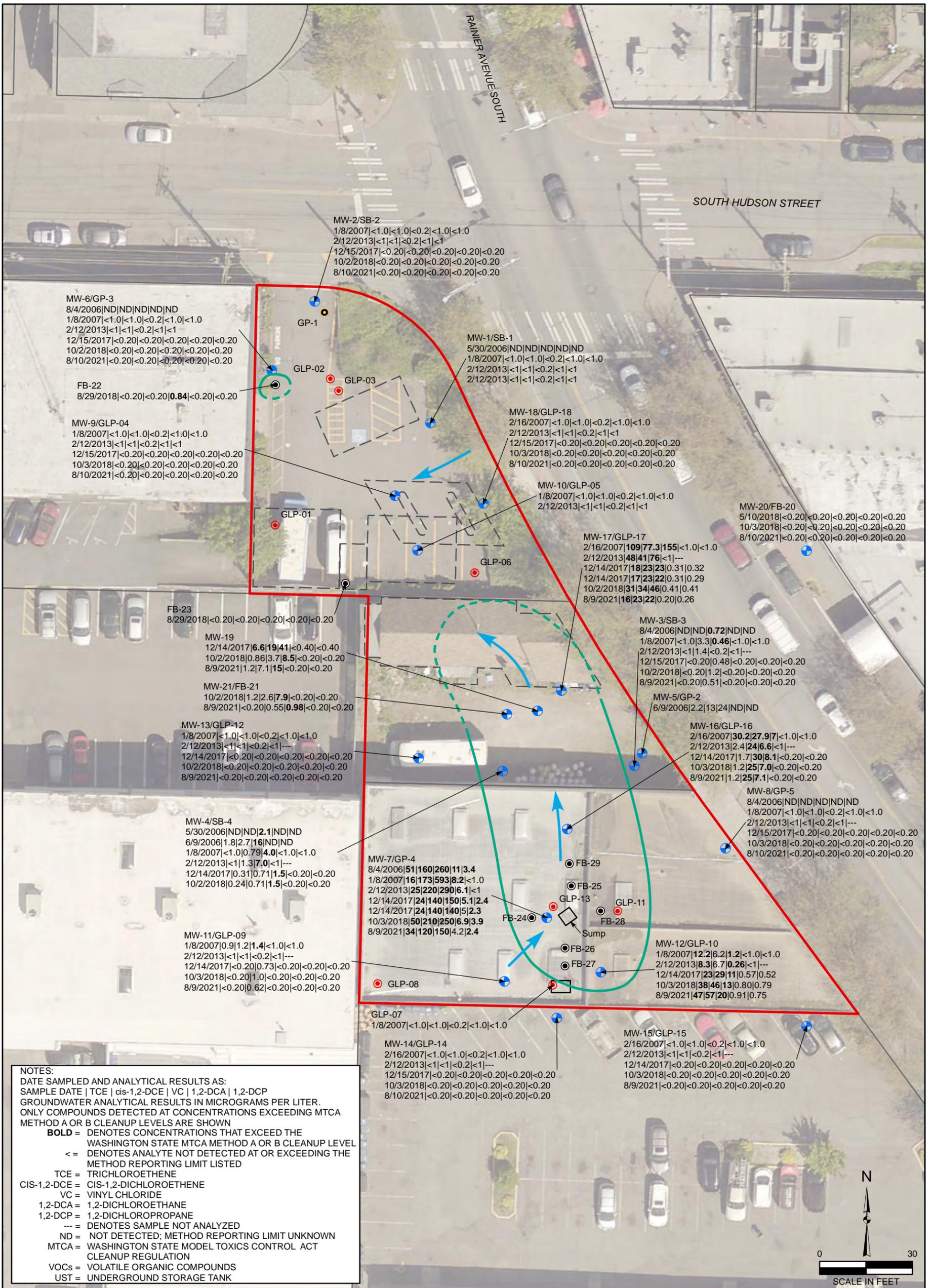
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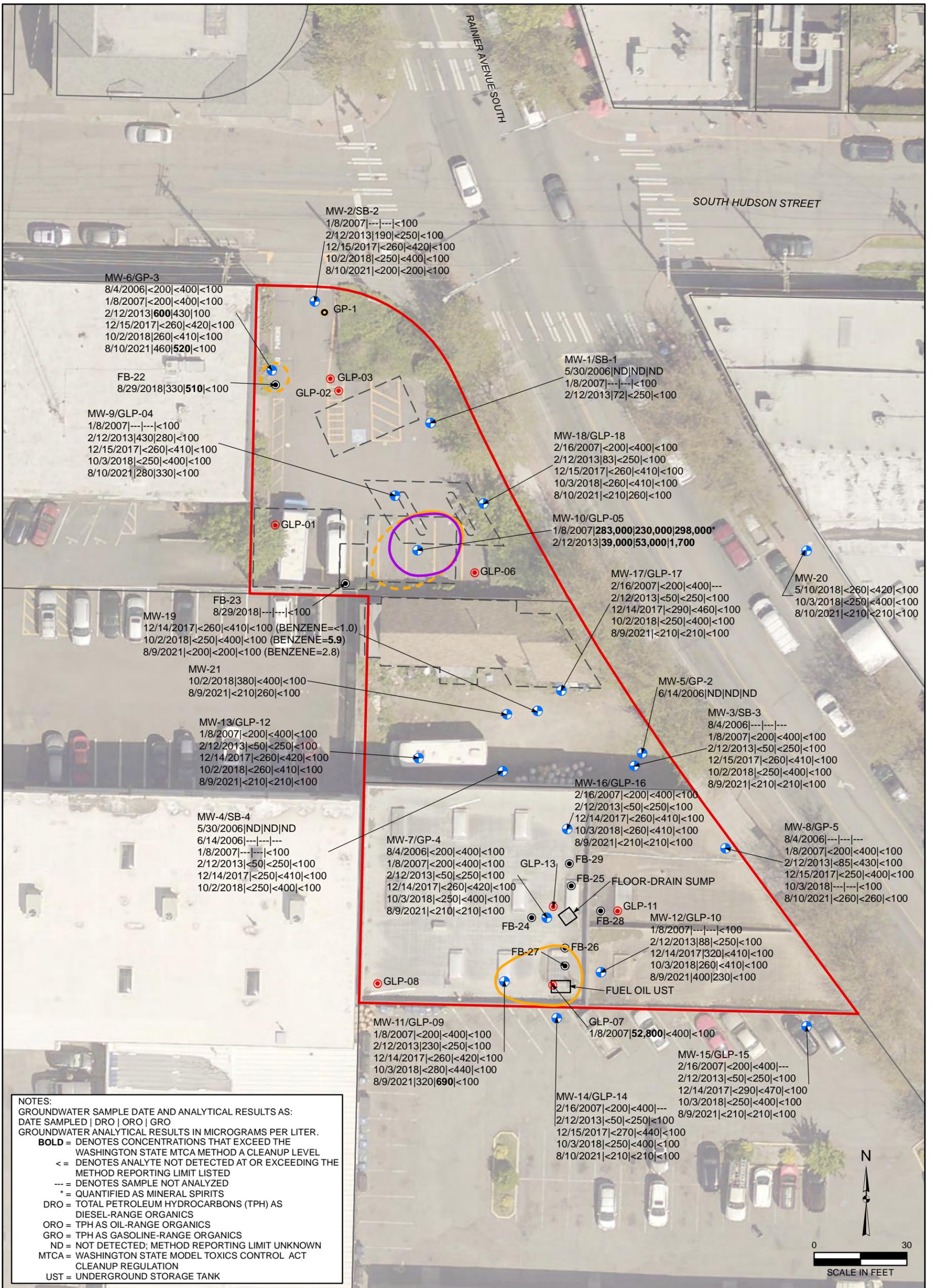
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FIGURE 10

CROSS-SECTION B-B'
PETROLEUM HYDROCARBONS
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021 RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON
FARALLON PN-1355-001

Date: 12/17/2021





NOTES:
 GROUNDWATER SAMPLE DATE AND ANALYTICAL RESULTS AS:
 DATE SAMPLED | DRO | ORO | GRO
 GROUNDWATER ANALYTICAL RESULTS IN MICROGRAMS PER LITER.
BOLD = DENOTES CONCENTRATIONS THAT EXCEED THE WASHINGTON STATE MTCA METHOD A CLEANUP LEVEL
 <= DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE METHOD REPORTING LIMIT LISTED
 --- = DENOTES SAMPLE NOT ANALYZED
 * = QUANTIFIED AS MINERAL SPIRITS
 DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS
 ORO = TPH AS OIL-RANGE ORGANICS
 GRO = TPH AS GASOLINE-RANGE ORGANICS
 ND = NOT DETECTED; METHOD REPORTING LIMIT UNKNOWN
 MTCA = WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION
 UST = UNDERGROUND STORAGE TANK

LEGEND

- + MONITORING WELL
- BORING (FARALLON)
- BORING (G-LOGICS)
- BORING (KLEINFELDER)
- ESTIMATED EXTENT OF DRO AND/OR ORO IN GROUNDWATER EXCEEDING MTCA METHOD A CLEANUP LEVEL, DASHED WHERE INFERRED
- ESTIMATED EXTENT OF GRO IN GROUNDWATER EXCEEDING MTCA METHOD A CLEANUP LEVEL
- ESTIMATED EXTENT OF BENZENE IN GROUNDWATER EXCEEDING MTCA METHOD A CLEANUP LEVEL
- APPROXIMATE PROPERTY BOUNDARY
- KING COUNTY PARCEL

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

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FIGURE 12
 ESTIMATED AREAL EXTENT OF
 PETROLEUM HYDROCARBONS IN GROUNDWATER
 MORNINGSIDE ACRES TRACTS
 5001, 5015, AND 5021
 RAINIER AVENUE SOUTH
 SEATTLE, WASHINGTON

FARALLON PN: 1355-001



LEGEND

- + MONITORING WELL
- BORING (FARALLON)
- BORING (G-LOGICS)
- BORING (KLEINFELDER)
- + VERTICAL AIR SPARGE WELL
- ⊕ VERTICAL SOIL VAPOR EXTRACTION WELL
- ++++ HORIZONTAL SOIL VAPOR EXTRACTION WELL
- ASSUMED AIR SPARGE WELL AREA OF INFLUENCE
- ASSUMED SOIL VAPOR EXTRACTION WELL AREA OF INFLUENCE
- APPROXIMATE SOURCE AREA TO BE EXCAVATED (MAXIMUM EXCAVATION DEPTH = 15 FEET BELOW GROUND SURFACE)
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY



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FIGURE 13

ALTERNATIVE 1
 MORNINGSIDE ACRES TRACTS
 5001, 5015, AND 5021
 RAINIER AVENUE SOUTH
 SEATTLE, WASHINGTON

FARALLON PN: 1355-001



LEGEND

- + MONITORING WELL
- BORING (FARALLON)
- BORING (G-LOGICS)
- BORING (KLEINFELDER)
- IN-SITU CHEMICAL REDUCTION/ENHANCED BIOREMEDIATION INJECTION POINT
- ASSUMED INJECTION AREA OF INFLUENCE
- APPROXIMATE SOURCE AREA TO BE EXCAVATED (MAXIMUM EXCAVATION DEPTH = 20 FEET BELOW GROUND SURFACE)
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY

NOTES:
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FIGURE 14

ALTERNATIVE 2

MORNINGSIDE ACRES TRACTS

5001, 5015, AND 5021
RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON

FARALLON PN: 1355-001

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LEGEND

- + MONITORING WELL
- BORING (FARALLON)
- BORING (G-LOGICS)
- BORING (KLEINFELDER)
- IN-SITU CHEMICAL REDUCTION/ENHANCED BIOREMEDIATION INJECTION WELL
- ASSUMED INJECTION AREA OF INFLUENCE
- APPROXIMATE SOURCE AREA TO BE EXCAVATED (MAXIMUM EXCAVATION DEPTH = 20 FEET BELOW GROUND SURFACE)
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY

NOTES:
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FIGURE 15
 ALTERNATIVE 3
 MORNINGSIDE ACRES TRACTS
 5001, 5015, AND 5021
 RAINIER AVENUE SOUTH
 SEATTLE, WASHINGTON

FARALLON PN: 1355-001

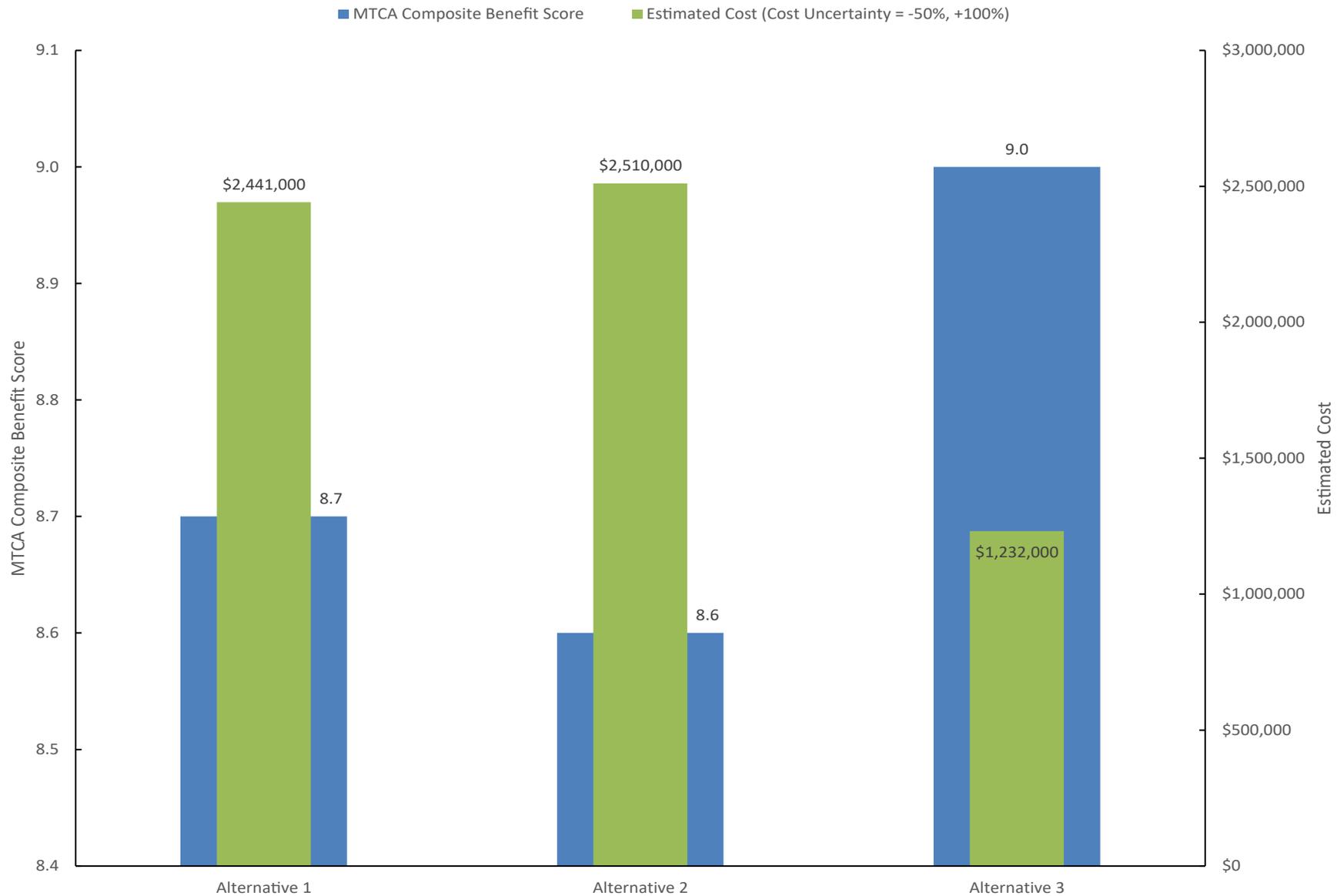
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Checked By: RL

Date: 1/5/2022

Disc Reference:

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NOTES:
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 MTCA = WASHINGTON STATE MODEL TOXICS CONTROL ACT



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FIGURE 16

**CLEANUP ACTION ALTERNATIVE COSTS
 VERSUS BENEFITS
 MORNINGSIDE ACRES TRACTS
 5001, 5015, AND 5021
 RAINIER AVENUE SOUTH
 SEATTLE, WASHINGTON**

FARALLON PN: 1355-001

Date: 12/6/2021 Disc Reference:
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TABLES

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY REPORT **Morningside Acres Tracts** **5001, 5015, and 5021 Rainier Avenue South** **Seattle, Washington**

Farallon PN: 1355-001

**Table 1
Groundwater Elevations
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001**

Location	Well Installation Date	Well Diameter (inches)	Top of Casing Elevation (feet NAVD88) ¹	Screened Interval (feet) ²	Monitoring Date	Depth to Water (feet) ²	Water Level Elevation (feet NAVD88) ¹	Comments
MW-1	5/25/2006	2	114.99	8 - 18	1/5/2007	9.91	105.08	---
					1/10/2007	9.99	105.00	---
					2/20/2007	10.41	104.58	---
					2/12/2013	10.52	104.47	---
					8/9/2021	NM	---	---
MW-2	5/25/2006	2	114.38	8 - 18	1/5/2007	16.07	98.31	---
					1/10/2007	Dry	---	---
					2/20/2007	15.66	98.72	---
					2/12/2013	9.43	104.95	---
					12/14/2017	9.41	104.97	---
					10/2/2018	9.71	104.67	---
					8/9/2021	9.82	104.56	---
MW-3	5/25/2006	2	114.97	8 - 18	1/5/2007	9.79	105.18	---
					1/10/2007	12.11	102.86	---
					2/20/2007	10.55	104.42	---
					2/12/2013	9.48	105.49	---
					12/14/2017	9.78	105.19	---
					10/2/2018	10.83	104.14	---
					8/9/2021	10.34	104.63	---
MW-4	5/25/2006	2	112.99	6.5 - 16.5	1/5/2007	7.26	105.73	---
					1/10/2007	7.25	105.74	---
					2/20/2007	7.39	105.60	---
					2/12/2013	7.44	105.55	---
					12/14/2017	7.87	105.12	---
					10/2/2018	8.48	104.51	---
					8/9/2021	NM	---	---
MW-5	6/8/2006	0.75	114.85	9 - 13	1/5/2007	9.89	104.96	---
					1/10/2007	NM	---	---
					2/20/2007	NM	---	---
					2/12/2013	NM	---	---
					8/9/2021	NM	---	---

**Table 1
Groundwater Elevations
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001**

Location	Well Installation Date	Well Diameter (inches)	Top of Casing Elevation (feet NAVD88) ¹	Screened Interval (feet) ²	Monitoring Date	Depth to Water (feet) ²	Water Level Elevation (feet NAVD88) ¹	Comments
MW-6	8/2/2006	0.75	115.15	9.5 - 14.5	1/5/2007	10.04	105.11	---
					1/10/2007	10.04	105.11	---
					2/20/2007	NM	---	---
					2/12/2013	10.51	104.64	---
					12/14/2017	10.77	104.38	---
					10/2/2018	11.20	103.95	---
					8/9/2021	10.82	104.33	---
MW-7	8/2/2006	0.75	108.29	6.5 - 11.5	1/5/2007	1.10	107.19	---
					1/10/2007	0.98	107.31	---
					2/20/2007	1.09	107.20	---
					2/12/2013	1.07	107.22	---
					12/14/2017	1.46	106.83	Petroleum odor
					10/2/2018	2.21	106.08	---
					8/9/2021	1.70	106.59	---
MW-8	8/2/2006	0.75	116.28	9.5 - 14.5	1/5/2007	10.01	106.27	---
					1/10/2007	10.41	105.87	---
					2/20/2007	10.46	105.82	---
					2/12/2013	10.21	106.07	---
					12/14/2017	10.56	105.72	---
					10/2/2018	11.26	105.02	---
					8/9/2021	10.94	105.34	---
MW-9	1/5/2007	0.75	114.70	9 - 19	1/5/2007	9.36	105.34	---
					1/10/2007	9.25	105.45	---
					2/20/2007	9.75	104.95	---
					2/12/2013	9.51	105.19	---
					12/14/2017	9.89	104.81	---
					10/2/2018	10.42	104.28	Petroleum odor
					8/9/2021	9.90	104.80	---

**Table 1
Groundwater Elevations
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001**

Location	Well Installation Date	Well Diameter (inches)	Top of Casing Elevation (feet NAVD88) ¹	Screened Interval (feet) ²	Monitoring Date	Depth to Water (feet) ²	Water Level Elevation (feet NAVD88) ¹	Comments
MW-10	1/5/2007	0.75	114.68	9 - 19	1/5/2007	8.58	106.10	---
					1/10/2007	8.65	106.03	---
					2/20/2007	9.35	105.33	NAPL present
					2/12/2013	9.74	104.94	---
					12/14/2017	9.94	104.74	NAPL present
					10/2/2018	10.54	104.14	NAPL present
					8/9/2021	10.28	104.40	NAPL present
MW-11	1/8/2007	0.75	108.47	3 - 13	1/10/2007	0.48	107.99	---
					2/20/2007	0.51	107.96	---
					2/12/2013	0.53	107.94	---
					12/14/2017	0.81	107.66	---
					10/2/2018	1.16	107.31	---
					8/9/2021	0.83	107.64	---
MW-12	1/8/2007	0.75	109.17	3 - 8	1/10/2007	1.61	107.56	---
					2/20/2007	1.96	107.21	---
					2/12/2013	1.96	107.21	---
					12/14/2017	2.38	106.79	Petroleum odor
					10/2/2018	3.11	106.06	---
					8/9/2021	2.58	106.59	---
MW-13	1/8/2007	0.75	111.82	5 - 15	1/10/2007	6.22	105.60	---
					2/20/2007	6.44	105.38	---
					2/12/2013	6.49	105.33	---
					12/14/2017	7.11	104.71	---
					10/2/2018	7.59	104.23	---
					8/9/2021	6.97	104.85	---
MW-14	2/16/2007	0.75	115.89	16 - 26	2/20/2007	9.20	106.69	---
					2/12/2013	9.16	106.73	---
					12/15/2017	9.56	106.33	---
					10/2/2018	10.22	105.67	---
					8/9/2021	9.78	106.11	---

**Table 1
Groundwater Elevations
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001**

Location	Well Installation Date	Well Diameter (inches)	Top of Casing Elevation (feet NAVD88) ¹	Screened Interval (feet) ²	Monitoring Date	Depth to Water (feet) ²	Water Level Elevation (feet NAVD88) ¹	Comments
MW-15	2/16/2007	0.75	115.92	7 - 17	2/20/2007	9.69	106.23	---
					2/12/2013	9.47	106.45	---
					12/14/2017	9.91	106.01	---
					10/2/2018	10.73	105.19	---
					8/9/2021	10.33	105.59	---
MW-16	2/16/2007	0.75	108.68	2 - 6	2/20/2007	1.65	107.03	---
					2/12/2013	1.65	107.03	---
					12/14/2017	2.05	106.63	---
					10/2/2018	2.70	105.98	---
					8/9/2021	2.19	106.49	---
MW-17	2/16/2007	0.75	113.61	6 - 16	2/20/2007	8.62	104.99	---
					2/12/2013	8.63	104.98	---
					12/14/2017	8.92	104.69	---
					10/2/2018	9.38	104.23	---
					8/9/2021	9.03	104.58	---
MW-18	2/16/2007	0.75	114.90	7 - 17	2/20/2007	10.38	104.52	---
					2/12/2013	10.47	104.43	---
					12/14/2017	10.67	104.23	---
					10/2/2018	11.18	103.72	---
					8/9/2021	10.72	104.18	---
MW-19	12/11/2017	2	113.31	25 - 30	12/14/2017	8.43	104.88	---
					10/2/2018	8.94	104.37	---
					8/9/2021	8.61	104.70	---
MW-20	4/13/2018	2	114.75	15 - 25	10/2/2018	8.83	105.92	---
					8/9/2021	9.07	105.68	---
MW-21	8/28/2018	2	112.86	35 - 45	10/2/2018	8.52	104.34	---
					8/9/2021	8.01	104.85	---

Notes:

¹ In feet above mean sea level.

² In feet below top of well casing.

NAVD88 = North American Vertical Datum of 1988

NAPL = nonaqueous-phase liquid

NM = not measured

Table 2
Soil Analytical Results for Chlorinated VOCs
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Location	Sampled By	Sample Identification	Sample Depth (feet bgs unless otherwise noted)	Sample Date	Analytical Results (milligrams per kilogram) ¹								
					PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloropropane	Chloroethane
GP-1	Kleinfelder	GP1-4@13'	13	6/8/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-2	Kleinfelder	GP2-3a	8.0	6/8/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3	Kleinfelder	GP3-3a	10	8/2/2006	< 0.02	< 0.02	< 0.05	< 0.05	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05
GP-4	Kleinfelder	GP4-3a	8.0 feet bbf	8/2/2006	< 0.02	0.24	0.14	< 0.05	0.30	< 0.05	< 0.05	< 0.05	< 0.05
GP-5	Kleinfelder	GP5-3a	10	8/2/2006	< 0.02	< 0.02	< 0.05	< 0.05	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05
GLP-05	G-Logics	GLP-05-05	5.0	1/5/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
GLP-08	G-Logics	GLP-08-7	7.0 feet bbf	1/5/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
GLP-09	G-Logics	GLP-09-2	2.0 feet bbf	1/5/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
	G-Logics	GLP-09-8	8.0 feet bbf	1/5/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
	G-Logics	GLP-09-12	12.0 feet bbf	1/5/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
GLP-10	G-Logics	GLP-10-3	3.0 feet bbf	1/5/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
	G-Logics	GLP-10-7	7.0 feet bbf	1/5/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
	G-Logics	GLP-10-9	9.0 feet bbf	1/5/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
GLP-11	G-Logics	GLP-11-3	3.0 feet bbf	1/5/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
GLP-12	G-Logics	GLP-12-6	6.0	1/5/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
GLP-13	G-Logics	GLP-13-4	4.0 feet bbf	2/16/2007	< 0.02	< 0.03	0.054	< 0.02	0.77	< 0.05	< 0.03	< 0.02	< 0.06
	G-Logics	GLP-13-8	8.0 feet bbf	2/16/2007	< 0.02	< 0.03	< 0.02	< 0.02	0.036	< 0.05	< 0.03	< 0.02	< 0.06
	G-Logics	GLP-13-12	12.0 feet bbf	2/16/2007	< 0.02	< 0.03	< 0.02	< 0.02	0.087	< 0.05	< 0.03	< 0.02	< 0.06
	G-Logics	GLP-13-12 DUP	12.0 feet bbf	2/16/2007	< 0.02	< 0.03	< 0.02	< 0.02	0.092	< 0.05	< 0.03	< 0.02	< 0.06
GLP-14	G-Logics	GLP-14-13	13.0	2/16/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
	G-Logics	GLP-14-24	24.0	2/16/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
GLP-15	G-Logics	GLP-15-13	13.0	2/16/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
	G-Logics	GLP-15-15	15.0	2/16/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
GLP-16	G-Logics	GLP-16-4	4.0 feet bbf	2/16/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
	G-Logics	GLP-16-6	6.0 feet bbf	2/16/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
GLP-17	G-Logics	GLP-17-11	11.0	2/16/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
	G-Logics	GLP-17-15	15.0	2/16/2007	< 0.02	< 0.03	0.027	0.039	0.041	< 0.05	< 0.03	< 0.02	< 0.06
GLP-18	G-Logics	GLP-18-10	10.0	2/16/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
	G-Logics	GLP-18-15	15.0	2/16/2007	< 0.02	< 0.03	< 0.02	< 0.02	< 0.03	< 0.05	< 0.03	< 0.02	< 0.06
MTCA Method A Cleanup Level²					0.05	0.03	160³	1,600³	0.67³	4,000³	11³	27.8³	NE

Table 2
Soil Analytical Results for Chlorinated VOCs
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Location	Sampled By	Sample Identification	Sample Depth (feet bgs unless otherwise noted)	Sample Date	Analytical Results (milligrams per kilogram) ¹								
					PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloropropane	Chloroethane
MW-19	Farallon	MW-19-10.0	10.0	12/11/2017	< 0.0024	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0078
	Farallon	MW-19-15.0	15.0	12/11/2017	< 0.0033	0.18	0.016	0.0043	0.017	< 0.0017	< 0.0017	< 0.0017	< 0.011
	Farallon	MW-19-22.5	22.5	12/12/2017	< 0.0025	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0080
	Farallon	MW-19-30.0	30.0	12/12/2017	< 0.0025	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0080
MW-20	Farallon	FB-20-10.0	10.0	4/13/2018	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0084
	Farallon	FB-20-13.0	13.0	4/13/2018	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0085
	Farallon	MW-20-15.0	15.0	5/8/2018	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0060
	Farallon	MW-20-20.0	20.0	5/8/2018	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0054
MW-21	Farallon	MW-21-30	30.0	8/28/2018	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0078
	Farallon	MW-21-35	35.0	8/28/2018	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0085
	Farallon	MW-21-40	40.0	8/28/2018	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0067
	Farallon	MW-21-45	45.0	8/28/2018	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0078
FB-22	Farallon	FB-22-10	10.0	8/29/2018	< 0.0021	< 0.0021	< 0.0021	< 0.0021	< 0.0021	< 0.0021	< 0.0021	< 0.0021	< 0.011
	Farallon	FB-22-15	15.0	8/29/2018	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0068
	Farallon	FB-22-20	20.0	8/29/2018	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0063
FB-23	Farallon	FB-23-10	10.0	8/29/2018	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0059
	Farallon	FB-23-13	13.0	8/29/2018	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0067
	Farallon	FB-23-17	17.0	8/29/2018	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0063
	Farallon	FB-23-20	20.0	8/29/2018	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0066
FB-24	Farallon	FB-24-6.0	6.0	4/13/2021	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.010
	Farallon	FB-24-10.0	10.0	4/13/2021	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0053
FB-25	Farallon	FB-25-2.0	2.0	4/13/2021	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0094
	Farallon	FB-25-6.0	6.0	4/13/2021	< 0.0016	< 0.0016	< 0.0016	< 0.0016	0.0019	< 0.0016	< 0.0016	< 0.0016	< 0.0078
	Farallon	FB-25-10.0	10.0	4/13/2021	< 0.0011	0.023	0.0074	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0056
FB-26	Farallon	FB-26-6.0	6.0	4/13/2021	< 0.0017	< 0.0017	< 0.0017	< 0.0017	0.0035	< 0.0017	< 0.0017	< 0.0017	< 0.0086
	Farallon	FB-26-10.0	10.0	4/13/2021	< 0.0018	0.88	0.042	< 0.0018	0.012	< 0.0018	0.0025	0.0029	< 0.0092
	Farallon	FB-26-14.0	14.0	4/13/2021	---	< 0.0011	---	---	---	---	---	---	---
FB-27	Farallon	FB-27-10.0	10.0	4/13/2021	---	< 0.0013	---	---	---	---	---	---	---
	Farallon	FB-27-14.0	14.0	4/13/2021	---	< 0.0012	---	---	---	---	---	---	---
MTCA Method A Cleanup Level²					0.05	0.03	160³	1,600³	0.67³	4,000³	11³	27.8³	NE

**Table 2
Soil Analytical Results for Chlorinated VOCs
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001**

Location	Sampled By	Sample Identification	Sample Depth (feet bgs unless otherwise noted)	Sample Date	Analytical Results (milligrams per kilogram) ¹								
					PCE	TCE	cis-1,2- Dichloroethene	trans-1,2- Dichloroethene	Vinyl Chloride	1,1- Dichloroethene	1,2- Dichloroethane	1,2- Dichloropropane	Chloroethane
FB-28	Farallon	FB-28-2.0	2.0	4/14/2021	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0075
	Farallon	FB-28-6.0	6.0	4/14/2021	< 0.0013	0.034	0.039	0.0080	0.0066	< 0.0013	< 0.0013	< 0.0013	< 0.0064
MTCA Method A Cleanup Level²					0.05	0.03	160³	1,600³	0.67³	4,000³	11³	27.8³	NE

NOTES:

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

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

¹Analyzed by U.S. Environmental Protection Agency Method 8260.

²MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013, unless otherwise noted.

³MTCA Method A cleanup level not established; the listed value is the Washington State Cleanup Levels and Risk Calculations (CLARC) MTCA Method B Standard Formula Value for Soil (Unrestricted Land Use) - Direct Contact (Ingestion Only), lowest of cancer or non-cancer values, from CLARC Master Spreadsheet dated July 2015, <https://fortress.wa.gov/ecy/clarc/CLARCDatatables.aspx>

bbf = below basement floor

bgs = below ground surface

Farallon = Farallon Consulting, L.L.C.

G-Logics = G-Logics, Inc.

Kleinfelder = Kleinfelder, Inc.

MTCA = Washington State Model Toxics Control Act Cleanup Regulation

ND = analyte not detected; laboratory method reporting limit unknown

NE = not established

PCE = tetrachloroethene

TCE = trichloroethene

VOC = volatile organic compound

TCE = trichloroethene

Table 3
Soil Analytical Results for Petroleum Hydrocarbons and Lead
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Location	Sampled By	Sample Identification	Sample Depth (feet bgs unless otherwise noted)	Sample Date	Analytical Results (milligrams per kilogram)									
					NWTPH-Dx				NWTPH-Gx	EPA Method 8021 or 8260				EPA 7000 Series Method
					Diesel	Mineral Oil	DRO	ORO	GRO	Benzene	Toluene	Ethylbenzene	Xylenes	Lead
GP-1	Kleinfelder	GP1-4@13'	13	6/8/2006	< 20	< 40	---	< 40 ¹	< 10	< 0.02	< 0.05	< 0.05	< 0.05	< 5
GP-2	Kleinfelder	GP2-3a	8.0	6/8/2006	---	---	---	---	---	< 0.02	< 0.05	< 0.05	< 0.05	---
GP-3	Kleinfelder	GP3-3a	10	8/2/2006	< 20	< 40	---	< 40 ¹	530	0.15	< 0.05	1.1	1.3	5.6
GP-4	Kleinfelder	GP4-3a	8.0 feet bbf	8/2/2006	< 20	< 40	---	< 40 ¹	< 10	< 0.02	< 0.05	< 0.05	< 0.05	5.6
GP-5	Kleinfelder	GP5-3a	10	8/2/2006	< 20	< 40	---	< 40 ¹	< 10	< 0.02	< 0.05	< 0.05	< 0.05	< 5
GLP-01	G-Logics	GLP-01-8.5	8.5	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.10	< 0.05	< 0.15	---
	G-Logics	GLP-01-10	10.0	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.10	< 0.05	< 0.15	---
GLP-02	G-Logics	GLP-02-09	9.0	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.10	< 0.05	< 0.15	---
GLP-03	G-Logics	GLP-03-03	3.0	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.10	< 0.05	< 0.15	---
	G-Logics	GLP-03-14	14.0	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.10	< 0.05	< 0.15	---
GLP-04	G-Logics	GLP-04-14	14.0	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.10	< 0.05	< 0.15	---
GLP-05	G-Logics	GLP-05-05	5.0	1/5/2007	< 25	---	3,300³	6,800¹	4,460²	1.15	0.094	1.68	3.40	---
	G-Logics	GLP-05-05 DUP	5.0	1/5/2007	< 25	---	3,630³	7,810¹	---	---	---	---	---	---
	G-Logics	GLP-05-11.5	11.5	1/5/2007	< 25	---	3,520³	3,480¹	4,800²	< 0.02	< 0.10	0.90	1.85	---
	G-Logics	GLP-05-18	18.0	1/5/2007	< 25	---	785 ³	1,650 ¹	890²	< 0.02	< 0.10	< 0.05	0.83	---
GLP-06	G-Logics	GLP-06-11	11.0	1/5/2007	< 25	---	< 40 ³	< 40 ¹	28 ²	< 0.02	< 0.10	0.11	0.23	---
	G-Logics	GLP-06-17	17.0	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.10	< 0.05	< 0.15	---
	G-Logics	GLP-06-18	18.0	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.10	< 0.05	< 0.15	---
	G-Logics	GLP-06-18 DUP	18.0	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.10	< 0.05	< 0.15	---
GLP-08	G-Logics	GLP-08-7	7.0 feet bbf	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-08-12	12.0 feet bbf	1/5/2007	< 25	---	< 40 ³	< 40 ¹	< 10 ²	< 0.02	< 0.10	< 0.05	< 0.15	---
	G-Logics	GLP-08-12 DUP	12.0 feet bbf	1/5/2007	< 25	---	< 40 ³	< 40 ¹	---	---	---	---	---	---
GLP-09	G-Logics	GLP-09-2	2.0 feet bbf	1/5/2007	< 25	---	< 40 ³	< 40 ¹	< 10 ²	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-09-8	8.0 feet bbf	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-09-12	12.0 feet bbf	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-09-12 DUP	12.0 feet bbf	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.10	< 0.05	< 0.15	---
GLP-10	G-Logics	GLP-10-3	3.0 feet bbf	1/5/2007	< 25	---	< 40 ³	< 40 ¹	< 10 ²	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-10-7	7.0 feet bbf	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-10-9	9.0 feet bbf	1/5/2007	---	---	---	---	< 10 ²	< 0.02	< 0.02	< 0.03	< 0.03	---
MTCA Method A Cleanup Level⁴					2,000	4,000	2,000	2,000⁵	30/100⁶	0.03	7	6	9	250

Table 3
Soil Analytical Results for Petroleum Hydrocarbons and Lead
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Location	Sampled By	Sample Identification	Sample Depth (feet bgs unless otherwise noted)	Sample Date	Analytical Results (milligrams per kilogram)									
					NWTPH-Dx				NWTPH-Gx	EPA Method 8021 or 8260				EPA 7000 Series Method
					Diesel	Mineral Oil	DRO	ORO	GRO	Benzene	Toluene	Ethylbenzene	Xylenes	Lead
GLP-11	G-Logics	GLP-11-3	3.0 feet bbf	1/5/2007	< 25	---	< 40 ³	< 40 ¹	< 10 ²	< 0.02	< 0.02	< 0.03	< 0.03	---
GLP-12	G-Logics	GLP-12-6	6.0	1/5/2007	< 25	---	< 40 ³	< 40 ¹	< 10 ²	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-12-6 DUP	6.0	1/5/2007	< 25	---	< 40 ³	< 40 ¹	< 10 ²	< 0.02	< 0.10	< 0.05	< 0.15	---
GLP-13	G-Logics	GLP-13-4	4.0 feet bbf	2/16/2007	< 25	---	< 40 ³	< 40 ¹	---	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-13-8	8.0 feet bbf	2/16/2007	< 25	---	< 40 ³	< 40 ¹	---	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-13-12	12.0 feet bbf	2/16/2007	< 25	---	< 40 ³	< 40 ¹	---	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-13-12 DUP	12.0 feet bbf	2/16/2007	---	---	---	---	---	< 0.02	< 0.02	< 0.03	< 0.03	---
GLP-14	G-Logics	GLP-14-13	13.0	2/16/2007	< 25	---	< 40 ³	< 40 ¹	---	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-14-24	24.0	2/16/2007	< 25	---	< 40 ³	< 40 ¹	---	< 0.02	< 0.02	< 0.03	< 0.03	---
GLP-15	G-Logics	GLP-15-13	13.0	2/16/2007	---	---	---	---	---	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-15-15	15.0	2/16/2007	---	---	---	---	---	< 0.02	< 0.02	< 0.03	< 0.03	---
GLP-16	G-Logics	GLP-16-4	4.0 feet bbf	2/16/2007	< 25	---	< 40 ³	< 40 ¹	---	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-16-6	6.0 feet bbf	2/16/2007	< 25	---	< 40 ³	< 40 ¹	---	< 0.02	< 0.02	< 0.03	< 0.03	---
GLP-17	G-Logics	GLP-17-11	11.0	2/16/2007	---	---	---	---	---	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-17-15	15.0	2/16/2007	---	---	---	---	---	< 0.02	< 0.02	< 0.03	< 0.03	---
GLP-18	G-Logics	GLP-18-10	10.0	2/16/2007	< 25	---	< 40 ³	< 40 ¹	63	< 0.02	< 0.02	< 0.03	< 0.03	---
	G-Logics	GLP-18-15	15.0	2/16/2007	< 25	---	< 40 ³	< 40 ¹	86	< 0.02	< 0.02	< 0.03	< 0.03	---
MW-19	Farallon	MW-19-10.0	10.0	12/11/2017	---	---	36	< 63	< 7.3	< 0.020	< 0.073	< 0.073	< 0.146	---
	Farallon	MW-19-15.0	15.0	12/11/2017	---	---	< 33	< 66	< 8.7	< 0.020	< 0.087	< 0.087	< 0.174	---
	Farallon	MW-19-22.5	22.5	12/12/2017	---	---	< 34	< 67	< 8.6	< 0.020	< 0.086	< 0.086	< 0.172	---
	Farallon	MW-19-30.0	30.0	12/12/2017	---	---	< 33	< 66	< 7.6	< 0.020	< 0.076	< 0.076	< 0.152	---
MW-20	Farallon	FB-20-10.0	10.0	4/13/2018	---	---	< 31	< 63	< 7.7	< 0.020	< 0.077	< 0.077	< 0.154	---
	Farallon	FB-20-13.0	13.0	4/13/2018	---	---	< 32	63	< 7.8	< 0.020	< 0.078	< 0.078	< 0.156	---
	Farallon	MW-20-15.0	15.0	5/8/2018	---	---	< 32	< 64	< 6.9	< 0.0012	< 0.0060	< 0.0012	< 0.0072	---
	Farallon	MW-20-20.0	20.0	5/8/2018	---	---	< 33	< 66	< 6.9	< 0.0011	< 0.0054	< 0.0011	< 0.0065	---
MW-21	Farallon	MW-21-30	30.0	8/28/2018	---	---	< 32	< 64	< 8.2	< 0.0016	< 0.0078	< 0.0016	< 0.0094	---
	Farallon	MW-21-35	35.0	8/28/2018	---	---	< 31	< 62	< 8.1	< 0.0017	< 0.0085	< 0.0017	< 0.0102	---
	Farallon	MW-21-40	40.0	8/28/2018	---	---	< 31	< 62	< 6.5	< 0.0013	< 0.0067	< 0.0013	< 0.0080	---
	Farallon	MW-21-45	45.0	8/28/2018	---	---	< 33	< 65	< 7.3	< 0.0016	< 0.0078	< 0.0016	< 0.0094	---
MTCA Method A Cleanup Level⁴					2,000	4,000	2,000	2,000⁵	30/100⁶	0.03	7	6	9	250

**Table 3
Soil Analytical Results for Petroleum Hydrocarbons and Lead
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001**

Location	Sampled By	Sample Identification	Sample Depth (feet bgs unless otherwise noted)	Sample Date	Analytical Results (milligrams per kilogram)									EPA 7000 Series Method
					NWTPH-Dx				NWTPH-Gx	EPA Method 8021 or 8260				
					Diesel	Mineral Oil	DRO	ORO	GRO	Benzene	Toluene	Ethylbenzene	Xylenes	
FB-22	Farallon	FB-22-10	10.0	8/29/2018	---	---	< 42	< 84	< 12	< 0.0021	< 0.011	< 0.0021	< 0.0131	---
	Farallon	FB-22-15	15.0	8/29/2018	---	---	< 33	< 66	< 7.9	< 0.0014	< 0.0068	< 0.0014	< 0.0082	---
	Farallon	FB-22-20	20.0	8/29/2018	---	---	< 29	< 59	< 6.1	< 0.0013	< 0.0063	< 0.0013	< 0.0076	---
FB-23	Farallon	FB-23-10	10.0	8/29/2018	---	---	320	< 70	< 18	< 0.0012	< 0.0059	< 0.0012	< 0.0071	---
	Farallon	FB-23-13	13.0	8/29/2018	---	---	430	< 68	1,400	< 0.0013	< 0.0067	< 0.0013	< 0.0080	---
	Farallon	FB-23-17	17.0	8/29/2018	---	---	< 33	< 65	< 8.2	< 0.0013	< 0.0063	< 0.0013	< 0.0076	---
	Farallon	FB-23-20	20.0	8/29/2018	---	---	< 31	< 61	< 7.6	< 0.0013	< 0.0066	< 0.0013	< 0.0079	---
MTCA Method A Cleanup Level⁴					2,000	4,000	2,000	2,000⁵	30/100⁶	0.03	7	6	9	250

NOTES:

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

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

— denotes constituent not analyzed.

¹Quantified as "oil."

²Quantified as "mineral spirits."

³Quantified as "kerosene."

⁴MTCA 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.

⁵Cleanup level for total petroleum hydrocarbons as heavy oil-orange organics.

⁶Cleanup level is 30 milligrams per kilogram if benzene is detected and 100 milligrams per kilogram if benzene is not detected.

bbf = below basement floor

bgs = below ground surface

DRO = total petroleum hydrocarbons as diesel-range organics

EPA = U.S. Environmental Protection Agency

Farallon = Farallon Consulting, L.L.C.

G-Logics = G-Logics, Inc.

GRO = total petroleum hydrocarbons as gasoline-range organics

Kleinfelder = Kleinfelder, Inc.

MTCA = Washington State Model Toxics Control Act Cleanup Regulation

ND = analyte not detected; laboratory method reporting limit unknown

NWTPH-Dx = Northwest Method NWTPH-Dx

NWTPH-Gx = Northwest Method NWTPH-Gx

ORO = total petroleum hydrocarbons as oil-range organics

Table 4
Groundwater Analytical Results for Chlorinated VOCs
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter) ¹								
				PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	1,2-Dichloroethane	Vinyl Chloride	Chloroethane	1,2-Dichloropropane
Reconnaissance Groundwater Samples												
GLP-07	G-Logics	1/8/2007	GLP-07-010807	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.2	< 2.0	< 1.0
FB-22	Farallon	8/29/2018	FB-22-GW	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.84	< 1.0	< 0.20
FB-23	Farallon	8/29/2018	FB-23-GW	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
Monitoring Well Groundwater Samples												
MW-1	Kleinfelder	5/30/2006	MW-1-053006	ND	ND	ND	ND	ND	ND	ND	ND	ND
	G-Logics	1/8/2007	MW-1-010807	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.2	< 2.0	< 1.0
	RGI	2/12/2013	MW-1-021213	< 1	< 1	< 1	< 1	< 1	< 1	< 0.2	< 1	< 1
	RGI	2/12/2013	MW-100-021213	< 1	< 1	< 1	< 1	< 1	< 1	< 0.2	< 1	< 1
MW-2	G-Logics	1/8/2007	MW-2-010807	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.2	< 2.0	< 1.0
	RGI	2/12/2013	MW-2-021213	< 1	< 1	< 1	< 1	< 1	< 1	< 0.2	< 1	< 1
	Farallon	12/15/2017	MW-2-121517	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	10/2/2018	MW-2-100218	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	8/10/2021	MW-2-081021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
MW-3	Kleinfelder	8/4/2006	MW-3-080406	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.72	< 1.0	< 1.0
	G-Logics	1/8/2007	MW-3-010807	< 1.0	< 1.0	3.3	< 1.0	< 2.0	< 1.0	0.46	11.2	< 1.0
	RGI	2/12/2013	MW-3-021213	< 1	< 1	1.4	< 1	< 1	< 1	< 0.2	< 1	---
	Farallon	12/15/2017	MW-3-121517	< 0.20	< 0.20	0.48	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	10/2/2018	MW-3-100218	< 0.20	< 0.20	1.2	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	8/9/2021	MW-3-080921	< 0.20	< 0.20	0.51	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
MW-4	Kleinfelder	5/30/2006	MW-4-053006	ND	ND	ND	ND	ND	ND	2.1	ND	ND
	Kleinfelder	6/9/2006	MW-4-061406	ND	1.8	2.7	ND	ND	ND	16	ND	ND
	G-Logics	1/8/2007	MW-4-010807	< 1.0	< 1.0	0.79 J	< 1.0	< 2.0	< 1.0	4.0	< 2.0	< 1.0
	RGI	2/12/2013	MW-4-021213	< 1	< 1	1.3	< 1	< 1	< 1	7.0	< 1	---
	Farallon	12/14/2017	MW-4-121417	< 0.20	0.31	0.71	< 0.20	< 0.20	< 0.20	1.5	< 1.0	< 0.20
	Farallon	10/2/2018	MW-4-100218	< 0.20	0.24	0.71	< 0.20	< 0.20	< 0.20	1.5	< 1.0	< 0.20
MW-5	Kleinfelder	6/9/2006	MW-5-061406	ND	2.2	13	ND	ND	ND	24	12	ND
MTCA Method A Cleanup Level²				5	5	16³	160³	400³	5	0.2	NE	1.22³
MTCA Method B Vapor Intrusion Screening Level⁴				25	1.4	NE	77	130	3.5	0.33	15,000	10

Table 4
Groundwater Analytical Results for Chlorinated VOCs
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter) ¹								
				PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	1,2-Dichloroethane	Vinyl Chloride	Chloroethane	1,2-Dichloropropane
MW-6	Kleinfelder	8/4/2006	MW-6-080406	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.2	< 1.0	< 1.0
	G-Logics	1/8/2007	MW-6-010807	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.2	< 2.0	< 1.0
	RGI	2/12/2013	MW-6-021213	< 1	< 1	< 1	< 1	< 1	< 1	< 0.2	< 1	< 1
	Farallon	12/15/2017	MW-6-121517	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	10/2/2018	MW-6-100218	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	8/10/2021	MW-6-081021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
MW-7	Kleinfelder	8/4/2006	MW-7-080406	< 1.0	51	160	< 1.0	2.5	11	260	< 1.0	3.4
	G-Logics	1/8/2007	MW-7-010807	< 1.0	16	173	2.6	6.1	8.2	593	< 2.0	< 1.0
	RGI	2/12/2013	MW-7-021213	< 1	25	220	3.7	3.5	6.1	290	< 1	< 1
	Farallon	12/14/2017	MW-7-121417	< 1.0	24	140	3.7	2.9	5.1	150	< 5.0	2.4
	Farallon	12/14/2017	DUP-1-121417	< 1.0	24	140	3.5	2.7	5.0	140	< 5.0	2.3
	Farallon	10/3/2018	MW-7-100318	< 2.0	50	210	5.0	4.2	6.9	250	< 10	3.9
	Farallon	8/9/2021	MW-7-080921	< 0.80	34	120	2.6	2.5	4.2	150	< 4.0	2.4
MW-8	Kleinfelder	8/4/2006	MW-8-080406	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.2	< 1.0	< 1.0
	G-Logics	1/8/2007	MW-8-010807	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.2	< 2.0	< 1.0
	RGI	2/12/2013	MW-8-021213	< 1	< 1	< 1	< 1	< 1	< 1	< 0.2	< 1	---
	Farallon	12/15/2017	MW-8-121517	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	10/3/2018	MW-8-100318	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	8/10/2021	MW-8-081021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
MW-9	G-Logics	1/8/2007	MW-9-010807	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.2	< 2.0	< 1.0
	RGI	2/12/2013	MW-9-021213	< 1	< 1	< 1	< 1	< 1	< 1	< 0.2	< 1	< 1
	Farallon	12/15/2017	MW-9-121517	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	10/3/2018	MW-9-100318	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	8/10/2021	MW-9-081021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
MW-10	G-Logics	1/8/2007	MW-10-010807	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.2	< 2.0	< 1.0
	RGI	2/12/2013	MW-10-021213	< 1	< 1	< 1	< 1	< 1	< 1	< 0.2	< 1	< 1
MTCA Method A Cleanup Level²				5	5	16³	160³	400³	5	0.2	NE	1.22³
MTCA Method B Vapor Intrusion Screening Level⁴				25	1.4	NE	77	130	3.5	0.33	15,000	10

Table 4
Groundwater Analytical Results for Chlorinated VOCs
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter) ¹								
				PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	1,2-Dichloroethane	Vinyl Chloride	Chloroethane	1,2-Dichloropropane
MW-11	G-Logics	1/8/2007	MW-11-010807	< 1.0	0.9	1.2	< 1.0	< 2.0	< 1.0	1.4	< 2.0	< 1.0
	RGI	2/12/2013	MW-11-021213	< 1	< 1	< 1	< 1	< 1	< 1	< 0.2	< 1	---
	Farallon	12/14/2017	MW-11-121417	< 0.20	< 0.20	0.73	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	10/3/2018	MW-11-100318	< 0.20	< 0.20	1.0	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	8/9/2021	MW-11-080921	< 0.20	< 0.20	0.62	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
MW-12	G-Logics	1/8/2007	MW-12-010807	< 1.0	12.2	6.2	< 1.0	< 2.0	< 1.0	1.2	< 2.0	< 1.0
	RGI	2/12/2013	MW-12-021213	< 1	8.3	6.7	< 1	< 1	< 1	0.26	< 1	---
	Farallon	12/14/2017	MW-12-121417	< 0.20	23	29	2.7	0.72	0.57	11	< 1.0	0.52
	Farallon	10/3/2018	MW-12-100318	< 0.40	38	46	4.5	1.1	0.80	13	< 2.0	0.79
	Farallon	8/9/2021	MW-12-080921	< 0.40	47	57	4.7	1.2	0.91	20	< 2.0	0.75
MW-13	G-Logics	1/8/2007	MW-13-010807	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.2	< 2.0	< 1.0
	RGI	2/12/2013	MW-13-021213	< 1	< 1	< 1	< 1	< 1	< 1	< 0.2	< 1	---
	Farallon	12/14/2017	MW-13-121417	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	10/2/2018	MW-13-100218	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	8/9/2021	MW-13-080921	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
MW-14	G-Logics	2/16/2007	MW-14-021607	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.2	< 2.0	< 1.0
	RGI	2/12/2013	MW-14-021213	< 1	< 1	< 1	< 1	< 1	< 1	< 0.2	< 1	---
	Farallon	12/15/2017	MW-14-121517	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	10/3/2018	MW-14-100318	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	8/10/2021	MW-14-081021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
MW-15	G-Logics	2/16/2007	MW-15-021607	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.2	< 2.0	< 1.0
	RGI	2/12/2013	MW-15-021213	< 1	< 1	< 1	< 1	< 1	< 1	< 0.2	< 1	---
	Farallon	12/14/2017	MW-15-121417	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	10/3/2018	MW-15-100318	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	8/9/2021	MW-15-080921	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
MTCA Method A Cleanup Level²				5	5	16³	160³	400³	5	0.2	NE	1.22³
MTCA Method B Vapor Intrusion Screening Level⁴				25	1.4	NE	77	130	3.5	0.33	15,000	10

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Seattle, Washington
Farallon PN: 1355-001

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter) ¹								
				PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	1,2-Dichloroethane	Vinyl Chloride	Chloroethane	1,2-Dichloropropane
MW-16	G-Logics	2/16/2007	MW-16-021607	< 1.0	30.2	27.9	< 1.0	< 2.0	< 1.0	7	< 2.0	< 1.0
	RGI	2/12/2013	MW-16-021213	< 1	2.4	24	6.1	< 1	< 1	6.6	< 1	---
	Farallon	12/14/2017	MW-16-121417	< 0.20	1.7	30	7.2	0.55	< 0.20	8.1	< 1.0	< 0.20
	Farallon	10/3/2018	MW-16-100318	< 0.20	1.2	25	5.4	0.44	< 0.20	7.0	< 1.0	< 0.20
	Farallon	8/9/2021	MW-16-080921	< 0.20	1.2	25	4.7	0.41	< 0.20	7.1	< 1.0	< 0.20
MW-17	G-Logics	2/16/2007	MW-17-021607	< 1.0	109	77.3	< 1.0	5.6	< 1.0	155	< 2.0	< 1.0
	RGI	2/12/2013	MW-17-021213	< 1	48	41	17	2.5	< 1	76	9.2	---
	Farallon	12/14/2017	MW-17-121417	< 0.20	18	23	8.4	0.92	0.31	23	8	0.32
	Farallon	12/14/2017	DUP-2-121417	< 0.20	17	23	8.3	0.89	0.31	22	7.9	0.29
	Farallon	10/2/2018	MW-17-100218	< 0.40	31	34	15	2.3	0.41	46	22	0.41
	Farallon	8/9/2021	MW-17-080921	< 0.20	16	23	8.8	1.2	0.20	22	4.2	0.26
MW-18	G-Logics	2/16/2007	MW-18-021607	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.2	< 2.0	< 1.0
	RGI	2/12/2013	MW-18-021213	< 1	< 1	< 1	< 1	< 1	< 1	< 0.2	< 1	< 1
	Farallon	12/15/2017	MW-18-121517	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	10/3/2018	MW-18-100318	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	8/10/2021	MW-18-081021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
MW-19	Farallon	12/14/2017	MW-19-121417	< 0.40	6.6	19	2.7	0.72	< 0.40	41	< 2.0	< 0.40
	Farallon	10/2/2018	MW-19-100218	< 0.20	0.86	3.7	0.21	< 0.20	< 0.20	8.5	< 1.0	< 0.20
	Farallon	8/9/2021	MW-19-080921	< 0.20	1.2	7.1	0.51	< 0.20	< 0.20	15	< 1.0	< 0.20
MTCA Method A Cleanup Level²				5	5	16³	160³	400³	5	0.2	NE	1.22³
MTCA Method B Vapor Intrusion Screening Level⁴				25	1.4	NE	77	130	3.5	0.33	15,000	10

Table 4
Groundwater Analytical Results for Chlorinated VOCs
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter) ¹								
				PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	1,2-Dichloroethane	Vinyl Chloride	Chloroethane	1,2-Dichloropropane
MW-20	Farallon	5/10/2018	MW-20-051018	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	10/3/2018	MW-20-100318	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
	Farallon	8/10/2021	MW-20-081021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0	< 0.20
MW-21	Farallon	10/2/2018	MW-21-100218	< 0.20 J	1.2 J	2.6 J	0.39 J	< 0.20 J	< 0.20 J	7.9 J	< 1.0 J	< 0.20 J
	Farallon	8/9/2021	MW-21-080921	< 0.20	< 0.20	0.55	< 0.20	< 0.20	< 0.20	0.98	< 1.0	< 0.20
MTCA Method A Cleanup Level²				5	5	16³	160³	400³	5	0.2	NE	1.22³
MTCA Method B Vapor Intrusion Screening Level⁴				25	1.4	NE	77	130	3.5	0.33	15,000	10

NOTES:

Results in **bold** denote concentrations exceeding MTCA cleanup levels.
Results in shaded cells denote concentrations exceeding MTCA vapor intrusion screening levels.
< denotes concentration not detected at or exceeding the laboratory method reporting limit listed.
— denotes constituent not analyzed.

¹Analyzed by U.S. Environmental Protection Agency Method 8260.

²MTCA 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.

³MTCA Method A cleanup level not established; the listed value is the Washington State Cleanup Levels and Risk Calculations (CLARC) MTCA Method B Standard Formula Value for Groundwater - Direct Contact (Ingestion and Inhalation Only), lowest of cancer or non-cancer values, from CLARC Master Spreadsheet, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical->

⁴Washington State CLARC MTCA Method B Standard Formula Value - Groundwater Screening Level for Vapor Intrusion Pathway, lowest of cancer or non-cancer values, from CLARC Master Spreadsheet, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC>

Farallon = Farallon Consulting, L.L.C.
G-Logics = G-Logics, Inc.
J = result is an estimate
Kleinfelder = Kleinfelder, Inc.
MTCA = Washington State Model Toxics Control Act Cleanup Regulation
ND = analyte not detected; laboratory reporting limit unknown
NE = not established
PCE = tetrachloroethene
RGI = The Riley Group, Inc.
TCE = trichloroethene
VOC = volatile organic compound

Table 5
Groundwater Analytical Results for Petroleum Hydrocarbons and 1,2-Dibromoethane
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter)								
				NWTPH-Dx			NWTPH-Gx	EPA Method 8021 or 8260				EPA Method 8011
				DRO	Mineral Oil	ORO	GRO	Benzene	Toluene	Ethylbenzene	Xylenes	1,2-Dibromoethane
Reconnaissance Groundwater Samples												
GLP-07	G-Logics	1/5/2007	GLP-07-GW	52,800¹	< 400	< 400 ²	< 100 ³	< 1.0	1.9	< 1.0	6.4	---
FB-22	Farallon	8/29/2018	FB-22-GW	330	---	510	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
FB-23	Farallon	8/29/2018	FB-23-GW	---	---	---	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
Monitoring Well Groundwater Samples												
MW-1	Kleinfelder	5/30/2006	MW-1-053006	ND	---	ND	ND	ND	ND	ND	ND	---
	G-Logics	1/8/2007	MW-1	---	---	---	< 100 ³	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-1-021213	72	---	< 250	< 100	< 0.35	< 1	< 1	< 2	---
	RGI	2/12/2013	MW-100-021213	59	---	< 250	---	< 0.35	< 1	< 1	< 2	---
MW-2	G-Logics	1/8/2007	MW-2	---	---	---	< 100 ³	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-2-021213	190	---	< 250	< 100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/15/2017	MW-2-121517	< 260	---	< 420	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/2/2018	MW-2-100218	< 250	---	< 400	< 100	< 0.20	< 1.0	< 0.20	< 0.60	< 0.0097
	Farallon	8/10/2021	MW-2-081021	< 200	---	< 200	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MW-3	Kleinfelder	8/4/2006	MW-3-080406	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	---
	G-Logics	1/8/2007	MW-3	< 200 ¹	< 400	< 400 ²	< 100 ³	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-3-021213	< 50	---	< 250	< 100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/15/2017	MW-3-121517	< 260	---	< 410	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/2/2018	MW-3-100218	< 250	---	< 400	< 100	< 0.20	< 1.0	< 0.20	< 0.60	< 0.0096
	Farallon	8/9/2021	MW-3-080921	< 210	---	< 210	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MW-4	Kleinfelder	5/30/2006	MW-4-053006	ND	---	ND	ND	ND	ND	ND	ND	---
	Kleinfelder	6/9/2006	MW-4-061406	---	---	---	---	ND	ND	ND	ND	---
	G-Logics	1/8/2007	MW-4	---	---	---	< 100 ³	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-4-021213	< 50	---	< 250	< 100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/14/2017	MW-4-121417	< 250	---	< 410	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/2/2018	MW-4-100218	< 250	---	< 400	< 100	< 0.20	< 1.0	< 0.20	< 0.60	< 0.0097
MTCA Method A Cleanup Level⁴				500	500	500⁵	800/1,000⁶	5	1,000	700	1,000	0.01
MTCA Method B Vapor Intrusion Screening Level⁷				NE	NE	NE	NE	2.4	15,000	2,800	320	0.30

Table 5
Groundwater Analytical Results for Petroleum Hydrocarbons and 1,2-Dibromoethane
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter)								
				NWTPH-Dx			NWTPH-Gx	EPA Method 8021 or 8260				EPA Method 8011
				DRO	Mineral Oil	ORO	GRO	Benzene	Toluene	Ethylbenzene	Xylenes	1,2-Dibromoethane
MW-5	Kleinfelder	6/9/2006	MW-5-061406	ND	---	ND	ND	ND	ND	ND	ND	---
MW-6	Kleinfelder	8/4/2006	MW-6-080406	< 200 ¹	< 400	< 400 ²	< 100 ³	< 1.0	< 1.0	< 1.0	< 1.0	---
	G-Logics	1/8/2007	MW-6	< 200 ¹	< 400	< 400 ²	< 100 ³	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-6-021213	600 < 50 SG	---	430 < 250 SG	100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/15/2017	MW-6-121517	< 260	---	< 420	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/2/2018	MW-6-100218	260	---	< 410	< 100	< 0.20	< 1.0	< 0.20	< 0.60	< 0.0097
	Farallon	8/10/2021	MW-6-081021	460	---	520	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MW-7	Kleinfelder	8/4/2006	MW-7-080406	< 200 ¹	< 400	< 400 ²	< 100 ³	< 1.0	2.2	< 1.0	< 1.0	---
	G-Logics	1/8/2007	MW-7	< 200 ¹	< 400	< 400 ²	< 100 ³	1.4	2.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-7-021213	< 50	---	< 250	< 100	0.55	< 1	< 1	< 2	---
	Farallon	12/14/2017	MW-7-121417	< 260	---	< 420	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	12/14/2017	DUP-1-121417	< 260	---	< 420	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/3/2018	MW-7-100318	< 250	---	< 400	< 100	< 2.0	< 10	< 2.0	< 6.0	< 0.0097
	Farallon	8/9/2021	MW-7-080921	< 210	---	< 210	< 100	< 0.80	< 4.0	< 0.80	< 2.4	---
MW-8	Kleinfelder	8/4/2006	MW-8-080406	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	---
	G-Logics	1/8/2007	MW-8	< 200 ¹	< 400	< 400 ²	< 100 ³	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-8-021213	< 85	---	< 430	< 100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/15/2017	MW-8-121517	< 250	---	< 400	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/3/2018	MW-8-100318	---	---	---	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
	Farallon	8/10/2021	MW-8-081021	< 260	---	< 260	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MTCA Method A Cleanup Level⁴				500	500	500⁵	800/1,000⁶	5	1,000	700	1,000	0.01
MTCA Method B Vapor Intrusion Screening Level⁷				NE	NE	NE	NE	2.4	15,000	2,800	320	0.30

Table 5
Groundwater Analytical Results for Petroleum Hydrocarbons and 1,2-Dibromoethane
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter)								
				NWTPH-Dx			NWTPH-Gx	EPA Method 8021 or 8260				EPA Method 8011
				DRO	Mineral Oil	ORO	GRO	Benzene	Toluene	Ethylbenzene	Xylenes	1,2-Dibromoethane
MW-9	G-Logics	1/8/2007	MW-9	---	---	---	< 100 ³	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-9-021213	430 < 50 SG	---	280 < 250 SG	< 100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/15/2017	MW-9-121517	< 260	---	< 410	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/3/2018	MW-9-100318	< 250	---	< 400	< 100	< 0.20	< 1.0	< 0.20	< 0.60	< 0.0098
	Farallon	8/10/2021	MW-9-081021	280	---	330	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MW-10	G-Logics	1/8/2007	MW-10	283,000¹	< 400	230,000²	298,000⁸	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-10-021213	39,000	---	53,000	1,700	< 0.35	< 1	< 1	< 2	---
MW-11	G-Logics	1/8/2007	MW-11	< 200 ¹	< 400	< 400 ²	< 100 ³	1.2	3.2	< 1.0	3.2	---
	RGI	2/12/2013	MW-11-021213	230	---	< 250	< 100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/14/2017	MW-11-121417	< 260	---	< 420	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/3/2018	MW-11-100318	< 280	---	< 440	< 100	< 0.20	< 1.0	< 0.20	< 0.60	< 0.0098
	Farallon	8/9/2021	MW-11-080921	320	---	690	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MW-12	G-Logics	1/8/2007	MW-12	< 200 ¹	< 400	< 400 ²	< 100 ³	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-12-021213	88	---	< 250	< 100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/14/2017	MW-12-121417	320	---	< 410	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/3/2018	MW-12-100318	260	---	< 410	< 100	< 0.40	< 2.0	< 0.40	< 1.20	< 0.0097
	Farallon	8/9/2021	MW-12-080921	400	---	230	< 100	< 0.40	< 2.0	< 0.40	< 1.20	---
MW-13	G-Logics	1/8/2007	MW-13	---	---	---	< 100 ³	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-13-021213	< 50	---	< 250	< 100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/14/2017	MW-13-121417	< 260	---	< 420	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/2/2018	MW-13-100218	< 260	---	< 410	< 100	< 0.20	< 1.0	< 0.20	< 0.60	< 0.0099
	Farallon	8/9/2021	MW-13-080921	< 210	---	< 210	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MTCA Method A Cleanup Level⁴				500	500	500⁵	800/1,000⁶	5	1,000	700	1,000	0.01
MTCA Method B Vapor Intrusion Screening Level⁷				NE	NE	NE	NE	2.4	15,000	2,800	320	0.30

Table 5
Groundwater Analytical Results for Petroleum Hydrocarbons and 1,2-Dibromoethane
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter)								
				NWTPH-Dx			NWTPH-Gx	EPA Method 8021 or 8260				EPA Method 8011
				DRO	Mineral Oil	ORO	GRO	Benzene	Toluene	Ethylbenzene	Xylenes	1,2-Dibromoethane
MW-14	G-Logics	2/16/2007	MW-14	< 200 ¹	< 400	< 400 ²	---	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-14-021213	< 50	---	< 250	< 100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/15/2017	MW-14-121517	< 270	---	< 440	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/3/2018	MW-14-100318	< 250	---	< 400	< 100	< 0.20	< 1.0	< 0.20	< 0.60	< 0.0097
	Farallon	8/10/2021	MW-14-081021	< 210	---	< 210	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MW-15	G-Logics	2/16/2007	MW-15	< 200 ¹	< 400	< 400 ²	---	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-15-021213	< 50	---	< 250	< 100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/14/2017	MW-15-121417	< 290	---	< 470	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/3/2018	MW-15-100318	< 250	---	< 400	< 100	< 0.20	< 1.0	< 0.20	< 0.60	< 0.0098
	Farallon	8/9/2021	MW-15-080921	< 210	---	< 210	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MW-16	G-Logics	2/16/2007	MW-16	< 200 ¹	< 400	< 400 ²	< 100 ³	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-16-021213	< 50	---	< 250	< 100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/14/2017	MW-16-121417	< 260	---	< 410	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/3/2018	MW-16-100318	< 260	---	< 410	< 100	< 0.20	< 1.0	< 0.20	< 0.60	< 0.0098
	Farallon	8/9/2021	MW-16-080921	< 210	---	< 210	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MW-17	G-Logics	2/16/2007	MW-17	< 200 ¹	< 400	< 400 ²	---	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-17-021213	< 50	---	< 250	< 100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/14/2017	MW-17-121417	< 290	---	< 460	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	12/14/2017	DUP-2-121417	< 310	---	< 500	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/2/2018	MW-17-100218	< 250	---	< 400	< 100	< 0.40	< 2.0	< 0.40	< 1.20	< 0.0098
	Farallon	8/9/2021	MW-17-080921	< 210	---	< 210	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MTCA Method A Cleanup Level⁴				500	500	500⁵	800/1,000⁶	5	1,000	700	1,000	0.01
MTCA Method B Vapor Intrusion Screening Level⁷				NE	NE	NE	NE	2.4	15,000	2,800	320	0.30

Table 5
Groundwater Analytical Results for Petroleum Hydrocarbons and 1,2-Dibromoethane
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter)								
				NWTPH-Dx			NWTPH-Gx	EPA Method 8021 or 8260				EPA Method 8011
				DRO	Mineral Oil	ORO	GRO	Benzene	Toluene	Ethylbenzene	Xylenes	1,2-Dibromoethane
MW-18	G-Logics	2/16/2007	MW-18	< 200 ¹	< 400	< 400 ²	< 100 ³	< 1.0	< 1.0	< 1.0	< 1.0	---
	RGI	2/12/2013	MW-18-021213	83	---	< 250	< 100	< 0.35	< 1	< 1	< 2	---
	Farallon	12/15/2017	MW-18-121517	< 260	---	< 410	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/3/2018	MW-18-100318	< 260	---	< 410	< 100	< 0.20	< 1.0	< 0.20	< 0.60	< 0.0096
	Farallon	8/10/2021	MW-18-081021	< 210	---	260	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MW-19	Farallon	12/14/2017	MW-19-121417	< 260	---	< 410	< 100	< 1.0	< 1.0	< 1.0	< 2.0	---
	Farallon	10/2/2018	MW-19-100218	< 250	---	< 400	< 100	5.9	< 1.0	< 0.20	< 0.60	< 0.0097
	Farallon	8/9/2021	MW-19-080921	< 200	---	< 200	< 100	2.8	< 1.0	< 0.20	< 0.60	---
MW-20	Farallon	5/10/2018	MW-20-051018	< 260	---	< 420	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
	Farallon	10/3/2018	MW-20-100318	< 250	---	< 400	< 100	< 0.20	< 1.0	< 0.20	< 0.60	< 0.0098
	Farallon	8/10/2021	MW-20-081021	< 210	---	< 210	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MW-21	Farallon	10/2/2018	MW-21-100218	380	---	< 400	< 100	< 0.20 J	< 1.0 J	< 0.20 J	< 0.60 J	< 0.010 J
	Farallon	8/9/2021	MW-21-080921	< 210	---	260	< 100	< 0.20	< 1.0	< 0.20	< 0.60	---
MTCA Method A Cleanup Level⁴				500	500	500⁵	800/1,000⁶	5	1,000	700	1,000	0.01
MTCA Method B Vapor Intrusion Screening Level⁷				NE	NE	NE	NE	2.4	15,000	2,800	320	0.30

NOTES:

Results in **bold** denote concentrations exceeding MTCA cleanup levels.
Results in shaded cells denote concentrations exceeding MTCA vapor intrusion screening levels.
< denotes concentration not detected at or exceeding the laboratory method reporting limit listed.
— denotes constituent not analyzed.

¹Quantified as "diesel."

²Quantified as "oil."

³Quantified as "gasoline."

⁴MTCA Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013.

⁵Cleanup level for total petroleum hydrocarbons as heavy oil-range organics.

⁶Cleanup level is 800 micrograms per liter if benzene is detected and 1,000 micrograms per liter if benzene is not detected.

⁷Washington State CLARC MTCA Method B Standard Formula Value - Groundwater Screening Level for Vapor Intrusion Pathway, lowest of cancer or non-cancer values, from CLARC Master Spreadsheet dated July 2015, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC>

⁸Quantified as "mineral spirits."

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = total petroleum hydrocarbons as diesel-range organics

EPA = U.S. Environmental Protection Agency

Farallon = Farallon Consulting, L.L.C.

G-Logics = G-Logics, Inc.

GRO = total petroleum hydrocarbons as gasoline-range organics

J = result is an estimate

Kleinfelder = Kleinfelder, Inc.

MTCA = Washington State Model Toxics Control Act Cleanup Regulation

ND = analyte not detected; laboratory method reporting limit unknown

NE = not established

NWTPH-Dx = Northwest Method NWTPH-Dx

NWTPH-Gx = Northwest Method NWTPH-Gx

ORO = total petroleum hydrocarbons as oil-range organics

RGI = The Riley Group, Inc.

SG = result for sample analyzed with silica gel cleanup procedure

Table 6
Sediment Analytical Results for Petroleum Hydrocarbons, Metals, and PCBs
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Location	Sampled By	Sample Identification	Sample Depth (feet bbf)	Sample Date	Analytical Results (milligrams per kilogram)														
					NWTPH-Dx				NWTPH-Gx	EPA Method 8260				EPA 7000 Series Methods					EPA Method 8082
					Diesel	Mineral Oil	DRO	ORO	GRO	Benzene	Toluene	Ethylbenzene	Xylenes	Arsenic	Cadmium	Chromium	Lead	Mercury	Polychlorinated Biphenyls (Aroclors)
Floor-Drain Sump	G-Logics	Sump	1.0	1/5/2007	< 25	---	< 40 ¹	10,700 ²	11,800 ³	0.068	0.27	0.68	0.40	8.2	4.7	22	570	< 0.5	< 0.20

NOTES:

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

— denotes constituent not analyzed.

¹Quantified as "kerosene."

²Quantified as "oil."

³Quantified as "mineral spirits."

bbf = below basement floor

DRO = total petroleum hydrocarbons as diesel-range organics

EPA = U.S. Environmental Protection Agency

G-Logics = G-Logics, Inc.

GRO = total petroleum hydrocarbons as gasoline-range organics

NWTPH-Dx = Northwest Method NWTPH-Dx

NWTPH-Gx = Northwest Method NWTPH-Gx

ORO = total petroleum hydrocarbons as oil-range organics

Table 7
Sediment Analytical Results for Chlorinated VOCs
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Location	Sampled By	Sample Identification	Sample Depth (feet bbf)	Sample Date	Analytical Results (milligrams per kilogram) ¹								
					PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloropropane	Chloroethane
Floor-Drain Sump	G-Logics	Sump	1.0	1/5/2007	2.46	32.9	2.99	< 0.02	0.055	< 0.05	< 0.03	< 0.02	< 0.06

NOTES:

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

¹Analyzed by U.S. Environmental Protection Agency Method 8260.

bbf = below basement floor

G-Logics = G-Logics, Inc.

PCE = tetrachloroethene

TCE = trichloroethene

Table 8
Air Sampling Analytical Results for HVOCs
Morningside Acres Tract
Seattle, Washington
Farallon PN: 1355-001

Sample Location	Sample Identification	Location Description	Sample Type	Sample Date	Sample Height (feet) ¹	Analytical Results (micrograms per cubic meter) ²											
						1,2-Dichloroethane			Trichloroethene (TCE)			Vinyl Chloride			1,2-Dichloropropane		
						Indoor Air	Outdoor Air	Indoor Corrected ³	Indoor Air	Outdoor Air	Indoor Corrected ³	Indoor Air	Outdoor Air	Indoor Corrected ³	Indoor Air	Outdoor Air	Indoor Corrected ³
First Floor																	
IA-1	IA-1-071619	Convenience Store Storage Room	Indoor Air	7/16/2019	6	0.42	0.057	0.36	< 0.27	< 0.23	< 0.27	< 0.26	< 0.26	< 0.26	< 0.23	< 0.23	< 0.23
IA-2	IA-2-071619	Front of Bookstore	Indoor Air	7/16/2019	4	0.37	0.057	0.31	< 0.27	< 0.23	< 0.27	< 0.26	< 0.26	< 0.26	< 0.23	< 0.23	< 0.23
IA-6	IA-6-071619	Bookstore Back Room	Indoor Air	7/16/2019	6	0.65	0.057	0.59	< 0.27	< 0.23	< 0.27	< 0.26	< 0.26	< 0.26	< 0.23	< 0.23	< 0.23
Basement																	
IA-3	IA-3-071619	Front of Bookstore Basement	Indoor Air	7/16/2019	5	0.057	0.057	0.000	0.62	< 0.23	0.62	< 0.26	< 0.26	< 0.26	< 0.23	< 0.23	< 0.23
IA-4	IA-4-071619	Garage Basement	Indoor Air	7/16/2019	5	0.057	0.057	0.000	0.59	< 0.23	0.59	0.56	< 0.26	0.56	< 0.23	< 0.23	< 0.23
IA-5	IA-5-071619	Back of Bookstore Basement	Indoor Air	7/16/2019	6	0.057	0.057	0.000	0.69	< 0.23	0.69	< 0.26	< 0.26	< 0.26	< 0.23	< 0.23	< 0.23
Outdoor Air																	
OA-1	OA-1-071619	Outside Garage; upwind	Outdoor Air	7/16/2019	4	NA	0.057	NA	NA	< 0.23	NA	NA	< 0.26	NA	NA	< 0.23	NA
MTCA Method B Indoor Air Cleanup Level - Residential Exposure Scenario⁴						0.0962			0.33			0.28			0.68		
MTCA Method B Indoor Air Remediation Level - Commercial Exposure Scenario⁵						0.321			1.1			0.90			---		

NOTES:
Results in **bold** denote concentrations exceeding residential exposure screening levels. Results highlighted in yellow exceed commercial exposure screening levels.
< denotes analyte not detected at or exceeding the reporting limit listed.
¹Feet above ground surface
²Analyzed by U.S. Environmental Protection Agency Method TO-15.
³Indoor air corrected value calculated by subtracting outdoor air result from indoor air sample result.
⁴Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method B Cleanup Level for Indoor Air, website link provided in Appendix B of the *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action* revised February 2016 and April 2018.
⁵MTCA Method B cleanup level calculation with modified exposure parameters adjusted for commercial exposure per Section 750 of MTCA. MTCA Method B indoor air screening level for commercial use has been revised following issuance of Ecology's *Trichloroethylene (TCE): Deriving Cleanup Levels under the Model Toxics Control Act (MTCA), Supporting material for Cleanup Levels and Risk Calculation (CLARC)* dated January 2020. The calculated MTCA Method B indoor air screening level for commercial use of 1.9 µg/m³ referenced in the letter regarding Vapor Intrusion Assessment, Morningside Acres Tracts, 5001, 5015 and 5021 Rainier Avenue South, Seattle, Washington dated September 5, 2019, prepared by Farallon (2019) and submitted to Ecology, has been recalculated to 1.1 µg/m³ for this report.
HVOC = halogenated volatile organic compound
NA = not applicable

Table 9
Air Sampling Analytical Results for Petroleum Hydrocarbons
Morningside Acres Tract
Seattle, Washington
Farallon PN: 1355-001

Sample Location	Sample Identification	Location Description	Sample Type	Sample Date	Sample Height (feet) ¹	Analytical Results (micrograms per cubic meter) ²									Total Corrected TPH ⁴
						C5-C8 Aliphatics			C9-C12 Aliphatics			C9-C10 Aromatics			
						Indoor Air	Outdoor Air	Indoor Corrected ³	Indoor Air	Outdoor Air	Indoor Corrected ³	Indoor Air	Outdoor Air	Indoor Corrected ³	
First Floor															
IA-1	IA-1-071619	Convenience Store Storage Room	Indoor Air	7/16/2019	6	100	68	32	72	63	9	< 25	< 25	< 25	41
IA-2	IA-2-071619	Front of Bookstore	Indoor Air	7/16/2019	4	180	68	112	73	63	10	< 25	< 25	< 25	122
IA-6	IA-6-071619	Bookstore Back Room	Indoor Air	7/16/2019	6	210	68	142	76	63	13	< 25	< 25	< 25	155
Basement															
IA-3	IA-3-071619	Front of Bookstore Basement	Indoor Air	7/16/2019	5	120	68	52	73	63	10	< 25	< 25	< 25	62
IA-4	IA-4-071619	Garage Basement	Indoor Air	7/16/2019	5	170	68	102	120	63	57	33	< 25	33	192
IA-5	IA-5-071619	Back of Bookstore Basement	Indoor Air	7/16/2019	6	100	68	32	85	63	22	< 25	< 25	< 25	54
Outdoor Air															
OA-1	OA-1-071619	Outside Garage; upwind	Outdoor Air	7/16/2019	4	NA	68	NA	NA	63	NA	NA	< 25	NA	131
MTCA Method B Indoor Air Cleanup Level - Residential Exposure Scenario⁵						2,720			136			182			301⁶

NOTES:

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

¹ Feet above ground surface

² Analyzed by Method MA-APH.

³ Indoor air corrected value calculated by subtracting outdoor air result from indoor air sample result.

⁴ Sum of indoor air corrected values.

⁵ Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method B Cleanup Level for Indoor Air, website link provided in Appendix B of the *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action* revised February 2016 and April 2018.

⁶ Site-specific cleanup level calculated following Washington State Department of Ecology Implementation Memorandum No. 18 regarding Petroleum Vapor Intrusion (PVI): Updated Screening Levels, and Assessing PVI Threats to Future Buildings dated January 10, 2018.

NA = not applicable

TPH = total petroleum hydrocarbons

Table 10
Remediation Technology Screening
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

Remediation Technology	Media	Description	Protectiveness	Permanence	Effectiveness	Implementability	Cost	Total Score	Retained?	Screening Comment
Institutional Controls	Soil, Groundwater	Institutional controls are physical or administrative measures that limit exposure to contaminants (e.g., fences, environmental covenants).	2	1	2	3	5	13	No	Institutional controls can be effective when used in combination with other technologies to limit exposure to contaminants exceeding cleanup standards. The goal of the cleanup action is to achieve cleanup standards without reliance on institutional controls.
Engineered Controls	Soil, Groundwater	Engineered controls are technologies that limit exposure to contaminants (e.g., engineered caps, sub-slab depressurization systems).	3	2	2	3	3	13	No	Not a permanent solution. Effectiveness considered low due to the need for long-term monitoring to ensure the technology remains protective.
Monitored Natural Attenuation (MNA)	Groundwater	MNA involves monitoring contaminant concentrations and MNA parameters in groundwater to document decreasing contaminant concentrations through biodegradation and other natural attenuation processes.	1	3	1	5	4	14	No	The restoration time frame for MNA can be on the order of decades. Not a protective or effective technology in the short-term.
Air Sparging	Soil, Groundwater	Air sparging involves injecting pressurized air into groundwater to volatilize and remove volatile contaminants. Air sparging typically is used in combination with SVE, which captures the contaminant vapors released from groundwater. The resulting aerobic environment in the saturated and vadose zones supports degradation of contaminants amenable to aerobic biodegradation.	3	4	3	3	3	16	Yes	The effectiveness of air sparging can be limited by non-uniform air flow in the saturated zone. A pilot test would be needed to determine site-specific effectiveness.
Soil Vapor Extraction (SVE)	Soil, Groundwater	SVE removes volatile contaminants through application of a vacuum in the vadose zone to remove contaminant vapors from the subsurface. Although SVE is primarily used to extract adsorbed contaminants in the vadose zone, it can also provide limited extraction of dissolved volatile contaminants in unconfined groundwater by creating a vapor pressure gradient above the groundwater table. Treatment of SVE emissions often is required to comply with air pollution control regulations.	4	4	2	2	3	15	Yes	SVE could be applied to address vadose zone soil and prevent vapor intrusion into buildings. A pilot test would be needed to determine site-specific effectiveness; effectiveness for groundwater treatment (when not used in combination with air sparging) is limited. Shallow depth to groundwater beneath structures reduces implementability.
In-Situ Chemical Reduction (ISCR)	Soil, Groundwater	ISCR involves introducing a chemical reducing agent (such as zero-valent iron) into the subsurface to transform soil or groundwater contaminants into less toxic or less mobile forms through chemical reduction reactions. When the reducing agent is introduced via direct injection, effective subsurface distribution of the reducing agent typically requires closely spaced injection points in the target treatment zone.	4	4	3	4	3	18	Yes	Reducing agents commonly used for ISCR typically have greater longevity in the subsurface than oxidants used for in-situ chemical oxidation (ISCO), which can render ISCR more effective, protective, and permanent than ISCO. ISCR reactions can significantly reduce contaminant concentrations on a timescale of months.

**Table 10
Remediation Technology Screening
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001**

Remediation Technology	Media	Description	Protectiveness	Permanence	Effectiveness	Implementability	Cost	Total Score	Retained?	Screening Comment
In-Situ Chemical Oxidation (ISCO)	Soil, Groundwater	ISCO involves injecting a chemical oxidant (such as permanganate, persulfate, or hydrogen peroxide) into the subsurface to transform soil or groundwater contaminants into less harmful chemical species through chemical oxidation reactions. Effective subsurface distribution of the oxidant typically requires closely spaced injection points in the target treatment zone.	3	3	2	3	3	14	No	The presence of naturally occurring organic matter and certain minerals in the subsurface can "consume" the oxidant, reducing the effectiveness of ISCO. Additionally, the longevity of chemical oxidants in the subsurface is typically less than that of reducing agents used for ISCR. Chemical oxidants typically also pose greater safety concerns during handling. Multiple injection events often are required to address contaminant rebound following initial concentration reductions.
In-Situ Enhanced Bioremediation	Soil, Groundwater	In-situ enhanced bioremediation involves injecting a reagent containing nutrients (e.g., oxygen, hydrogen) and/or microbes into the subsurface to enhance naturally occurring biodegradation of organic contaminants in soil and groundwater. Effective subsurface distribution of the reagent typically requires closely spaced injection points in the target treatment zone.	3	4	2	4	3	16	Yes	Case studies indicate that biodegradation of chlorinated volatile organic compounds such as tetrachloroethene and trichloroethene can become stalled before the parent compound completely degrades to harmless end products, which can lead to accumulation of more toxic daughter products such as vinyl chloride. Treatability studies and pilot tests often are required to determine site-specific effectiveness.
In-Situ Thermal Treatment	Soil, Groundwater	In-situ thermal treatment involves heating contaminated soil and groundwater (using electrical resistance heating, for example) to volatilize or otherwise mobilize contaminants so they can be recovered, treated, and/or disposed of as necessary.	4	4	4	1	1	14	No	In-situ thermal treatment could be effective in source areas because the technology treats soil and groundwater uniformly and works well in silty soil. However, costs per unit area treated are very high relative to other, less costly technologies. Thermal heating can result in soil temperatures exceeding 100 degrees Celsius, and may affect existing building structures and underground utilities. Implementation is complicated by the requirement of a fixed separation distance between electrodes and the significant equipment and infrastructure requirements. Safety issues complicate installations near or beneath occupied buildings.
Excavation and Off-Site Disposal of Soil	Soil	This technology involves excavating and disposing of contaminated soil at an off-site, permitted facility.	5	4	5	2	2	18	Yes	Excavation of contaminated soil in source areas would significantly reduce the restoration time frame. Protective measures such as dust suppression, covering of truck loads, and structural shoring would be necessary to mitigate short-term exposure risks and potential damage to existing buildings and infrastructure.

NOTE:
Scores: 1 = least favorable; 5 = most favorable.

**Table 11
Evaluation of Cleanup Action Alternatives
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001**

Cleanup Action Alternative	Alternative 1 Source Area Excavation with Air Sparging and Soil Vapor Extraction	Score	Alternative 2 Source Area Excavation with In-Situ Chemical Reduction and In-Situ Enhanced Bioremediation	Score	Alternative 3 Source Area Excavation During Property Redevelopment, with In-Situ Chemical Reduction and In-Situ Enhanced Bioremediation	Score
Description	This alternative includes excavation and off-Property disposal of contaminated soil in source areas on the northern and southern parcels. Structural shoring would be used to protect existing buildings and infrastructure. Construction dewatering and treatment of extracted groundwater would be conducted as needed to facilitate excavation. It is assumed that construction dewatering would remove all groundwater exceeding cleanup levels on the northern parcel. The excavations would be backfilled with clean structural fill material. Following source area excavation, an air sparging and soil vapor extraction (SVE) system would be installed to treat residual groundwater contamination. The SVE system would prevent vapor intrusion into buildings. This alternative includes 5 years of groundwater performance monitoring and 1 year of confirmational groundwater monitoring.	--	This alternative includes excavation and off-Property disposal of contaminated soil in source areas on the northern and southern parcels. Structural shoring would be used to protect existing buildings and infrastructure. Construction dewatering and treatment of extracted groundwater would be conducted as needed to facilitate excavation. It is assumed that construction dewatering would remove all groundwater exceeding cleanup levels on the northern parcel. The excavations would be backfilled with clean structural fill material. Following source area excavation, a reducing agent and enhanced bioremediation reagent would be injected into the saturated soil zone to treat residual groundwater contamination. It is assumed that two direct-push injection events would be performed over 2 years. This alternative includes 7 years of groundwater performance monitoring and 1 year of confirmational groundwater monitoring.	--	This alternative includes excavation and off-Property disposal of contaminated soil in source areas on the northern and southern parcels during Property redevelopment. Costs for Property clearing, building demolition, structural shoring, and non-impacted soil removal above the planned redevelopment excavation depth would be covered by the redevelopment rather than incurred as cleanup costs. Incremental costs for managing contaminated soil above the planned redevelopment excavation depth, treating contaminated groundwater extracted during construction dewatering for redevelopment, and performing construction dewatering for soil removal below the planned redevelopment excavation depth are included in this alternative. The excavations would be backfilled with clean structural fill material. Following source area excavation, a reducing agent and enhanced bioremediation reagent would be injected into the saturated soil zone to treat residual groundwater contamination. It is assumed that two injection events would be performed over 2 years, using injection wells installed on the lowest level of the new building constructed during redevelopment. This alternative includes 7 years of groundwater performance monitoring and 1 year of confirmational groundwater monitoring.	--
Threshold Cleanup Action Requirements						
Protective of Human Health and the Environment	Yes - Alternative would protect human health and the environment.	--	Yes - Alternative will protect human health and the environment.	--	Yes - Alternative will protect human health and the environment.	--
Complies with Cleanup Standards	Yes - Alternative would achieve soil cleanup standards immediately in the excavated source areas. Groundwater cleanup standards would be achieved through operation of the air sparging and SVE system.	--	Yes - Alternative would achieve soil cleanup standards immediately in the excavated source areas. Groundwater cleanup standards would be achieved through injection of a reducing agent and enhanced bioremediation reagents.	--	Yes - Alternative would achieve soil cleanup standards immediately in the excavated source areas. Groundwater cleanup standards would be achieved through injection of a reducing agent and enhanced bioremediation reagents.	--
Complies with Applicable State and Federal Laws	Yes - Alternative complies with applicable laws.	--	Yes - Alternative complies with applicable laws.	--	Yes - Alternative complies with applicable laws.	--
Provides for Compliance Monitoring	Yes - Alternative includes provisions for compliance monitoring.	--	Yes - Alternative includes provisions for compliance monitoring.	--	Yes - Alternative includes provisions for compliance monitoring.	--
Other Cleanup Action Requirements						
Uses Permanent Solutions to the Maximum Extent Practicable	(See "Evaluation of Permanence to the Maximum Extent Practicable" below.)	--	(See "Evaluation of Permanence to the Maximum Extent Practicable" below.)	--	(See "Evaluation of Permanence to the Maximum Extent Practicable" below.)	--
Provides for a Reasonable Restoration Time Frame	Yes - Source area soil will be removed by excavation over a period of 1 to 2 months. Residual groundwater contamination will be treated by air sparging and SVE and monitored over a 5 year period.	--	Yes - Source area soil will be removed by excavation over a period of 1 to 2 months. Residual groundwater contamination will be treated by in-situ chemical reduction and enhanced bioremediation injections and monitored over a 7 year period.	--	Yes - Source area soil will be removed by excavation over a period of 1 to 2 months. Residual groundwater contamination will be treated by in-situ chemical reduction and enhanced bioremediation injections and monitored over a 7 year period.	--
Considers Public Concerns	Yes - Potential public concerns are identified in the evaluation of permanence to the maximum extent practicable, below.	--	Yes - Potential public concerns are identified in the evaluation of permanence to the maximum extent practicable, below.	--	Yes - Potential public concerns are identified in the evaluation of permanence to the maximum extent practicable, below.	--

**Table 11
Evaluation of Cleanup Action Alternatives
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001**

Cleanup Action Alternative	Alternative 1 Source Area Excavation with Air Sparging and Soil Vapor Extraction	Score	Alternative 2 Source Area Excavation with In-Situ Chemical Reduction and In-Situ Enhanced Bioremediation	Score	Alternative 3 Source Area Excavation During Property Redevelopment, with In-Situ Chemical Reduction and In-Situ Enhanced Bioremediation	Score
Evaluation of Permanence to the Maximum Extent Practicable¹						
Protectiveness (30% Weighting Factor)	Alternative protects human health by achieving cleanup standards. Potential vapor intrusion risk would be mitigated by the SVE system.	10	Alternative protects human health by achieving cleanup standards.	9	Alternative protects human health by achieving cleanup standards.	9
Permanence (20% Weighting Factor)	Alternative will permanently remove contaminated soil through excavation and treat residual groundwater contamination through air sparging and SVE. Excavated contaminated soil, and reactive media used to treat SVE system emissions (if necessary), will be disposed of at a permitted facility off the Property.	9	Alternative will permanently remove contaminated soil through excavation and treat residual groundwater contamination through ISCR and enhanced bioremediation injections. Excavated contaminated soil will be disposed of at a permitted facility off the Property.	9	Alternative will permanently remove contaminated soil through excavation in conjunction with Property redevelopment and treat residual groundwater contamination through ISCR and enhanced bioremediation injections. Excavated contaminated soil will be disposed of at a permitted facility off the Property.	9
Long-Term Effectiveness (20% Weighting Factor)	Alternative provides long-term effectiveness by removing contaminated soil from source areas and treating residual groundwater contamination through air sparging and SVE.	10	Alternative provides long-term effectiveness by removing contaminated soil from source areas and treating residual groundwater contamination through ISCR and enhanced bioremediation injections.	10	Alternative provides long-term effectiveness by removing contaminated soil from source areas and treating residual groundwater contamination through ISCR and enhanced bioremediation injections.	10
Management of Short-Term Risks (10% Weighting Factor)	Alternative disturbs contaminated source area soil, posing moderate short-term risk to workers and the public during construction and soil transport off the Property. Structural risk to buildings and infrastructure is mitigated with engineered shoring. Operation of air sparging and SVE system poses little risk.	7	Alternative disturbs contaminated source area soil, posing moderate short-term risk to workers and the public during construction and soil transport off the Property. Structural risk to buildings and infrastructure is mitigated with engineered shoring. ISCR and enhanced bioremediation injections pose little risk.	7	Alternative disturbs contaminated source area soil, presenting short-term risk to workers and the public during construction and soil transport off the Property. Engineered shoring to protect buildings and infrastructure is installed as part of redevelopment. ISCR and enhanced bioremediation injections pose little risk.	7
Technical and Administrative Implementability (10% Weighting Factor)	Soil excavation and construction and operation of air sparging and SVE system in the building on the southern parcel would pose challenges due to access constraints and shallow depth to groundwater beneath the building. The SVE system may require permitting through the Puget Sound Clean Air Agency. The presence of dense/very dense sands and stiff/hard silts may limit the ability to inject air through the relatively short air sparge well screens.	6	Soil excavation in the building on the southern parcel would pose challenges due to access constraints. An Underground Injection Control permit would be required for ISCR and enhanced bioremediation injections.	7	Contaminated soil excavation and installation of ISCR and enhanced bioremediation injection wells would be performed in conjunction with Property redevelopment. Existing buildings would be demolished and structural shoring would be installed as part of redevelopment activities, eliminating access constraints. An Underground Injection Control permit would be required for ISCR and enhanced bioremediation injections.	9
Consideration of Public Concerns (10% Weighting Factor)	Construction noise, potential risks associated with structural shoring and soil excavation, truck traffic, and noise generated by the air sparging and SVE system may cause minor public concerns.	6	Construction noise, potential risks associated with structural shoring and soil excavation, and truck traffic may cause minor public concerns.	7	The greatest public concerns likely would be associated with redevelopment construction activities (i.e., noise, soil excavation, truck traffic, etc.). Incremental concerns associated with additional construction dewatering, excavation of source area soil, and loading and transport of contaminated soil off the Property are not expected to be significant.	9
MTCA Composite Benefit Score¹	8.7	--	8.6	--	9.0	--
Screening-Level Cost Estimate (Cost Uncertainty = -50%, +100%)	\$2,441,000	--	\$2,510,000	--	\$1,232,000	--

NOTES:

-- = not applicable

¹Each of the six evaluation criteria for permanence to the maximum extent practicable was scored from 1 (least favorable) to 10 (most favorable). The MTCA Composite Benefit Score was calculated by summing the products of the scores and the weighting factors for the six criteria.

Table 12
Cleanup Action Alternatives Cost Summary
Morningside Acres Tracts
Seattle, Washington
Farallon PN: 1355-001

	Alternative 1 Source Area Excavation with Air Sparging and Soil Vapor Extraction	Alternative 2 Source Area Excavation with In-Situ Chemical Reduction and In-Situ Enhanced Bioremediation	Alternative 3 Source Area Excavation During Property Redevelopment, with In-Situ Chemical Reduction and In-Situ Enhanced Bioremediation
Estimated Restoration Time Frame	6 years	8 years	8 years
CAPITAL COSTS			
Construction Costs			
Site Preparation	\$89,208	\$82,076	\$58,100
Remediation			
Structural Shoring, Soil Excavation and Disposal ¹	\$705,009	\$705,009	\$299,016
Air Sparging and SVE System Installation	\$334,077	\$0	\$0
ISCR/Enhanced Bioremediation Injections	\$0	\$507,520	\$311,665
Site Restoration	\$62,355	\$59,897	\$16,000
Subtotal Construction	\$1,190,650	\$1,354,502	\$684,781
Contingency and Taxes			
Contingency Percent	30%	30%	20%
Contingency Cost	\$357,000	\$406,000	\$137,000
Subtotal Construction and Contingency	\$1,548,000	\$1,761,000	\$822,000
Washington and Local Sales Tax (6.5% + 3.6%)	\$156,000	\$178,000	\$83,000
Total Construction Costs (incl. tax)	\$1,704,000	\$1,939,000	\$905,000
Engineering Costs			
Project Management (6% pre-tax construction/contingency costs)	\$92,800	\$105,600	\$49,300
Remedial Design, Permitting (12% of pre-tax construction/contingency costs)	\$185,700	\$211,300	\$98,600
Construction Management (8% of pre-tax construction/contingency costs)	\$123,800	\$140,800	\$65,700
Total Engineering Costs	\$402,000	\$458,000	\$214,000
TOTAL CAPITAL COSTS	\$2,106,000	\$2,397,000	\$1,119,000
ONGOING PERIODIC AND FUTURE COSTS			
Air Sparging and SVE System Operation and Maintenance	\$244,860	\$0	\$0
Performance Groundwater Monitoring	\$54,110	\$75,754	\$75,754
Confirmational Groundwater Monitoring	\$21,644	\$21,644	\$21,644
Progress Reporting	\$6,012	\$7,816	\$7,816
Voluntary Cleanup Program and 5-Year Review	\$8,000	\$8,000	\$8,000
TOTAL ONGOING PERIODIC AND FUTURE COSTS	\$335,000	\$113,000	\$113,000
ESTIMATED TOTAL COST	\$2,441,000	\$2,510,000	\$1,232,000

NOTES:

¹Includes construction dewatering and extracted groundwater treatment and discharge.

ISCR = in-situ chemical reduction
SVE = soil vapor extraction

APPENDIX A
HAZARDOUS BUILDING MATERIALS REPORT

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY REPORT
Morningside Acres Tracts
5001, 5015, and 5021 Rainier Avenue South
Seattle, Washington

Farallon PN: 1355-001

HAZARDOUS BUILDING MATERIALS SURVEY

5015, 5021 and 5023 Rainier Avenue South
Seattle, Washington

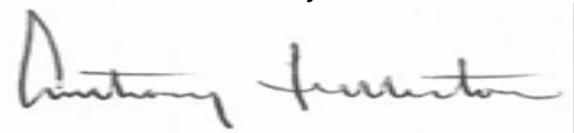
Prepared for:

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Project No. 6263.80

A handwritten signature in black ink, appearing to read "Anthony Fullerton", enclosed within a thin black rectangular border.

Anthony Fullerton
AHERA BI #169219 Exp. 08/29/2019
September 2019

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Acronyms

AAS	atomic absorption spectroscopy
ACM	asbestos-containing materials
ACT	acoustical ceiling tile
ASHERA	Asbestos Hazard Emergency Response Act
ASHARA	Asbestos Schools Hazard Abatement Reauthorization Act
ASTM	American Society of Testing and Materials
CFC	chlorofluorocarbons
CFR	Code of Federal Regulation
CMU	Cement masonry unit
DEHP	Di (2-ethylhexyl) phthalate
DOSH	Division of Safety and Health
EA	each
EPA	U.S. Environmental Protection Agency
HBM	hazardous building materials
HM	homogeneous material
LBP	lead-based paint
LF	linear feet
mg/cm ²	milligrams per square centimeter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MTNW	Med-Tox Northwest
ND	none detected
NVLAP	National Voluntary Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyl
PLM	polarized light microscopy
ppm	parts per million
PSCAA	Puget Sound Clean Air Agency
SAT	Seattle Asbestos Test
SF	square feet
TCLP	toxicity characteristic leaching procedure
TSI	thermal system insulation
WAC	Washington Administration Code
WDOC	Washington Department of Commerce
WISHA	Washington Industrial Health and Safety Act
WRD	WISHA Regional Directive
XRF	X-ray fluorescence
% wt.	percent in weight

Survey Summary

Between August 1- 6 2019, Anthony Fullerton of Med-Tox Northwest (MTNW) conducted a hazardous building materials (HBM) survey of the two buildings located at 5015, 5021 and 5023 Rainier Avenue South in Seattle, Washington. 5021 (Wash's Auto repair) and 5023 (Book store) are on one parcel in the same building just different retail spaces. 5015 Rainier Avenue South (Smoke Beyond) is on a separate parcel. This work was conducted for pre-purchase due diligence in accordance with our P-6263.80 proposal. The site was in full operation at the time of the survey.

The survey included asbestos, lead-based paint (LBP), and other potential HBM such as chlorofluorocarbons (CFC), polychlorinated biphenyl (PCB) light ballasts and solids sampling, mercury-containing fluorescent tubes and/or thermostats. Washington Administrative Code (WAC) 296-155-775 requires identification of asbestos and hazardous materials and their hazards eliminated before the start of any renovation and/or demolition activities.

Limited destructive investigation was performed during survey; however, renovation or demolition activities may uncover additional suspect asbestos materials. The Comments and Recommendations section of this report details additional destructive investigation required before and/or during demolition activities.

As required by WAC 296-62-077 and Puget Sound Clean Air Agency (PSCAA), building inspectors certified under the Asbestos Hazard Emergency Response Act (AHERA) and employed by MTNW conducted the asbestos portion of the survey. Copies of the inspectors' AHERA building inspector and State of Washington Department of Commerce (WDOC) Lead Inspector/Risk Assessor certificates are included in **Appendix A**.

Building Information

Photographic documentation of the structures and the major systems described herein are provided in **Appendix B**.

General and Structural: There are two buildings on two King County Parcels that comprise the site. The following buildings were included in the survey activities:

- King County Tax Parcel No. 564960-0130, which totals .22 acres of land developed with an approximately 14,453 square-foot commercial building. There are two addresses associated with the building; 5023 (Book store) and 5021 (Wash's Auto Repair). The building constructed in 1922 is built of brick and mortar and the roof of the is flat with built-up roofing. Exterior windows are a combination of aluminum and steel framed. Doors are a combination of metal and wood that are hollow and solid core. There is a metal roll-up door located on

the east side of the building that is accessible from Rainier Avenue South.

5023 Rainier Avenue South: Interior spaces for the Book store consist of an open sales area, kitchen and restrooms. Interior finishes include wood-framed walls and ceilings finished with a combination of plaster and skim coat over lath and un-textured gypsum wallboard (GWB) system. The floor throughout the space is hardwood. Additional flooring finishes consist of carpeting with mastic in the kitchen area and sheet vinyl flooring (SVF) in the restrooms. Total square footage for the space is 3,243 SF. Heating for the store is provided by overhead electric space heaters that are controlled by electric thermostats.

5021 Rainier Avenue South: Wash's Auto Repair has two floors; the street level floor and basement. Interior spaces consist an office space, storage area, restroom, workshop, basement storage, mechanical room and basement records storage. Interior finishes include combination of plaster and skim coat over lath and un-textured GWB. The interior perimeter walls are brick and mortar or clay tile and mortar. The office space appears to have been renovated. Interior finishes in this space consist of un-textured GWB system and a suspended ceiling with drop-in acoustical ceiling tiles (ACT). There is wood paneling on the walls in the restroom and storage area. The floor throughout the space is lightweight concrete on wood car decking. Additional flooring finishes observed included vinyl floor tile (VFT) and mastic, SVF and linoleum sheeting.

The basement is accessed by a car ramp located along the north wall of the work area or by two interior stair wells. One stair well leads to the records storage area and the other leads to the basement mechanical room. Both spaces are void of many finishes with the exception of plaster and skim coat and bare wood. The floors in these spaces are finished concrete. The basement mechanical room houses a furnace that appears to be abandoned in place. Ducts from the furnace extend through the east side wall and run under the unexcavated floor to the office area and adjacent bookstore. The ducts were observed to have duct tape and white insulating wrap around them. At the time of the survey, heat for the building was provided by ceiling mounted space heaters.

Total square footage for the space for the main floor is 6,088 SF and the basement is 5,122 SF for a total of 11,210 SF according to the King County Assessor. The roof of the building was not surveyed at the request of the owner.

- King County Tax Parcel No. 564960-0133, which totals .12 acres of land developed with an approximately 1,158 SF commercial building. The site is occupied by a smoke shop. The building was constructed in 1926 and is wood framed constructed, built on wood post and pier. The exterior siding is wood over vapor barrier and the exterior windows are a combination of wood framed and aluminum framed. The roof for the building is pitched and is finished with 3-tab composition roofing.

5015 Rainier Avenue South: Interior spaces for the building include a sales area, large storage area, small storage area and restroom. There is also a garage that is accessible from the outside located on the west end of the building. Interior walls and ceiling are primarily finished with un-textured GWB (walls) and textured GWB (ceilings). Additional wall finishes include ¼-inch GWB panels and Masonite panels. Additional ceiling finishes include 12-inch ACT that is splined and stapled to the wood framing. Floors in the building consist of wood sub-floor that is finished with several patterns and colors of VF, self-stick floor tile, VFT and mastic and linoleum. Heat for the building is from individual electric wall heaters and there is an electric hot water heater located by the restrooms. All the pipes observed were un-insulated. There was no access to the attic area or the crawlspace.

Asbestos Survey

The AHERA regulation, 40 CFR 763, is the primary governing regulation when performing asbestos surveys. This regulation was originally enacted for school buildings but has since been applied to public and commercial buildings by the Asbestos School Hazard Abatement Reauthorization Act (ASHARA) in 1994 and by the Occupational Safety and Health Administration's (OSHA) worker protection regulations in 1995, specifically 29 CFR 1926.1101(k).

PSCAA also requires compliance with AHERA's survey and sampling requirements. This applies to any renovation or demolition activities where suspect ACM may be disturbed. PSCAA is a local agency that receives statutory authority from the U.S. Environmental Protection Agency (EPA) to enforce environmental regulations.

AHERA divides suspect asbestos-containing material (ACM) into three categories; "surfacing materials" (i.e., sprayed fireproofing, popcorn ceiling texture, etc.), "thermal system insulation" (TSI) (i.e., pipe or building insulation, etc.), and "miscellaneous materials" (i.e., flooring material, roofing, construction mastics, etc.). The following sections summarize the potential ACMs identified for all three categories; for a complete listing of suspect materials sampled, see **Appendix C**. See **Appendix J** for asbestos, LBP and PCB sample location drawings.

Homogeneous material (HM) descriptions in the following text are provided to help correlate material descriptions for identified ACM and other major building components provided in **Appendix C** as sampled by MTNW. Not all tested miscellaneous HMs are detailed below.

Surfacing Materials

There were six surfacing materials as defined by 40 CFR 763 identified in the spaces.

5023 Rainier Avenue South

- Plaster and skim coat (HM-01). This material was observed on the ceiling and some walls in bookstore. Five samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.

5021 Rainier Avenue South

- Plaster and skim coat (HM-07). This material was observed on the ceiling and some walls within the space. Seven samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.
- Sliver coat paint (HM-09) on ¼-inch plaster board on paper backing (HM-08) and brick. The walls leading to the basement mechanical room are finished with ¼-inch plaster board on paper backing and brick and mortar. The walls and parts of the ceiling were observed to be painted with silver coat. Six samples were collected (there is less than 5,000 SF of this material) and analyzed for asbestos content; these materials were determined to be negative for asbestos.
- Spray-on textured on GWB repair panel (HM-14). This material was observed in the basement on the ceiling. Most of the ceiling is plaster and skim coat but there was a small section that was repaired with this material. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Textured GWB panels (HM-24). This material was observed on the north exterior wall of the building. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.

5015 Rainier Avenue South

- Textured GWB Ceiling (HM-28). This material was observed on the ceiling of the smoke shop. Five samples were collected and analyzed for asbestos content; this material is negative for asbestos.

Thermal System Insulation

There were two TSI material as defined by 40 CFR 763 identified in the buildings.

- Fiberglass batt insulation. This material was observed in all three spaces. This material was visually determined to be non-asbestos containing.

5021 Rainier Avenue South

- White duct tape and wrap on square duct, round duct and boiler (HM-10). This material was observed in the basement mechanical room and in the crawlspace under the bookstore. Some of the duct and the boiler just has this material on the seams or joints however, there is a main duct that is completely wrapped with this material. Three samples were collected of

this material; **this material was determined to contain 63% to 65% Chrysotile asbestos.**

Miscellaneous Materials

The miscellaneous materials identified here were determined to be positive for asbestos. For a complete list of all miscellaneous materials sampled, please refer to **Appendix C.**

5023 Rainier Avenue South:

- **Roofing (assumed).** The roof of the building was not surveyed at the request of the owner. It is being assumed asbestos-containing for the purpose of this report.

5021 Rainier Avenue South:

- **12-inch tan VFT and black mastic- top layer (HM-15).** This material was observed in the office. Two samples were collected and submitted for laboratory analysis; **the black mastic was determined to contain 3% Chrysotile asbestos.** The floor tile is negative for asbestos however it is considered asbestos contaminated from the black mastic.
- **Black flooring- bottom layer (HM-16).** This material was observed in the office. Two samples were collected and submitted for laboratory analysis; **the black flooring was determined to contain 3% Chrysotile asbestos.**
- **9-inch green VFT with mastic (HM-19).** This material was observed in the restroom/storage closet along the north wall at the main entrance. One sample was collected and submitted for laboratory analysis; **the floor tile was determined to contain 2% Chrysotile asbestos and the mastic 3% Chrysotile asbestos.**
- **Roofing (assumed).** The roof of the building was not surveyed at the request of the owner. It is being assumed asbestos-containing for the purpose of this report.

5015 Rainier Avenue South:

There were no asbestos-containing materials identified in the samples collected.

Table 1 summarizes ACM identified in the space surveyed by MTNW. Friability was determined by conditions observed during the survey and by how the material behaves during mechanical demolition.

Table 1. Summary of Asbestos-Containing Materials

Material	Location	Friable	Quantity*
5023 Rainier Avenue South			
Roofing (assumed)	Roofing	No	3,243 SF

Material	Location	Friable	Quantity*
5021 Rainier Avenue South			
White duct tape and wrap on square duct, round duct and boiler	Basement	Yes	220 SF
12-inch tan VFT and black mastic (HM-15) over black flooring (HM-16)	Office	No	380 SF
9-inch green VFT and mastic	Restroom storage closet	No	10 SF
Roofing (assumed)	Roofing	No	6,088 SF

SF= square feet. *Quantities are approximate; building was in operation at time of survey.

Note: This table is not to be used without the complete survey document including appendices for additional information.

Table 2 lists all suspect materials sampled that have been determined to be non-asbestos containing.

Table 2. Summary of Suspect Materials Determined Non-Asbestos Containing

Material Description	Material Description
5023 Rainier Avenue South	
Plaster and skim coat	Un-textured GWB system
White with black squares SVF	White square pattern SVF
4-inch black cove base and mastic	Tan carpet mastic
5021 Rainier Avenue South	
Plaster and skim coat	¼-inch plaster board on paper backing with silver paint
Silver paint on brick	Un-textured GWB system
Wall panel and mastic	Clay tile mortar
Spray-on texture on GWB repair panel	Yellow SVF
Green linoleum sheeting	Lightweight concrete floor
Car decking slip sheet under lightweight concrete floor	2-x 4-foot ACT
Window glaze	Textured GWB panels
Textured GWB panel seam caulk	Brick wall mortar
Plaster wall fascia	
5015 Rainier Avenue South	
Textured GWB ceiling	Un-textured GWB system
¼-inch GWB	Masonite wall panels
12-inch brown self-stick floor tile- top layer	Linoleum flooring- bottom layer
White patterned SVF remnant (HM-34)	Remnant white SVF (HM-35)
Terrazzo pattern SVF with sparkles	12-inch ACT
Window glaze	White SVF backsplash

Material Description	Material Description
Brick chimney mortar	Siding vapor barrier
Roof vapor barrier	3-tab composition roofing

Note: This table is not to be used without the complete survey document including appendices for additional information.

Lead-Based Paint Summary

Lead was commonly used in most paint products until 1978, when it was banned from residential paints at concentrations greater than 600 parts per million (ppm); however, commercial applications with lead were still utilized and are still available. Lead is poisonous to the human body and presents a potential health hazard during any kind of disturbance (such as maintenance, including grinding, welding, and cutting) and if improperly disposed, where lead can enter drinking water supplies.

EPA defines LBP as a concentration of 1.0 milligrams per centimeter squared (mg/cm²) or greater by x-ray fluorescence (XRF) or 0.5 percent by weight (% wt.) or greater by total lead analysis; equivalent to 5,000 milligrams per kilogram (mg/kg). This EPA action level triggers requirements for protection of the environment, maintenance workers, and building occupants in child occupied facilities as defined by 40 Code of Federal Regulations (CFR) 745. Additionally, building components exceeding EPA lead levels may cause demolition waste streams to fail waste designation sampling performed for compliance with WAC 173-303.

WISHA worker protection regulations have not defined a minimum concentration for regulating lead, and has clarified that lead at any detectable concentration shall be considered regulated by WAC 296-155-176, Lead. Paint sample results can be expressed in mg/kg (same as ppm), % wt. or mg/cm² by area depending on the type of analytical methods used. Any positive result, regardless of the reporting method by the laboratory, will require compliance with WAC 296-155-176.

Lead in Painted Surfaces

Interior and exterior painted surfaces were tested for LBP using bulk sample collection and chemical analysis. A total of 23 paint chip samples were collected from the three spaces. Analytical results are provided in **Table 3**.

Table 3. Summary of Bulk Paint Chips Results

Sample Number	Location	Component	Substrate	Color	Result (% by wt)
5023 Rainier Ave S					
6263.80-AF-01Pb	Kitchen	Wall	Plaster	pink	0.015
6263.80-AF-02Pb	North	Wall	Plaster	beige	<0.0085
6263.80-AF-03Pb	South	Wall	GWB	Beige	<0.0087
6263.80-AF-04Pb	kitchen	Wall	Plaster	Peach	<0.011
6263.80-AF-05Pb	East	Trim	wood	beige	<0.0095
5021 Rainier Ave S					
6263.80-AF-06Pb	Storage	Wall	Plaster	Beige	0.32
6263.80-AF-07Pb	Work area	Wall	Wood	Blue	0.0038
6263.80-AF-08Pb	Work area	Wall	Brick	Gray/blue	0.19
6263.80-AF-09Pb	Work area	Wall	Brick	Blue	2.5
6263.80-AF-10Pb	Work area	Ceiling	Plaster	Gray	0.11
6263.80-AF-11Pb	Work area	North wall by ramp	Plaster	Blue	0.13
Exterior					
6263.80-AF-12Pb	East side of 5021	Wall	Wood	Light gray/white	13
6263.80-AF-13Pb	North side of 5021	Wall	GWB	White	0.014
6263.80-AF-14Pb	East side	Fascia	Plaster/concrete	Red	12
6263.80-AF-15Pb	South side	Wall	Brick	Beige	3.5
5015 Rainier Ave S					
6263.80-AF-16Pb	Sales area	Wall	wood	Orange	<0.0099
6263.80-AF-17Pb	Sales area	Wall	GWB	White	0.056
6263.80-AF-18Pb	Storage area	Wall	Masonite	Light green	0.23
6263.80-AF-19Pb	Storage area	Wall	Wood	Light green	<0.022
6263.80-AF-20Pb	Storage area	Wall	GWB	Beige	0.41
6263.80-AF-21Pb	Exterior	Siding	Wood	Yellow	13

Sample Number	Location	Component	Substrate	Color	Result (% by wt)
6263.80-AF-22Pb	Exterior	Soffit	Wood	Brown	0.12
6263.80-AF-23Pb	Exterior	Trim	Wood	Black	0.047

% by wt= percent by weight. **Bolded values** – bulk paint chip samples with lead detected above the laboratory reporting limit have been bolded. WISHA worker protection regulations have stated that lead at any detectable concentration shall be considered regulated per WAC 296-155-176, Lead.

Other Hazardous Building Materials

Chlorofluorocarbons

MTNW inspected the buildings for cooling systems with potential CFCs. There was one window mounted air conditioning unit observed (5015 Rainier Avenue South).

PCB Light Ballasts and Fluorescent Light Tubes

Older fluorescent light ballasts have small capacitors that may contain high concentrations of PCBs. Nearly all ballasts manufactured before 1979 contain PCBs. All ballasts manufactured after July 1, 1978 that do not contain PCBs are required to be clearly marked "No PCBs". Unmarked ballasts or ballasts without a date code should be assumed to be PCB ballasts. PCBs are toxic chemicals according to the EPA. While there is only a small amount, about one ounce, of PCBs in each light ballast capacitor, but there are a large number of ballasts in the United States. About half of the one billion ballasts, estimated as currently installed, were manufactured before 1979 and usually contain PCBs. A "No PCB" label means there are less than 50 ppm PCBs however, in the state of Washington PCB in oils are regulated at 2 ppm (WAC 173-303-9904). Ballasts manufactured after 1978/79 may contain a PCB replacement called Di (2-ethylhexyl) phthalate (DEHP), a probable human carcinogen. DEHP, a clear, odorless, synthetic compound, is often used as a plasticizer. By 1985, most manufacturers had stopped using DEHP in ballasts for 4-foot fixtures but continued to use it for most 8-foot and high intensity discharge fixtures until 1991. In any case, ballasts should not be disassembled for disposal but collected and sent to a treatment, storage or disposal facility certified by the state/EPA for disposal of PCBs and/or DEHP.

Fluorescent light fixtures were observed throughout the buildings. These fixtures were not inspected for the presence of a PCB light ballasts due to being in use and Ecology's recommendation to properly manage all light ballasts. Therefore, all light fixtures are assumed to contain PCB light ballasts; light tubes are assumed to contain mercury. Additionally high intensity discharge (HID) lights, E-lights and exit signs may be regulated as universal or hazardous waste and will require dismantling and special handling. **Table 4** provides a summary of these items in the building:

Table 4. Summary of Fluorescent, HID Lights, E-Lights and Exit Signs

Location	HID lights	4-foot, 2-bulb	4-foot, 3-bulb	4-foot, 4-bulb	8-foot, 1-bulb	8-foot, 2-bulb	E-lights
5023 Rainier Avenue South	0	15	0	0	0	0	0
5021 Rainier Avenue South	0	20	0	2	0	0	0
5015 Rainier Avenue South	1	10	0	0	0	0	1
Total	1	45	0	2	0	0	1

Typically, there is one ballast for every two light tubes in a fluorescent light fixture; accordingly, there is approximately 50 ballasts in the light fixtures requiring recycling or PCB hazardous waste disposal. There are also 98 four-foot light tubes that will need to be recycled during demolition.

PCB in Paints and Caulking

PCBs were used in paint and caulk formulations as drying oils (resins) and plasticizers or softening agents (liquids). Wood, concrete, gypsum wallboard and metal may have painted surfaces containing PCBs.

PCBs were tested in representative paints on the exterior of the buildings. **Table 5** below provides a summary of PCB sample results.

Table 5. Summary of PCB Sample Results

Sample Number	Location	Material	Result (mg/kg*)
5023 Rainier Ave S			
6263.80-AF-01PCB	Interior	Beige paint on plaster wall	4.9 Aroclor 1254
6263.80-AF-02PCB	Interior	Beige paint on wood trim	2.9 Aroclor 1254
6263.80-AF-03PCB	Interior	Beige paint on GWB wall	ND
5021 Rainier Ave S			
6263.80-AF-04PCB	Interior perimeter	Blue/gray paint on brick walls	590 Aroclor 1254 720 Aroclor 1260
6263.80-AF-05PCB	Interior shop area	Blue/gray paint on plaster walls and ceiling	500 Aroclor 1254 310 Aroclor 1260
6263.80-AF-06PCB	Exterior	Red on wood and plaster	2.9 Aroclor 1254
5015 Rainier Ave S			
6263.80-AF-07PCB	Exterior	Yellow paint on wood siding	ND

*mg/kg= milligrams per kilogram, ND= none detected. PCB-containing waste in demolition debris cannot be recycled. It may go to a subtitle D landfill. Profiling and special transport requirements apply.

Mercury Containing Switches

Heating system thermostats were investigated for mercury containing systems. There were no mercury-containing thermostats observed.

Laboratory Analytical Methods

Asbestos-Containing Materials

Bulk samples were analyzed by Polarized Light Microscopy (PLM) dispersion staining EPA Method 600/R-93/116 by Seattle Asbestos Test, LLC. (SAT). SAT is accredited through the National Voluntary Laboratory Accreditation Program (NVLAP) of the U. S. Department of Commerce. This accreditation does not constitute endorsement, but rather a finding of laboratory competence. The NVLAP participant number for SAT is 200768-0 (certification copies are located in **Appendix D**). Analytical results are in **Appendix E**.

Lead-Based Paint

Bulk paint chip samples were submitted to EMSL Analytical, Inc., for analysis. A total of 23 paint chip samples were analyzed for lead using atomic absorption spectroscopy (AAS) to determine the presence and percentage of lead. Procedures for analyzing metals are found in the American Society of Testing and Materials (ASTM) D-3335-78 and EPA Method Manual SW-846, Method 6010. (EMSL used SW 846 3050B*/7000B) an equivalent analytical method.

Analytical results for paint chip samples are provided in **Appendix F**. EMSL Analytical, Inc., laboratory certification is attached in **Appendix G**.

PCBs

Bulk PCB samples were submitted to On-Site Environmental, Inc., for analysis using gas chromatography (GC) equipped with electron capture detectors (ECD). Samples were analyzed using EPA Method SW-846 8082A. Analytical results are provided in **Appendix H**. On-Site Environmental, Inc. laboratory certification is attached in **Appendix I**.

Sample location drawings are provided in **Appendix J**.

Comments and Recommendations

Asbestos-Containing Materials

Med-Tox Northwest recommends, and state law requires, that all asbestos materials identified in **Table 1** be removed prior to demolition or renovation activities that may impact them.

Med-Tox Northwest recommends that this survey report be placed on-site during renovation and/or demolition and copies provided to the contractor(s) bidding and performing work. WISHA, OSHA and PSCAA require that the report be on-site and available for review during the entire project duration.

Additional destructive investigation and sampling will be required prior to and during any demolition activities including the following:

1. Majority of doors and door frames throughout the buildings were metal and tagged as fire-rated doors. Prior to any activity that will impact any door or door frame, drill into the doors and door frames to determine if suspect fire protection is located inside.
2. Electrical wire systems (wiring and panel components) were not tested due to occupancy and live electrical loads and will require testing prior to demolition.
3. The roof of 5021/5023 Rainier Avenue South was assumed to be asbestos containing. Prior to demolition or activities that will potentially impact it, the roof should be sampled by an AHERA building inspector and analyzed by a NVLAP certified laboratory to determine if it is asbestos containing.
4. This survey was conducted for upcoming renovations or demolition to the structures. Due to occupancy and the limitation of non-destructive investigation there may be additional suspect materials hidden. Although it is not anticipated that there will be many, prior to demolition or renovation activities destructive investigation inside walls and ceiling cavities must be performed.
5. The attic and crawl space were not accessible at 5015 Rainier Avenue South. These areas must be surveyed to determine if any additional suspect asbestos containing materials exist in these spaces.

Lead-Based Paint

For lead, any percentage of lead in the material should be an assumed risk to human health. All painted surfaces should be assumed to contain at least trace levels of lead in paint, therefore requiring compliance with WAC 296-155-176 during any disturbance of painted surfaces.

There were 23 bulk samples collected for lead analysis. Lead was detected at concentrations greater than the analytical detection limit in a majority of the bulk paint samples analyzed. Disposal options under WAC 173-303 are also determined by whether the material contains lead. Prior to demolition or renovation, based on the results of the bulk paint samples a TCLP sample should be collected to determine where the demolition debris from the buildings can be disposed of.

PCB

There were paints that were determined to contain PCB's. PCB-containing waste in demolition debris cannot be recycled. It may go to a subtitle D landfill. Profiling and special transport requirements (i.e., lined containers) apply.

Work procedures for proper removal and protection of workers should be provided to contractors in accordance with WAC 296-155 and WAC 296-841. This includes Hazardous Communications training as it pertains to PCB's considered a remediation waste.

It is recommended that sampling of the soil under the cement slab of the building be sampled for PCB contamination due to leaching of PCB's from the paints. There is a possibility that the soil and sediment could need to be handled as remediation waste due to the high levels of PCB's found in the caulking and paint.

Other Hazardous Building Materials

Fluorescent light tubes contain mercury and can be recycled as a universal waste for minimal cost. HID lights should be collected and recycled/disposed of appropriately. The air-conditioning unit with CFC's must be drained prior to demolition of the structure.

Limitations

A good faith effort has been made to identify ACM, LBP, and other HBM in the structures associated with 5015, 5021 and 5023 Rainier Avenue South in Seattle, Washington. This survey was performed for future renovations or demolition, due to occupancy; destructive investigation was only performed on a limited basis. Additional destructive investigation and sampling will be required depending on inaccessible building systems including mechanical spaces and/or mechanical/electrical system routing.

Sampling was performed consistent with the level of care and skill ordinarily exercised by professionals currently practicing under similar conditions in the area. No other warranty, expressed or implied, is made.

This report has been prepared for the exclusive use of Farallon Consulting, LLC and its designates for this project only. The analyses, conclusions, and recommendations presented in this report are based on conditions encountered at the time of our survey and our experience and judgment. MTNW cannot be held responsible for interpretation by others of the data contained in this report; any use of this report shall include the entire document. This survey is not intended for use as abatement plans and/or specifications which MTNW recommends for regulatory compliance.

Farallon Consulting
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
Hazardous Building Materials Survey



Appendix A

AHERA Building Inspector and WDOC Lead Certificates

Certificate of Completion

This is to certify that

Anthony L. Fullerton

has satisfactorily completed
4 hours of refresher training as an
AHERA Building Inspector

to comply with the training requirements of
TSCA Title II, 40 CFR 763 (AHERA)

EPA Provider # 1085

169219
Certificate Number



Aug 29, 2018
Date(s) of Training

Expires in 1 year.

A handwritten signature in black ink, appearing to read "A. M. L.", written over a horizontal line.

Instructor

Exam Score: N/A
If appropriate:

STATE OF WASHINGTON

Department of Commerce

Lead-Based Paint Abatement Program

Anthony L Fullerton

*Has fulfilled the certification requirements of
WAC 365-230
and has been certified to conduct lead-based
paint activities as a
Risk Assessor*

Certification #

0242

Issuance Date

05/25/2017

Expiration Date

04/03/2020

Farallon Consulting
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
Hazardous Building Materials Survey



Appendix B

Building and Building System Photographic Documentation

Hazardous Building Materials Survey
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
September 2019



Photo 1: East side of 5015 Rainier Avenue South facing northwest.



Photo 2: Interior of 5015 Rainier Avenue South.

Hazardous Building Materials Survey
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
September 2019



Photo 3: East side of the 5021/5023 facing south.



Photo 4: North side of 5021/5023 Rainier Avenue South facing east.

Hazardous Building Materials Survey
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
September 2019



Photo 5: South side of 5021/5023 Rainier Avenue South facing northwest.



Photo 6: Main work area in the auto repair business.

Hazardous Building Materials Survey
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
September 2019



Photo 7: Office area of the auto repair business.



Photo 8: Storage area in the auto repair business.



Photo 9: Basement of the auto repair business.



Photo 10: Old boiler observed in the auto repair mechanical room. The white tape is ACM.



Photo 11: - ACM duct insulation found in the basement of 5021 Rainier Avenue South.



Photo 12: Small restroom area and janitor closet in the auto repair shop. There is ACM floor tile inside on the floor.

Hazardous Building Materials Survey
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
September 2019



Photo 13: Typical finishes observed in the bookstore.



Photo 14: Restroom areas of the bookstore.



Photo 15: Typical finishes observed in the restrooms of the bookstore.



Photo 16: Storage area above the restrooms in the bookstore.

Farallon Consulting
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
Hazardous Building Materials Survey



Appendix C

Summary of Materials Sampled for Asbestos

Hazardous Building Materials Survey—
5015, 5021 and 5023 Rainier Ave South

Table C-1. Summary of Materials Sampled for Asbestos

Sample	Material	Location	AHERA Type	HM	Result
5023 Rainier Ave S					
6263.80-AF-001	Plaster and skim coat	Ceiling	Surfacing	01	ND
6263.80-AF-002	Plaster and skim coat	Ceiling	Surfacing	01	ND
6263.80-AF-003	Plaster and skim coat	North wall	Surfacing	01	ND
6263.80-AF-004	Plaster and skim coat	North wall	Surfacing	01	ND
6263.80-AF-005	Plaster and skim coat	Kitchen	Surfacing	01	ND
6263.80-AF-006	Un-textured GWB system	South wall	Misc.	02	ND
6263.80-AF-007	Un-textured GWB system	East wall	Misc.	02	ND
6263.80-AF-008	Un-textured GWB system	Restroom	Misc.	02	ND
6263.80-AF-009	White with black squares SVF	Women's restroom	Misc.	03	ND
6263.80-AF-010	White with black squares SVF	Women's restroom	Misc.	03	ND
6263.80-AF-011	White square pattern SVF	Uni-sex restroom	Misc.	04	ND
6263.80-AF-012	White square pattern SVF	Uni-sex restroom	Misc.	04	ND
6263.80-AF-013	4-inch black cove base and mastic	Restrooms	Misc.	05	ND
6263.80-AF-014	4-inch black cove base and mastic	Restrooms	Misc.	05	ND
6263.80-AF-015	Tan carpet mastic on wood	Kitchen	Misc.	06	ND
6263.80-AF-016	Tan carpet mastic on wood	Kitchen	Misc.	06	ND
5021 Rainier Ave S					
6263.80-AF-017	Plaster and skim coat	Basement ceiling	Surfacing	07	ND
6263.80-AF-018	Plaster and skim coat	Basement ceiling	Surfacing	07	ND
6263.80-AF-019	Plaster and skim coat	Boiler room	Surfacing	07	ND
6263.80-AF-020	Plaster and skim coat	Work area ceiling	Surfacing	07	ND
6263.80-AF-021	Plaster and skim coat	Work area ceiling	Surfacing	07	ND
6263.80-AF-022	Plaster and skim coat	Work area ceiling	Surfacing	07	ND
6263.80-AF-023	Plaster and skim coat	Storage room wall	Surfacing	07	ND
6263.80-AF-024	Plaster and skim coat	Storage room wall	Surfacing	07	ND
6263.80-AF-025	¼-inch plaster board on paper backing with silver paint	Boiler room stairs wall	Surfacing	08/09	ND
6263.80-AF-026	¼-inch plaster board on paper backing with silver paint	Boiler room stairs wall	Surfacing	08/09	ND
6263.80-AF-027	¼-inch plaster board on paper backing with silver paint	Boiler room stairs wall	Surfacing	08/09	ND
6263.80-AF-028	Silver coat paint on brick	Boiler room stairs wall	Surfacing	09	ND
6263.80-AF-029	Silver coat paint on brick	Boiler room stairs wall	Surfacing	09	ND

Hazardous Building Materials Survey—
5015, 5021 and 5023 Rainier Ave South

Sample	Material	Location	AHERA Type	HM	Result
6263.80-AF-030	Silver coat paint on brick	Boiler room stairs wall	Surfacing	09	ND
6263.80-AF-031	White duct tape on square duct	Boiler room	TSI	10	65% CHR
6263.80-AF-032	White duct tape boiler	Boiler room	TSI	10	62% CHR
6263.80-AF-033	White duct tape on round duct	Boiler room	TSI	10	65% CHR
6263.80-AF-034	Un-textured GWB system	office	Misc.	11	ND
6263.80-AF-035	Un-textured GWB system	office	Misc.	11	ND
6263.80-AF-036	Wall panel and mastic	Restroom/storage main entry	Misc.	12	ND
6263.80-AF-037	Wall panel and mastic	Restroom/storage main entry	Misc.	12	ND
6263.80-AF-038	Clay tile mortar	Work area perimeter walls	Misc.	13	ND
6263.80-AF-039	Clay tile mortar	Work area perimeter walls	Misc.	13	ND
6263.80-AF-040	Clay tile mortar	Work area perimeter walls	Misc.	13	ND
6263.76-AF-041	Spray-on textured on GWB repair panel	Basement ceiling	Surfacing	14	ND
6263.76-AF-042	Spray-on textured on GWB repair panel	Basement ceiling	Surfacing	14	ND
6263.76-AF-043	Spray-on textured on GWB repair panel	Basement ceiling	Surfacing	14	ND
6263.76-AF-044	12-inch tan VFT and black mastic - top	Office	Misc.	15	Layer 1: ND Layer 2: 3% CHR
6263.76-AF-045	12-inch tan VFT and black mastic -top	Office	Misc.	15	Layer 1: ND Layer 2: 3% CHR
6263.76-AF-046	Black flooring- bottom	Office	Misc.	16	4% CHR
6263.76-AF-047	Black flooring- bottom	Office	Misc.	16	Layer 1: 3% CHR Layer 2: ND
6263.76-AF-048	Yellow SVF	Restroom	Misc.	17	ND
6263.76-AF-049	Green linoleum sheet flooring	Storage	Misc.	18	ND
6263.76-AF-050	Green linoleum sheet flooring	Storage	Misc.	18	ND
6263.76-AF-051	9-inch green VFT and mastic	Restroom/storage main entry	Misc.	19	Layer 1: 2% CHR Layer 2: 3% CHR
6263.76-AF-052	Lightweight concrete floor	Work area	Misc.	20	ND
6263.76-AF-053	Lightweight concrete floor	Work area	Misc.	20	ND
6263.76-AF-054	Car decking slip sheet under lightweight concrete floor	Work area	Misc.	21	ND

*Hazardous Building Materials Survey—
5015, 5021 and 5023 Rainier Ave South*

Sample	Material	Location	AHERA Type	HM	Result
6263.76-AF-055	Car decking slip sheet under lightweight concrete floor	Work area	Misc.	21	ND
6263.76-AF-056	2-x 4-foot ACT	Office	Misc.	22	ND
6263.76-AF-057	2-x 4-foot ACT	Office	Misc.	22	ND
6263.80-AF-058	Window glaze	Work area windows	Misc.	23	ND
6263.80-AF-059	Window glaze	Work area windows	Misc.	23	ND
Exterior					
6263.80-AF-060	Textured GWB panels	North side exterior-east end	Surfacing	24	ND
6263.80-AF-061	Textured GWB panels	North side exterior-east end	Surfacing	24	ND
6263.80-AF-062	Textured GWB panels	North side exterior-east end	Surfacing	24	ND
6263.80-AF-063	Textured GWB panel seam caulk	North side exterior	Misc.	25	ND
6263.80-AF-064	Textured GWB panel seam caulk	North side exterior	Misc.	25	ND
6263.80-AF-065	Brick wall mortar	South side	Misc.	26	ND
6263.80-AF-066	Brick wall mortar	East side	Misc.	26	ND
6263.80-AF-067	Brick wall mortar	North side	Misc.	26	ND
6263.80-AF-068	Plaster wall fascia	East side exterior	Misc.	27	ND
6263.80-AF-069	Plaster wall fascia	East side exterior	Misc.	27	ND
6263.80-AF-070	Plaster wall fascia	East side exterior	Misc.	27	ND
5015 Rainier Ave S					
6263.80-AF-071	Textured GWB ceiling	Interior sales area	Surfacing	28	ND
6263.80-AF-072	Textured GWB ceiling	Interior sales area	Surfacing	28	ND
6263.80-AF-073	Textured GWB ceiling	Interior sales area	Surfacing	28	ND
6263.80-AF-074	Textured GWB ceiling	Interior sales area	Surfacing	28	ND
6263.80-AF-075	Textured GWB ceiling	Interior sales area	Surfacing	28	ND
6263.80-AF-076	Un-textured GWB system	Interior	Misc.	29	ND
6263.80-AF-077	Un-textured GWB system	Interior	Misc.	29	ND
6263.80-AF-078	¼-inch GWB	Storage	Misc.	30	ND
6263.80-AF-079	¼-inch GWB	Storage	Misc.	30	ND
6263.80-AF-080	Masonite wall panel	Storage	Misc.	31	ND
6263.80-AF-081	Masonite wall panel	Storage	Misc.	31	ND
6263.80-AF-082	12-inch brown self-stick floor tile- top layer	Sales area	Misc.	32	ND
6263.80-AF-083	12-inch brown self-stick floor tile- top layer	Sales area	Misc.	32	ND
6263.80-AF-084	Linoleum flooring- bottom layer	Sales area	Misc.	33	ND
6263.80-AF-085	Linoleum flooring- bottom layer	Sales area	Misc.	33	ND

Hazardous Building Materials Survey—
5015, 5021 and 5023 Rainier Ave South

Sample	Material	Location	AHERA Type	HM	Result
6263.80-AF-086	White patterned SVF remnant	Small storage area	Misc.	34	ND
6263.80-AF-087	White patterned SVF remnant	Small storage area	Misc.	34	ND
6263.80-AF-088	Remnant white SVF- approx. 6 SF	Small storage area	Misc.	35	ND
6263.80-AF-089	Terrazzo pattern SVF with sparkles	Restroom	Misc.	36	ND
6263.80-AF-090	Terrazzo pattern SVF with sparkles	Restroom	Misc.	36	ND
6263.80-AF-091	12-inch ACT	Storage	Misc.	37	ND
6263.80-AF-092	12-inch ACT	Storage	Misc.	37	ND
6263.80-AF-093	Window glaze	Exterior wood framed windows	Misc.	38	ND
6263.80-AF-094	Window glaze	Exterior wood framed windows	Misc.	38	ND
6263.80-AF-095	White SVF backsplash	Small storage room	Misc.	39	ND
6263.80-AF-096	Brick chimney mortar	Exterior- south side	Misc.	40	ND
6263.80-AF-097	Brick chimney mortar	Exterior- south side	Misc.	40	ND
6263.80-AF-098	Siding vapor barrier	Under wood siding	Misc.	41	ND
6263.80-AF-099	Siding vapor barrier	Under wood siding	Misc.	41	ND
6263.80-AF-100	Roof vapor barrier	Roof	Misc.	42	ND
6263.80-AF-101	3-tab composition roofing	Roof	Misc.	43	ND

CMU = cement masonry unit, GWB = gypsum wall board, HM = homogeneous material, Misc. = miscellaneous, ND = none detected, OR = oiling room, SH = shed, SVF = sheet vinyl flooring, TSI = thermal system insulation, VFT = vinyl floor tile.

Farallon Consulting
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
Hazardous Building Materials Survey



Appendix D

National Voluntary Laboratory Accreditation Program Certificate

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200768-0

Seattle Asbestos Test, LLC
Lynnwood, WA

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

Asbestos Fiber Analysis

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2018-10-01 through 2019-09-30

Effective Dates

A handwritten signature in blue ink, which appears to read 'Dana S. Lamm'. The signature is written over a horizontal line.

For the National Voluntary Laboratory Accreditation Program

Farallon Consulting
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
Hazardous Building Materials Survey



Appendix E

Analytical Report- Asbestos

SEATTLE ASBESTOS TEST, LLC

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

www.seattleasbestostest.com, admin@seattleasbestostest.com

Project Manager: Anthony Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Tel: 253.351.0677

Date Analyzed: 8/20/2019

Client Job#: 6263.80

Project Location: 5015, 5021, 5023 Rainier Ave S
Seattle WA

Laboratory batch#: 201911779

Samples Received: 101

Enclosed please find the test results for the bulk samples submitted to our laboratory for asbestos analysis. Analysis was performed using polarized light microscopy (PLM) in accordance with Test Method US EPA/600/R-93/116.

Percentages for this report are done by visual estimate and relate to the suggested acceptable error ranges by the method. Since variation in data increases as the quantity of asbestos decreases toward the limit of detection, the EPA recommends point counting for samples containing between <1% and 10% asbestos (NESHAP, 40 CFR Part 61). Statistically, point counting is a more accurate method. If you feel a point count might be beneficial, please feel free to call and request one.

The test results refer only to the samples or items submitted and tested. The accuracy with which these samples represent the actual materials is totally dependent on the acuity of the person who took the samples. This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government. The test report or calibration certificate shall not be reproduced except in full, without written approval of the laboratory.

This report is highly confidential and will not be released without your consent. Samples are archived for 30 days after the analysis, and disposed of as hazardous waste thereafter.

Thank you for using our service and let us know if we can further assist you.

Sincerely



Steve (Fanyao) Zhang
President

SEATTLE ASBESTOS TEST, LLC

Lynnwood Lab: 19711 Scriber Lake Road, Suite D, WA 98036, Tel:425.673.9850, Fax:425.673.9810
 Bellevue Lab: 12727 Northup Way, Suite 1, Bellevue, WA 98005, Tel:425.861.1111, Fax:425.861.1118
 Email: admin@seattleasbestostest.com, Website: www.seattleasbestostest.com

201911779
 Analyzing Quality

CHAIN OF CUSTODY

Bulk Asbestos
 Point Count 400
 Point Count 1000
 Point Count Gravimetric
 Other (Specify) _____
 1 Hour
 2 Hours
 Same day (4 to 6 Hrs.)
 1 Day
 5 Days

Med-Tox, Northwest

PO Box 1446, Auburn, WA 98071-1446 Tel: 253.351.0677 Fax: 253.351.0688
 Number of Samples 101 PO# 6263-80 Project Location 5015, 5021, 5023 Rainier Ave S.
 Seattle, WA

Project Manager (Check one or more):

Anthony Fullerton 206.356.8927 fullertona@medtoxnw.com evansc@medtoxnw.com
 Ginnie Kindler kindierg@medtoxnw.com Jon Havelock havelockj@medtoxnw.com
 Teresa Choate choate@medtoxnw.com

SEQ#	CLIENT SAMPLE #	SAMPLE DESCRIPTION	LOCATION	NOTES
1	6263-80-AF-01			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20	6263-80-AF-101			

See Attached Table

	Print Name	Signature	Company	Date	Time
Sampled:	A Fullerton		Med-Tox, Northwest	8/6/19	
Relinquished:	A Fullerton		Med-Tox, Northwest	8/12/19	
Delivered:			Med-Tox, Northwest		
Received:	Yui Yang		Seattle Asbestos Test	8/13/19	1500
Analyzed:	Yui Yang		Seattle Asbestos Test	8/20/19	1500
Reported:			Seattle Asbestos Test		

Seattle Asbestos Test warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted and disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. Seattle Asbestos Test accepts no legal responsibility for the purpose for which the client uses the test results. By signing on this form, the clients agree to relieve Seattle Asbestos Test of any liability that may arise from the test results. It is the client's responsibility to make sure the samples are appropriately taken according to federal and local regulations. Invoices paid late may be charged of interest, and invoices go to collection may be charged 17% to 25% of collection fee. NSF checks will be charged of \$50.

Results reporting method: Phone Fax Email Pick-up

Composite all wallboard samples Text result to phone Point count % or less asbestos

Hazardous Building Materials Survey—
 5015, 5021 and 5023 Rainier Ave South

Table C-1. Summary of Materials Sampled for Asbestos

201911779

Sample	Material	Location	AHERA Type	HM	Result
5023 Rainier Ave S					
6263.80-AF-001	Plaster and skim coat	Ceiling	Surfacing	01	
6263.80-AF-002	Plaster and skim coat	Ceiling	Surfacing	01	
6263.80-AF-003	Plaster and skim coat	North wall	Surfacing	01	
6263.80-AF-004	Plaster and skim coat	North wall	Surfacing	01	
6263.80-AF-005	Plaster and skim coat	Kitchen	Surfacing	01	
6263.80-AF-006	Un-textured GWB system	South wall	Misc.	02	
6263.80-AF-007	Un-textured GWB system	East wall	Misc.	02	
6263.80-AF-008	Un-textured GWB system	Restroom	Misc.	02	
6263.80-AF-009	White with black squares SVF	Women's restroom	Misc.	03	
6263.80-AF-010	White with black squares SVF	Women's restroom	Misc.	03	
6263.80-AF-011	White square pattern SVF	Uni-sex restroom	Misc.	04	
6263.80-AF-012	White square pattern SVF	Uni-sex restroom	Misc.	04	
6263.80-AF-013	4-inch black cove base and mastic	Restrooms	Misc.	05	
6263.80-AF-014	4-inch black cove base and mastic	Restrooms	Misc.	05	
6263.80-AF-015	Tan carpet mastic on wood	Kitchen	Misc.	06	
6263.80-AF-016	Tan carpet mastic on wood	Kitchen	Misc.	06	
5021 Rainier Ave S					
6263.80-AF-017	Plaster and skim coat	Basement ceiling	Surfacing	07	
6263.80-AF-018	Plaster and skim coat	Basement ceiling	Surfacing	07	
6263.80-AF-019	Plaster and skim coat	Boiler room	Surfacing	07	
6263.80-AF-020	Plaster and skim coat	Work area ceiling	Surfacing	07	
6263.80-AF-021	Plaster and skim coat	Work area ceiling	Surfacing	07	
6263.80-AF-022	Plaster and skim coat	Work area ceiling	Surfacing	07	
6263.80-AF-023	Plaster and skim coat	Storage room wall	Surfacing	07	
6263.80-AF-024	Plaster and skim coat	Storage room wall	Surfacing	07	
6263.80-AF-025	¼-inch plaster board on paper backing with silver paint	Boiler room stairs wall	Surfacing	08/09	
6263.80-AF-026	¼-inch plaster board on paper backing with silver paint	Boiler room stairs wall	Surfacing	08/09	
6263.80-AF-027	¼-inch plaster board on paper backing with silver paint	Boiler room stairs wall	Surfacing	08/09	
6263.80-AF-028	Silver coat paint on brick	Boiler room stairs wall	Surfacing	09	
6263.80-AF-029	Silver coat paint on brick	Boiler room stairs wall	Surfacing	09	

201911779

Hazardous Building Materials Survey—
5015, 5021 and 5023 Rainier Ave South

Sample	Material	Location	AHERA Type	HM	Result
6263.80-AF-030	Silver coat paint on brick	Boiler room stairs wall	Surfacing	09	
6263.80-AF-031	White duct tape on square duct	Boiler room	TSI	10	
6263.80-AF-032	White duct tape boiler	Boiler room	TSI	10	
6263.80-AF-033	White duct tape on round duct	Boiler room	TSI	10	
6263.80-AF-034	Un-textured GWB system	office	Misc.	11	
6263.80-AF-035	Un-textured GWB system	office	Misc.	11	
6263.80-AF-036	Wall panel and mastic	Restroom/storage main entry	Misc.	12	
6263.80-AF-037	Wall panel and mastic	Restroom/storage main entry	Misc.	12	
6263.80-AF-038	Clay tile mortar	Work area perimeter walls	Misc.	13	
6263.80-AF-039	Clay tile mortar	Work area perimeter walls	Misc.	13	
6263.80-AF-040	Clay tile mortar	Work area perimeter walls	Misc.	13	
6263.76-AF-041	Spray-on textured on GWB repair panel	Basement ceiling	Surfacing	14	
6263.76-AF-042	Spray-on textured on GWB repair panel	Basement ceiling	Surfacing	14	
6263.76-AF-043	Spray-on textured on GWB repair panel	Basement ceiling	Surfacing	14	
6263.76-AF-044	12-inch tan VFT and black mastic - top	Office	Misc.	15	
6263.76-AF-045	12-inch tan VFT and black mastic -top	Office	Misc.	15	
6263.76-AF-046	Black flooring- bottom	Office	Misc.	16	
6263.76-AF-047	Black flooring- bottom	Office	Misc.	16	
6263.76-AF-048	Yellow SVF	Restroom	Misc.	17	
6263.76-AF-049	Green linoleum sheet flooring	Storage	Misc.	18	
6263.76-AF-050	Green linoleum sheet flooring	Storage	Misc.	18	
6263.76-AF-051	9-inch green VFT and mastic	Restroom/storage main entry	Misc.	19	
6263.76-AF-052	Lightweight concrete floor	Work area	Misc.	20	
6263.76-AF-053	Lightweight concrete floor	Work area	Misc.	20	
6263.76-AF-054	Car decking slip sheet under lightweight concrete floor	Work area	Misc.	21	

201911779

Hazardous Building Materials Survey—
 5015, 5021 and 5023 Rainier Ave South

Sample	Material	Location	AHERA Type	HM	Result
6263.76-AF-055	Car decking slip sheet under lightweight concrete floor	Work area	Misc.	21	
6263.76-AF-056	2-x 4-foot ACT	Office	Misc.	22	
6263.76-AF-057	2-x 4-foot ACT	Office	Misc.	22	
6263.80-AF-058	Window glaze	Work area windows	Misc.	23	
6263.80-AF-059	Window glaze	Work area windows	Misc.	23	
Exterior					
6263.80-AF-060	Textured GWB panels	North side exterior-east end	Surfacing	24	
6263.80-AF-061	Textured GWB panels	North side exterior-east end	Surfacing	24	
6263.80-AF-062	Textured GWB panels	North side exterior-east end	Surfacing	24	
6263.80-AF-063	Textured GWB panel seam caulk	North side exterior	Misc.	25	
6263.80-AF-064	Textured GWB panel seam caulk	North side exterior	Misc.	25	
6263.80-AF-065	Brick wall mortar	South side	Misc.	26	
6263.80-AF-066	Brick wall mortar	East side	Misc.	26	
6263.80-AF-067	Brick wall mortar	North side	Misc.	26	
6263.80-AF-068	Plaster wall fascia	East side exterior	Misc.	27	
6263.80-AF-069	Plaster wall fascia	East side exterior	Misc.	27	
6263.80-AF-070	Plaster wall fascia	East side exterior	Misc.	27	
5015 Rainier Ave S					
6263.80-AF-071	Textured GWB ceiling	Interior sales area	Surfacing	28	
6263.80-AF-072	Textured GWB ceiling	Interior sales area	Surfacing	28	
6263.80-AF-073	Textured GWB ceiling	Interior sales area	Surfacing	28	
6263.80-AF-074	Textured GWB ceiling	Interior sales area	Surfacing	28	
6263.80-AF-075	Textured GWB ceiling	Interior sales area	Surfacing	28	
6263.80-AF-076	Un-textured GWB system	Interior	Misc.	29	
6263.80-AF-077	Un-textured GWB system	Interior	Misc.	29	
6263.80-AF-078	¼-inch GWB	Storage	Misc.	30	
6263.80-AF-079	¼-inch GWB	Storage	Misc.	30	
6263.80-AF-080	Masonite wall panel	Storage	Misc.	31	
6263.80-AF-081	Masonite wall panel	Storage	Misc.	31	
6263.80-AF-082	12-inch brown self-stick floor tile- top layer	Sales area	Misc.	32	
6263.80-AF-083	12-inch brown self-stick floor tile- top layer	Sales area	Misc.	32	
6263.80-AF-084	Linoleum flooring- bottom layer	Sales area	Misc.	33	
6263.80-AF-085	Linoleum flooring- bottom layer	Sales area	Misc.	33	

SEATTLE ASBESTOS TEST

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ANALYTICAL LABORATORY REPORT PLM by Method EPA/600/R-93/116

Attn.: Anthony Fullerton Client: Med-Tox, Northwest Address: PO Box 1446, Auburn, WA 98071-1446
 Job#: 6263.80 Batch#: 201911779 Date Received: 8/13/2019
 Samples Rec'd: 101 Date Analyzed: 8/20/2019 Samples Analyzed: 100
 Project Loc.: 5015, 5021, 5023 Rainier Ave S
 Seattle WA

Analyzed by: *Yui Yang* Reviewed by: *Steve (Fanyao) Zhang, President*

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
1	6263.80-AF-001	1	Gray sandy/brittle material with multi-layered paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
2	6263.80-AF-002	1	Gray sandy/brittle material with multi-layered paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
3	6263.80-AF-003	1	Gray loose sandy/brittle material with multi-layered paint		None detected	Sand, Filler, Binder, Paint	4	Cellulose
4	6263.80-AF-004	1	Multi-layered white paint		None detected	Paint/binder	2	Cellulose
		2	Silver paint		None detected	Paint, Filler	4	Cellulose
		3	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
5	6263.80-AF-005	1	White powdery material with paint		None detected	Binder/filler, Paint	2	Cellulose
		2	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
6	6263.80-AF-006	1	White chalky material with paint and paper		None detected	Binder/filler, Gypsum/binder, Paint	30	Cellulose
7	6263.80-AF-007	1	White powdery material with paint		None detected	Binder/filler, Paint	2	Cellulose
		2	White powdery material with paper		None detected	Binder/filler	31	Cellulose
		3	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	25	Cellulose
8	6263.80-AF-008	1	White powdery material with paint		None detected	Binder/filler, Paint	2	Cellulose
		2	White powdery material with paper		None detected	Binder/filler	36	Cellulose
		3	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	20	Cellulose
9	6263.80-AF-009	1	White/black sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material		None detected	Binder/filler	65	Cellulose
10	6263.80-AF-010	1	White/black sheet vinyl with debris		None detected	Vinyl/binder, Debris		None detected
		2	Gray fibrous material with mastic and debris		None detected	Binder/filler, Mastic/binder, Debris	67	Cellulose
11	6263.80-AF-011	1	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	62	Cellulose
		2	Brown wood block		None detected	Wood aggregates	6	Cellulose

SEATTLE ASBESTOS TEST

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 Project Loc.: 5015, 5021, 5023 Rainier Ave S
 Seattle WA

Analyzed by:  Yui Yang Reviewed by:  Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
12	6263.80-AF-012	1	White sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	61	Cellulose
		3	Brown wood block		None detected	Wood aggregates	7	Cellulose
13	6263.80-AF-013	1	Black rubbery material with paint		None detected	Rubber/binder, Paint	2	Cellulose
		2	Beige mastic		None detected	Mastic/binder	3	Cellulose
		3	White powdery material with paint		None detected	Binder/filler, Paint	2	Cellulose
14	6263.80-AF-014	1	Black rubbery material with paint		None detected	Rubber/binder, Paint	2	Cellulose
		2	Beige mastic		None detected	Mastic/binder	2	Cellulose
		3	White powdery material with paint		None detected	Binder/filler, Paint	2	Cellulose
15	6263.80-AF-015	1	Tan mastic		None detected	Mastic/binder	7	Synthetic fibers, Cellulose
16	6263.80-AF-016	1	Tan mastic		None detected	Mastic/binder	8	Synthetic fibers, Cellulose
17	6263.80-AF-017	1	White brittle material with sand and paint		None detected	Filler, Binder, Paint, Sand	2	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
18	6263.80-AF-018	1	White sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	2	Cellulose
19	6263.80-AF-019	1	Gray loose sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
20	6263.80-AF-020	1	Gray paint		None detected	Paint/binder	2	Cellulose
		2	Silver paint		None detected	Paint, Filler	2	Cellulose
		3	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
21	6263.80-AF-021	1	Gray paint		None detected	Paint/binder	2	Cellulose
		2	Trace silver paint		None detected	Paint, Filler	2	Cellulose
		3	Gray sandy/brittle material		None detected	Sand, Filler, Binder	4	Cellulose
22	6263.80-AF-022	1	Gray paint		None detected	Paint/binder	2	Cellulose
		2	Trace silver paint		None detected	Paint, Filler	2	Cellulose

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 Samples Rec'd: 101 Date Analyzed: 8/20/2019 Samples Analyzed: 100
 Project Loc.: 5015, 5021, 5023 Rainier Ave S
 Seattle WA

Analyzed by: *[Signature]* Reviewed by: *[Signature]* Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	% Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
22	6263.80-AF-022	3	Gray sandy/brittle material	None detected	Sand, Filler, Binder	3	Cellulose
23	6263.80-AF-023	1	Beige brittle material with powdery material and paint	None detected	Filler, Binder, Paint	4	Cellulose
		2	Gray sandy/brittle material	None detected	Sand, Filler, Binder	2	Cellulose
24	6263.80-AF-024	1	Beige brittle material with powdery material and paint	None detected	Filler, Binder, Paint	3	Cellulose
		2	Gray sandy/brittle material	None detected	Sand, Filler, Binder	3	Cellulose
25	6263.80-AF-025	1	Silver paint	None detected	Paint, Filler	2	Cellulose
		2	White brittle material	None detected	Filler, Binder	2	Cellulose
		3	Gray sandy/brittle material with debris	None detected	Sand, Filler, Binder, Debris	3	Cellulose
26	6263.80-AF-026	1	Silver paint	None detected	Paint, Filler	2	Cellulose
		2	Gray sandy/brittle material with debris	None detected	Sand, Filler, Binder, Debris	3	Cellulose
		3	Brown paper	None detected	Filler	75	Cellulose
27	6263.80-AF-027	1	Silver paint	None detected	Paint, Filler	2	Cellulose
		2	White brittle material	None detected	Filler, Binder	2	Cellulose
		3	Gray sandy/brittle material with debris	None detected	Sand, Filler, Binder, Debris	3	Cellulose
		4	Brown paper	None detected	Filler	71	Cellulose
28	6263.80-AF-028	1	Silver paint	None detected	Paint, Filler	2	Cellulose
		2	Gray loose sandy/brittle material with debris	None detected	Sand, Filler, Binder, Debris	4	Cellulose
29	6263.80-AF-029	1	Silver paint	None detected	Paint, Filler	2	Cellulose
		2	Gray loose sandy/brittle material	None detected	Sand, Filler, Binder	2	Cellulose
30	6263.80-AF-030	1	Silver paint	None detected	Paint, Filler	3	Cellulose
		2	Gray loose sandy/brittle material	None detected	Sand, Filler, Binder	2	Cellulose

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 Project Loc.: 5015, 5021, 5023 Rainier Ave S
 Seattle WA

Analyzed by: Yui Yang

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
31	6263.80-AF-031	1	White fibrous material	65	Chrysotile	Filler	28	Cellulose
32	6263.80-AF-032	1	White fibrous material with debris	62	Chrysotile	Filler	25	Cellulose
33	6263.80-AF-033	1	White fibrous material with debris	65	Chrysotile	Filler	27	Cellulose
34	6263.80-AF-034	1	White powdery material with paint		None detected	Binder/filler, Paint	4	Cellulose
		2	White powdery material with paper		None detected	Binder/filler	30	Cellulose
		3	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	27	Cellulose
35	6263.80-AF-035	1	White chalky material with paint and paper		None detected	Binder/filler, Gypsum/binder, Paint	32	Cellulose
36	6263.80-AF-036	1	Gray soft material with paint		None detected	Filler, Binder, Paint	3	Cellulose
		2	Black asphaltic fibrous material with mastic		None detected	Asphalt/binder, Mastic/binder, Filler	70	Cellulose
		3	Trace silver paint		None detected	Paint, Filler	2	Cellulose
		4	Green paint		None detected	Paint, Filler	4	Cellulose
37	6263.80-AF-037	1	Gray soft material with paint		None detected	Filler, Binder, Paint	3	Cellulose
		2	Black asphaltic fibrous material with mastic		None detected	Asphalt/binder, Mastic/binder, Filler	71	Cellulose
		3	Trace silver paint		None detected	Paint, Filler	2	Cellulose
		4	Green paint		None detected	Paint, Filler	2	Cellulose
		5	Brown wood debris		None detected	Wood debris	5	Cellulose
38	6263.80-AF-038	1	Gray loose sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
39	6263.80-AF-039	1	Trace silver paint		None detected	Paint, Filler	2	Cellulose
		2	Red brittle material		None detected	Filler, Binder	2	Cellulose
		3	Gray loose sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
40	6263.80-AF-040	1	Gray paint		None detected	Paint, Filler	2	Cellulose
		2	Silver paint		None detected	Paint, Filler	2	Cellulose

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 Project Loc.: 5015, 5021, 5023 Rainier Ave S
 Seattle WA

Analyzed by: *Yui Yang* Reviewed by: *Steve (Fanyao) Zhang, President*

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
40	6263.80-AF-040	3	White brittle material		None detected	Filler, Binder	3	Cellulose
		4	Gray loose sandy/brittle material		None detected	Sand, Filler, Binder	2	Cellulose
41	6263.80-AF-041	1	White powdery material with perlite		None detected	Filler, Binder, Perlite	4	Cellulose
42	6263.80-AF-042	1	White powdery material with perlite		None detected	Filler, Binder, Perlite	4	Cellulose
43	6263.80-AF-043	1	White powdery material with perlite		None detected	Filler, Binder, Perlite	5	Cellulose
44	6263.80-AF-044	1	Tan tile with debris		None detected	Vinyl/binder, Mineral grains, Debris	3	Cellulose
		2	Black mastic	3	Chrysotile	Mastic/binder	2	Cellulose
45	6263.80-AF-045	1	Tan tile with debris		None detected	Vinyl/binder, Mineral grains, Debris	4	Cellulose
		2	Black mastic	3	Chrysotile	Mastic/binder	3	Cellulose
46	6263.80-AF-046	1	Black soft/loose material	4	Chrysotile	Filler, Fine particles	5	Cellulose
47	6263.80-AF-047	1	Black soft/loose material	3	Chrysotile	Filler, Fine particles	4	Cellulose
		2	Brown wood block		None detected	Wood aggregates	7	Cellulose
48	6263.80-AF-048	1	Yellow sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with trace mastic		None detected	Binder/filler, Mastic/binder	60	Cellulose
49	6263.80-AF-049	1	Green vinyl		None detected	Vinyl/binder	2	Cellulose
		2	Brown woven fibrous material		None detected	Filler, Binder	86	Cellulose
50	6263.80-AF-050	1	Green vinyl		None detected	Vinyl/binder	3	Cellulose
		2	Brown woven fibrous material		None detected	Filler, Binder	85	Cellulose
51	6263.80-AF-051	1	Green tile	2	Chrysotile	Vinyl/binder, Mineral grains	2	Cellulose
		2	Black mastic	3	Chrysotile	Mastic/binder	3	Cellulose
52	6263.80-AF-052	1	Gray hard sandy/brittle material		None detected	Sand, Filler, Cement/binder	3	Cellulose
53	6263.80-AF-053	1	Gray hard sandy/brittle material		None detected	Sand, Filler, Cement/binder	2	Cellulose

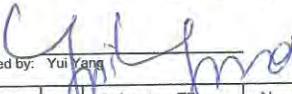
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Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
54	6263.80-AF-054	1	Black asphaltic fibrous material with debris		None detected	Filler, Asphalt, Binder, Debris	70	Cellulose
55	6263.80-AF-055	1	Black asphaltic fibrous material with debris		None detected	Filler, Asphalt, Binder, Debris	68	Cellulose
56	6263.80-AF-056	1	Gray fibrous material with paint		None detected	Paint, Filler, Perlite, Glass beads	65	Cellulose, Glass fibers
57	6263.80-AF-057	1	Gray fibrous material with paint		None detected	Paint, Filler, Perlite, Glass beads	62	Cellulose, Glass fibers
58	6263.80-AF-058	1	White brittle material		None detected	Filler, Binder	2	Cellulose
59	6263.80-AF-059	1	White brittle material with debris		None detected	Filler, Binder, Debris	3	Cellulose
60	6263.80-AF-060	1	White soft/elastic material with paint		None detected	Binder, Filler, Paint	4	Cellulose
		2	Tan chalky material		None detected	Gypsum/binder	15	Cellulose
61	6263.80-AF-061	1	Tan chalky material with paint		None detected	Gypsum/binder, Paint	12	Cellulose
62	6263.80-AF-062	1	White soft/elastic material with paint		None detected	Binder, Filler, Paint	3	Cellulose
		2	Tan chalky material		None detected	Gypsum/binder	15	Cellulose
63	6263.80-AF-063	1	White soft/elastic material with paint		None detected	Binder, Filler, Paint	4	Cellulose
64	6263.80-AF-064	1	White soft/elastic material with paint and debris		None detected	Binder, Filler, Paint, Debris	3	Cellulose
65	6263.80-AF-065	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
66	6263.80-AF-066	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
67	6263.80-AF-067	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
68	6263.80-AF-068	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	4	Cellulose
69	6263.80-AF-069	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
70	6263.80-AF-070	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	2	Cellulose
71	6263.80-AF-071	1	White chalky material with paint and paper		None detected	Binder/filler, Gypsum/binder, Paint, Wood debris	30	Cellulose
72	6263.80-AF-072	1	White brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	21	Cellulose

SEATTLE ASBESTOS TEST

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ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

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 Seattle WA

Analyzed by:  Yui Yang Reviewed by:  Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
73	6263.80-AF-073	1	White chalky material with paint and paper		None detected	Binder/filler, Gypsum/binder, Paint, Wood debris	35	Cellulose
74	6263.80-AF-074	1	White chalky material with paint and paper		None detected	Binder/filler, Gypsum/binder, Paint, Wood debris	33	Cellulose
75	6263.80-AF-075	1	White chalky material with paint and paper		None detected	Binder/filler, Gypsum/binder, Paint, Wood debris	30	Cellulose
76	6263.80-AF-076	1	White chalky material with paint and paper		None detected	Binder/filler, Gypsum/binder, Paint, Wood debris	34	Cellulose
77	6263.80-AF-077	1	White chalky material with paint and paper		None detected	Binder/filler, Gypsum/binder, Paint	30	Cellulose
78	6263.80-AF-078	1	White chalky material with paint and paper		None detected	Binder/filler, Gypsum/binder, Paint, Wood debris	35	Cellulose
79	6263.80-AF-079	1	White chalky material with paint and paper		None detected	Binder/filler, Gypsum/binder, Paint	30	Cellulose
80	6263.80-AF-080	1	Brown fibrous material with paint		None detected	Filler, Paint	90	Cellulose
81	6263.80-AF-081	1	Brown fibrous material with paint		None detected	Filler, Paint	92	Cellulose
82	6263.80-AF-082	1	Brown sheet vinyl		None detected	Vinyl/binder		None detected
		2	Beige tile		None detected	Vinyl/binder, Mineral grains	3	Cellulose
		3	Clear mastic		None detected	Mastic/binder	2	Cellulose
83	6263.80-AF-083	1	Brown sheet vinyl		None detected	Vinyl/binder		None detected
		2	Beige tile		None detected	Vinyl/binder, Mineral grains	2	Cellulose
		3	Clear mastic		None detected	Mastic/binder	2	Cellulose
84	6263.80-AF-084	1	Black asphaltic fibrous material with paint		None detected	Filler, Asphalt, Binder, Paint	70	Cellulose
		2	Brown wood block		None detected	Wood aggregates	4	Cellulose
85	6263.80-AF-085	1	Black asphaltic fibrous material with paint		None detected	Filler, Asphalt, Binder, Paint	66	Cellulose
86	6263.80-AF-086	1	White/brown sheet vinyl		None detected	Vinyl/binder		None detected

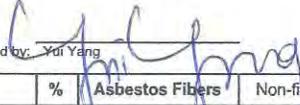
SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

Disclaimer: This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government.

ANALYTICAL LABORATORY REPORT PLM by Method EPA/600/R-93/116

Attn.: Anthony Fullerton Client: Med-Tox, Northwest Address: PO Box 1446, Auburn, WA 98071-1446
 Job#: 6263.80 Batch#: 201911779 Date Received: 8/13/2019
 Samples Rec'd: 101 Date Analyzed: 8/20/2019 Samples Analyzed: 100
 Project Loc.: 5015, 5021, 5023 Rainier Ave S
 Seattle WA

Analyzed by:  Yui Yang Reviewed by:  Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
86	6263.80-AF-086	2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	61	Cellulose
87	6263.80-AF-087	1	White/brown sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	63	Cellulose
88	6263.80-AF-088	1	White/beige sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with trace mastic		None detected	Binder/filler, Mastic/binder	65	Cellulose
89	6263.80-AF-089	1	Beige sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray/green fibrous material with trace mastic		None detected	Binder/filler, Mastic/binder	67	Cellulose
90	6263.80-AF-090	1	Beige sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray/green fibrous material with trace mastic		None detected	Binder/filler, Mastic/binder	64	Cellulose
91	6263.80-AF-091	1	Brown fibrous material with paint		None detected	Filler, Paint	92	Cellulose
92	6263.80-AF-092	1	Brown fibrous material with paint		None detected	Filler, Paint	90	Cellulose
93	6263.80-AF-093	1	Off-white brittle material with paint		None detected	Filler, Binder, Paint	3	Cellulose
94	6263.80-AF-094		Sample not submitted					
95	6263.80-AF-095	1	White/pink sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray/green fibrous material with trace mastic		None detected	Binder/filler, Mastic/binder	65	Cellulose
96	6263.80-AF-096	1	Gray loose sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	2	Cellulose
97	6263.80-AF-097	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
98	6263.80-AF-098	1	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	70	Cellulose
99	6263.80-AF-099	1	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	72	Cellulose
100	6263.80-AF-100	1	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	70	Cellulose
101	6263.80-AF-101	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	24	Glass fibers

Farallon Consulting
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
Hazardous Building Materials Survey



Appendix F

Analytical Report- Lead



EMSL Analytical, Inc.

6340 CastlePlace Dr., Indianapolis, IN 46250

Phone/Fax: (317) 803-2997 / (317) 803-3047

<http://www.EMSL.com>

indianapolislab@emsl.com

EMSL Order:	161916318
CustomerID:	MEDT50
CustomerPO:	
ProjectID:	

Attn: **Anthony Fullerton**
Med-Tox Northwest
PO Box 1446
Auburn, WA 98071

Phone: (253) 351-0677
Fax: (253) 351-0688
Received: 08/14/19 8:50 AM
Collected: 8/6/2019

Project: 6263.80

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected	Analyzed	Weight	RDL	Lead Concentration
6263.80-AF-01Pb 161916318-0001	8/6/2019	8/14/2019	0.2237 g	0.0089 % wt	0.015 % wt
	Site: KITCHEN WALL / PLASTER / PINK				
6263.80-AF-02Pb 161916318-0002	8/6/2019	8/14/2019	0.2356 g	0.0085 % wt	<0.0085 % wt
	Site: NORTH WALL / PLASTER / BEIGE				
6263.80-AF-03PB 161916318-0003	8/6/2019	8/14/2019	0.2294 g	0.0087 % wt	<0.0087 % wt
	Site: SOUTH WALL / GWB / BEIGE				
6263.80-AF-04Pb 161916318-0004	8/6/2019	8/14/2019	0.1828 g	0.011 % wt	<0.011 % wt
	Site: KITCHEN WALL / PLASTER / PEACH				
6263.80-AF-05Pb 161916318-0005	8/6/2019	8/14/2019	0.2109 g	0.0095 % wt	<0.0095 % wt
	Site: EAST TRIM / WOOD / BEIGE				
6263.80-AF-06Pb 161916318-0006	8/6/2019	8/14/2019	0.2416 g	0.0083 % wt	0.32 % wt
	Site: STORAGE WALL / PLASTER / BEIGE				
6263.80-AF-07Pb 161916318-0007	8/6/2019	8/14/2019	0.19 g	0.011 % wt	0.038 % wt
	Site: WORK AREA WALL / WOOD / BLUE				
6263.80-AF-08Pb 161916318-0008	8/6/2019	8/14/2019	0.2478 g	0.0081 % wt	0.19 % wt
	Site: WORK AREA WALL / BRICK / GRAY/BLUE				
6263.80-AF-09Pb 161916318-0009	8/6/2019	8/14/2019	0.2245 g	0.22 % wt	2.5 % wt
	Site: WORK AREA WALL / BRICK / BLUE				
6263.80-AF-10Pb 161916318-0010	8/6/2019	8/14/2019	0.2381 g	0.0084 % wt	0.11 % wt
	Site: WORK AREA CEILING / PLASTER / GRAY				
6263.80-AF-11Pb 161916318-0011	8/6/2019	8/14/2019	0.2295 g	0.0087 % wt	0.13 % wt
	Site: WORK AREA NORTH WALL BY RAMP / PLASTER / BLUE				

Doug Wiegand, Laboratory Manager
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Indianapolis, IN AIHA-LAP, LLC--ELLAP 157245, OH E10040

Initial report from 08/20/2019 16:30:46



EMSL Analytical, Inc.

6340 CastlePlace Dr., Indianapolis, IN 46250

Phone/Fax: (317) 803-2997 / (317) 803-3047

<http://www.EMSL.com>

indianapolislab@emsl.com

EMSL Order:	161916318
CustomerID:	MEDT50
CustomerPO:	
ProjectID:	

Attn: **Anthony Fullerton**
Med-Tox Northwest
PO Box 1446
Auburn, WA 98071

Phone: (253) 351-0677
 Fax: (253) 351-0688
 Received: 08/14/19 8:50 AM
 Collected: 8/6/2019

Project: **6263.80**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected	Analyzed	Weight	RDL	Lead Concentration
6263.80-AF-12Pb 161916318-0012	8/6/2019	8/14/2019	0.2475 g	0.40 % wt	13 % wt
Site: EAST SIDE OF 5021 WALL / WOOD / LIGHT GRAY/WHITE					
6263.80-AF-13Pb 161916318-0013	8/6/2019	8/14/2019	0.2457 g	0.0081 % wt	0.014 % wt
Site: NORTH SIDE OF 5021 WALL / GWB / WHITE					
6263.80-AF-14Pb 161916318-0014	8/6/2019	8/14/2019	0.2249 g	0.44 % wt	12 % wt
Site: EAST SIDE FASCIA / PLASTER/CONCRETE / RED					
6263.80-AF-15Pb 161916318-0015	8/6/2019	8/14/2019	0.2272 g	0.22 % wt	3.5 % wt
Site: SOUTH SIDE WALL / BRICK / BEIGE					
6263.80-AF-16Pb 161916318-0016	8/6/2019	8/14/2019	0.2012 g	0.0099 % wt	<0.0099 % wt
Site: SALES AREA WALL / WOOD / ORANGE					
6263.80-AF-17Pb 161916318-0017	8/6/2019	8/14/2019	0.2153 g	0.0093 % wt	0.056 % wt
Site: SALES AREA WALL / GWB / WHITE					
6263.80-AF-18Pb 161916318-0018	8/6/2019	8/14/2019	0.2325 g	0.0086 % wt	0.23 % wt
Site: STORAGE AREA WALL / MASONITE / LIGHT GREEN					
6263.80-AF-19Pb 161916318-0019	8/6/2019	8/14/2019	0.0914 g	0.022 % wt	<0.022 % wt
Site: STORAGE AREA WALL / WOOD / LIGHT GREEN					
6263.80-AF-20Pb 161916318-0020	8/6/2019	8/14/2019	0.2368 g	0.0084 % wt	0.41 % wt
Site: STORAGE AREA WALL / GWB / BEIGE					
6263.80-AF-21Pb 161916318-0021	8/6/2019	8/14/2019	0.2252 g	0.44 % wt	13 % wt
Site: EXTERIOR SIDING / WOOD / YELLOW					
6263.80-AF-22Pb 161916318-0022	8/6/2019	8/14/2019	0.2158 g	0.46 % wt	12 % wt
Site: EXTERIOR SOFFIT / WOOD / BROWN					

Doug Wiegand, Laboratory Manager
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Indianapolis, IN AIHA-LAP, LLC--ELLAP 157245, OH E10040

Initial report from 08/20/2019 16:30:46



EMSL Analytical, Inc.

6340 CastlePlace Dr., Indianapolis, IN 46250

Phone/Fax: (317) 803-2997 / (317) 803-3047

<http://www.EMSL.com>

indianapolislab@emsl.com

EMSL Order:	161916318
CustomerID:	MEDT50
CustomerPO:	
ProjectID:	

Attn: **Anthony Fullerton**
Med-Tox Northwest
PO Box 1446
Auburn, WA 98071

Phone: (253) 351-0677
 Fax: (253) 351-0688
 Received: 08/14/19 8:50 AM
 Collected: 8/6/2019

Project: **6263.80**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

<i>Client SampleDescription</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Weight</i>	<i>RDL</i>	<i>Lead Concentration</i>
6263.80-AF-23Pb	8/6/2019	8/14/2019	0.1668 g	0.012 % wt	0.047 % wt
161916318-0023	Site: EXTERIOR TRIM / WOOD / BLACK				

Doug Wiegand, Laboratory Manager
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Indianapolis, IN AIHA-LAP, LLC--ELLAP 157245, OH E10040

Initial report from 08/20/2019 16:30:46



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING
LABORATORY PRODUCTS TRAINING

Lead (Pb) Chain of Custody

EMSL Order ID (Lab Use Only):

161916318

EMSL Analytical, Inc.

6340 Castleplace Dr.

Indianapolis, IN 46250

Phone: (317) 803-2997

Fax: (317) 803-3047

Company: Med-Tox Northwest		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>		
Street: 1701 West Valley Hwy North #3		<i>Third Party Billing requires written authorization from third party</i>		
City: Auburn	State/Province: WA	Zip/Postal Code: 98001	Country: US	
Report To (Name): Anthony Fullerton		Telephone #: 206-356-8927		
Email Address: fullertona@medtoxnw.com		Fax #: 253-351-0688	Purchase Order:	
Project Name/Number: 6263-80		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		
U.S. State Samples Taken: WA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt		
Turnaround Time (TAT) Options* - Please Check				
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour	
<input type="checkbox"/> 72 Hour	<input type="checkbox"/> 96 Hour	<input checked="" type="checkbox"/> 1 Week	<input type="checkbox"/> 2 Week	
<small>*Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide</small>				
Matrix	Method	Instrument	Reporting Limit	Check
Chips <input checked="" type="checkbox"/> % by wt. <input type="checkbox"/> mg/cm ² <input type="checkbox"/> ppm (mg/kg)	SW846-7000B	Flame Atomic Absorption	0.01%	<input checked="" type="checkbox"/>
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter	<input type="checkbox"/>
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter	<input type="checkbox"/>
	NIOSH 7300M/NIOSH 7303	ICP-OES	0.5 µg/filter	<input type="checkbox"/>
Wipe* <small>*if no box checked, non-ASTM Wipe assumed</small>	SW846-7000B	Flame Atomic Absorption	10 µg/wipe	<input type="checkbox"/>
	SW846-6010B or C	ICP-OES	1.0 µg/wipe	<input type="checkbox"/>
TCLP	SW846-1311/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW846-1311/SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
SPLP	SW846-1312/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW846-1312/SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
TTLC	22 CCR App. II, 7000B/7420	Flame Atomic Absorption	40 mg/kg (ppm)	<input type="checkbox"/>
	22 CCR App. II, SW846-6010B or C	ICP-OES	2 mg/kg (ppm)	<input type="checkbox"/>
STLC	22 CCR App. II, 7000B/7420	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	22 CCR App. II, SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
Soil	SW846-7000B	Flame Atomic Absorption	40 mg/kg (ppm)	<input type="checkbox"/>
	SW846-6010B or C	ICP-OES	2 mg/kg (ppm)	<input type="checkbox"/>
Wastewater Unpreserved <input type="checkbox"/> Preserved with HNO ₃ pH < 2 <input type="checkbox"/>	SM3111B/SW846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.7	ICP-OES	0.020 mg/L (ppm)	<input type="checkbox"/>
Drinking Water Unpreserved <input type="checkbox"/> Preserved with HNO ₃ pH < 2 <input type="checkbox"/>	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	<input type="checkbox"/>
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	<input type="checkbox"/>
	40 CFR Part 50	Graphite Furnace AA	3.6 µg/filter	<input type="checkbox"/>
Other:				
Name of Sampler: A Fullerton		Signature of Sampler: <i>[Signature]</i>		
Sample #	Location	Volume/Area	Date/Time Sampled	
6263-80-AFP01 Pb		See Table	8/16/19	
6263-80-AF-23Pb			↓	
Client Sample #s	01 Pb, 23 Pb	Total # of Samples:	23	
Relinquished (Client)	<i>[Signature]</i>	Date:	8/12/19	Time: 1308
Received (Lab):	<i>[Signature]</i>	Date:	8/14/19	Time: 850 <i>[Signature]</i>
Comments:				

161916318

Table 3. Summary of Bulk Paint Chip Sample Results

Sample Number	Location	Component	Substrate	Color	Result (ppm)
5023 Rainier Ave S					
6263.80-AF-01Pb	Kitchen	Wall	Plaster	pink	
6263.80-AF-02Pb	North	Wall	Plaster	beige	
6263.80-AF-03Pb	South	Wall	GWB	Beige	
6263.80-AF-04Pb	kitchen	Wall	Plaster	Peach	
6263.80-AF-05Pb	East	Trim	wood	beige	
5021 Rainier Ave S					
6263.80-AF-06Pb	Storage	Wall	Plaster	Beige	
6263.80-AF-07Pb	Work area	Wall	Wood	Blue	
6263.80-AF-08Pb	Work area	Wall	Brick	Gray/blue	
6263.80-AF-09Pb	Work area	Wall	Brick	Blue	
6263.80-AF-10Pb	Work area	Ceiling	Plaster	Gray	
6263.80-AF-11Pb	Work area	North wall by ramp	Plaster	Blue	
Exterior					
6263.80-AF-12Pb	East side of 5021	Wall	Wood	Light gray/white	
6263.80-AF-13Pb	North side of 5021	Wall	GWB	White	
6263.80-AF-14Pb	East side	Fascia	Plaster/concrete	Red	
6263.80-AF-15Pb	South side	Wall	Brick	Beige	
5015 Rainier Ave S					
6263.80-AF-16Pb	Sales area	Wall	wood	Orange	
6263.80-AF-17Pb	Sales area	Wall	GWB	White	
6263.80-AF-18Pb	Storage area	Wall	Masonite	Light green	
6263.80-AF-19Pb	Storage area	Wall	Wood	Light green	
6263.80-AF-20Pb	Storage area	Wall	GWB	Beige	
6263.80-AF-21Pb	Exterior	Siding	Wood	Yellow	
6263.80-AF-22Pb	Exterior	Soffit	Wood	Brown	
6263.80-AF-23Pb	Exterior	Trim	Wood	Black	

GWB = gypsum wall board, ppm = parts per million. **Bolded values** -- bulk paint chip samples with lead detected above the laboratory reporting limit have been bolded. The Washington Industrial Safety and Health Administration (WISHA) worker protection regulations have stated that lead at any detectable concentration shall be considered regulated (Washington Administrative Code [WAC] 296-155-176, Lead

Farallon Consulting
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
Hazardous Building Materials Survey



Appendix G

EMSL Analytical, Inc. Laboratory Certification



AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.

6340 Castleplace Drive, Indianapolis, IN 46250

Laboratory ID: 157245

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2017 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

LABORATORY ACCREDITATION PROGRAMS

- | | |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> INDUSTRIAL HYGIENE | Accreditation Expires: June 01, 2021 |
| <input checked="" type="checkbox"/> ENVIRONMENTAL LEAD | Accreditation Expires: June 01, 2021 |
| <input checked="" type="checkbox"/> ENVIRONMENTAL MICROBIOLOGY | Accreditation Expires: June 01, 2021 |
| <input type="checkbox"/> FOOD | Accreditation Expires: |
| <input type="checkbox"/> UNIQUE SCOPES | Accreditation Expires: |

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2017 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Elizabeth Bair

Elizabeth Bair
Chairperson, Analytical Accreditation Board

Cheryl O. Morton

Cheryl O. Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC



AIHA Laboratory Accreditation Programs, LLC SCOPE OF ACCREDITATION

EMSL Analytical, Inc.

6340 Castleplace Drive, Indianapolis, IN 46250

Laboratory ID: **157245**

Issue Date: 05/31/2019

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

The EPA recognizes the AIHA-LAP, LLC ELLAP program as meeting the requirements of the National Lead Laboratory Accreditation Program (NLLAP) established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and includes paint, soil and dust wipe analysis. Air and composited wipes analyses are not included as part of the NLLAP.

Environmental Lead Laboratory Accreditation Program (ELLAP)

Initial Accreditation Date: 09/01/2002

Field of Testing (FoT)	Technology sub-type/ Detector	Method	Method Description <i>(for internal methods only)</i>
Paint		EPA SW-846 3050B	
		EPA SW-846 3051A	
		EPA SW-846 7000B	
Soil		EPA SW-846 3050B	
		EPA SW-846 3051A	
		EPA SW-846 7000B	
Settled Dust by Wipe		EPA SW-846 3050B	
		EPA SW-846 3051A	
		EPA SW-846 7000B	
Airborne Dust		EPA SW-846 3050B	
		EPA SW-846 3051A	
		EPA SW-846 7000B	

A complete listing of currently accredited Environmental Lead laboratories is available on the AIHA-LAP, LLC website at: <http://www.aihaaccreditedlabs.org>

Farallon Consulting
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
Hazardous Building Materials Survey



Appendix H

Analytical Report- PCB's



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

August 26, 2019

Anthony Fullerton
MED-TOX
P.O. Box 1146
Auburn, WA 98071

Re: Analytical Data for Project 6263.80
Laboratory Reference No. 1908-207

Dear Anthony:

Enclosed are the analytical results and associated quality control data for samples submitted on August 15, 2019.

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

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

Sincerely,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: August 26, 2019
Samples Submitted: August 15, 2019
Laboratory Reference: 1908-207
Project: 6263.80

Case Narrative

Samples were collected on August 6, 2019 and received by the laboratory on August 15, 2019. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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

PCBs EPA 8082A Analysis

The percent recovery for surrogate DCB in the sample 6263.80-AF-07PCB (123%) was above the quality control limits of 37-122%. All other QC associated with this sample batch was within limits and the sample was non-detect for PCBs, therefore, no further action was undertaken.

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: August 26, 2019
 Samples Submitted: August 15, 2019
 Laboratory Reference: 1908-207
 Project: 6263.80

PCBs EPA 8082A

Matrix: Solid
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	6263.80-AF-01PCB					
Laboratory ID:	08-207-01					
Aroclor 1016	ND	3.6	EPA 8082A	8-20-19	8-20-19	
Aroclor 1221	ND	3.6	EPA 8082A	8-20-19	8-20-19	
Aroclor 1232	ND	3.6	EPA 8082A	8-20-19	8-20-19	
Aroclor 1242	ND	3.6	EPA 8082A	8-20-19	8-20-19	
Aroclor 1248	ND	3.6	EPA 8082A	8-20-19	8-20-19	
Aroclor 1254	4.9	3.6	EPA 8082A	8-20-19	8-20-19	
Aroclor 1260	ND	3.6	EPA 8082A	8-20-19	8-20-19	

Surrogate: Percent Recovery Control Limits
 DCB 112 37-122

Client ID:	6263.80-AF-02PCB					
Laboratory ID:	08-207-02					
Aroclor 1016	ND	2.9	EPA 8082A	8-20-19	8-20-19	
Aroclor 1221	ND	2.9	EPA 8082A	8-20-19	8-20-19	
Aroclor 1232	ND	2.9	EPA 8082A	8-20-19	8-20-19	
Aroclor 1242	ND	2.9	EPA 8082A	8-20-19	8-20-19	
Aroclor 1248	ND	2.9	EPA 8082A	8-20-19	8-20-19	
Aroclor 1254	2.9	2.9	EPA 8082A	8-20-19	8-20-19	
Aroclor 1260	ND	2.9	EPA 8082A	8-20-19	8-20-19	

Surrogate: Percent Recovery Control Limits
 DCB 89 37-122

Client ID:	6263.80-AF-03PCB					
Laboratory ID:	08-207-03					
Aroclor 1016	ND	3.8	EPA 8082A	8-20-19	8-20-19	
Aroclor 1221	ND	3.8	EPA 8082A	8-20-19	8-20-19	
Aroclor 1232	ND	3.8	EPA 8082A	8-20-19	8-20-19	
Aroclor 1242	ND	3.8	EPA 8082A	8-20-19	8-20-19	
Aroclor 1248	ND	3.8	EPA 8082A	8-20-19	8-20-19	
Aroclor 1254	ND	3.8	EPA 8082A	8-20-19	8-20-19	
Aroclor 1260	ND	3.8	EPA 8082A	8-20-19	8-20-19	

Surrogate: Percent Recovery Control Limits
 DCB 99 37-122



Date of Report: August 26, 2019
 Samples Submitted: August 15, 2019
 Laboratory Reference: 1908-207
 Project: 6263.80

PCBs EPA 8082A

Matrix: Solid
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	6263.80-AF-04PCB					
Laboratory ID:	08-207-04					
Aroclor 1016	ND	310	EPA 8082A	8-20-19	8-23-19	
Aroclor 1221	ND	310	EPA 8082A	8-20-19	8-23-19	
Aroclor 1232	ND	310	EPA 8082A	8-20-19	8-23-19	
Aroclor 1242	ND	310	EPA 8082A	8-20-19	8-23-19	
Aroclor 1248	ND	310	EPA 8082A	8-20-19	8-23-19	
Aroclor 1254	590	310	EPA 8082A	8-20-19	8-23-19	
Aroclor 1260	720	310	EPA 8082A	8-20-19	8-23-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCB	---	37-122				S
Client ID:	6263.80-AF-05PCB					
Laboratory ID:	08-207-05					
Aroclor 1016	ND	69	EPA 8082A	8-20-19	8-23-19	
Aroclor 1221	ND	69	EPA 8082A	8-20-19	8-23-19	
Aroclor 1232	ND	69	EPA 8082A	8-20-19	8-23-19	
Aroclor 1242	ND	69	EPA 8082A	8-20-19	8-23-19	
Aroclor 1248	ND	69	EPA 8082A	8-20-19	8-23-19	
Aroclor 1254	500	69	EPA 8082A	8-20-19	8-23-19	
Aroclor 1260	310	69	EPA 8082A	8-20-19	8-23-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCB	---	37-122				S
Client ID:	6263.80-AF-06PCB					
Laboratory ID:	08-207-06					
Aroclor 1016	ND	2.2	EPA 8082A	8-20-19	8-20-19	
Aroclor 1221	ND	2.2	EPA 8082A	8-20-19	8-20-19	
Aroclor 1232	ND	2.2	EPA 8082A	8-20-19	8-20-19	
Aroclor 1242	ND	2.2	EPA 8082A	8-20-19	8-20-19	
Aroclor 1248	ND	2.2	EPA 8082A	8-20-19	8-20-19	
Aroclor 1254	2.9	2.2	EPA 8082A	8-20-19	8-20-19	
Aroclor 1260	ND	2.2	EPA 8082A	8-20-19	8-20-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCB	105	37-122				



Date of Report: August 26, 2019
 Samples Submitted: August 15, 2019
 Laboratory Reference: 1908-207
 Project: 6263.80

PCBs EPA 8082A

Matrix: Solid
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	6263.80-AF-07PCB					
Laboratory ID:	08-207-07					
Aroclor 1016	ND	3.3	EPA 8082A	8-20-19	8-20-19	
Aroclor 1221	ND	3.3	EPA 8082A	8-20-19	8-20-19	
Aroclor 1232	ND	3.3	EPA 8082A	8-20-19	8-20-19	
Aroclor 1242	ND	3.3	EPA 8082A	8-20-19	8-20-19	
Aroclor 1248	ND	3.3	EPA 8082A	8-20-19	8-20-19	
Aroclor 1254	ND	3.3	EPA 8082A	8-20-19	8-20-19	
Aroclor 1260	ND	3.3	EPA 8082A	8-20-19	8-20-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCB	123	37-122				Q



Date of Report: August 26, 2019
 Samples Submitted: August 15, 2019
 Laboratory Reference: 1908-207
 Project: 6263.80

**PCBs EPA 8082A
 QUALITY CONTROL**

Matrix: Solid
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0820S1					
Aroclor 1016	ND	0.050	EPA 8082A	8-20-19	8-20-19	
Aroclor 1221	ND	0.050	EPA 8082A	8-20-19	8-20-19	
Aroclor 1232	ND	0.050	EPA 8082A	8-20-19	8-20-19	
Aroclor 1242	ND	0.050	EPA 8082A	8-20-19	8-20-19	
Aroclor 1248	ND	0.050	EPA 8082A	8-20-19	8-20-19	
Aroclor 1254	ND	0.050	EPA 8082A	8-20-19	8-20-19	
Aroclor 1260	ND	0.050	EPA 8082A	8-20-19	8-20-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>		<i>Control Limits</i>			
DCB	102		37-122			

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	08-209-01										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	0.414	0.412	0.500	0.500	ND	83	82	38-120	0	15	
<i>Surrogate:</i>											
DCB						91	88	37-122			





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

Company: MTNW
 Project Number: 6263.80
 Project Name: 5015, 5021, 5023 Rainier Ave
 Project Manager: A Kollerker
 Sampled by: A Fuhler

Turnaround Request (in working days)

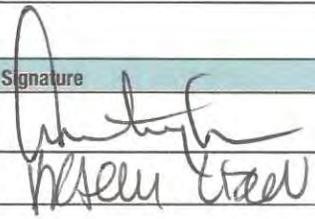
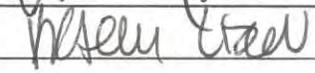
(Check One)

Same Day 1 Day
 2 Days 3 Days
 Standard (7 Days)
 _____ (other)

Laboratory Number: 08-207

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	6263.80-AF-01 PCB	8/6/19		Solid	1
2	02 PCB				1
3	03 PCB				1
4	04 PCB				1
5	05 PCB				1
6	06 PCB				1
7	6263.80-AF-07 PCB	8/6/19		Solid	1

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

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		MTNW	8/12/19	1320	
Received		OSE	8/15/19	1030	
Relinquished					
Received					
Relinquished					
Received					
Reviewed/Date		Reviewed/Date			Data Package: Standard <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> Chromatograms with final report <input type="checkbox"/> Electronic Data Deliverables (EDDs) <input type="checkbox"/>

Farallon Consulting
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
Hazardous Building Materials Survey



Appendix I

On-Site Laboratory Accreditation

The State of
Department



Washington
of Ecology

OnSite Environmental, Inc.
Redmond, WA

has complied with provisions set forth in Chapter 173-50 WAC and is hereby recognized by the Department of Ecology as an ACCREDITED LABORATORY for the analytical parameters listed on the accompanying Scope of Accreditation. This certificate is effective July 27, 2019 and shall expire July 26, 2020.

Witnessed under my hand on August 12, 2019

Rebecca Wood
Lab Accreditation Unit Supervisor

Laboratory ID
C591

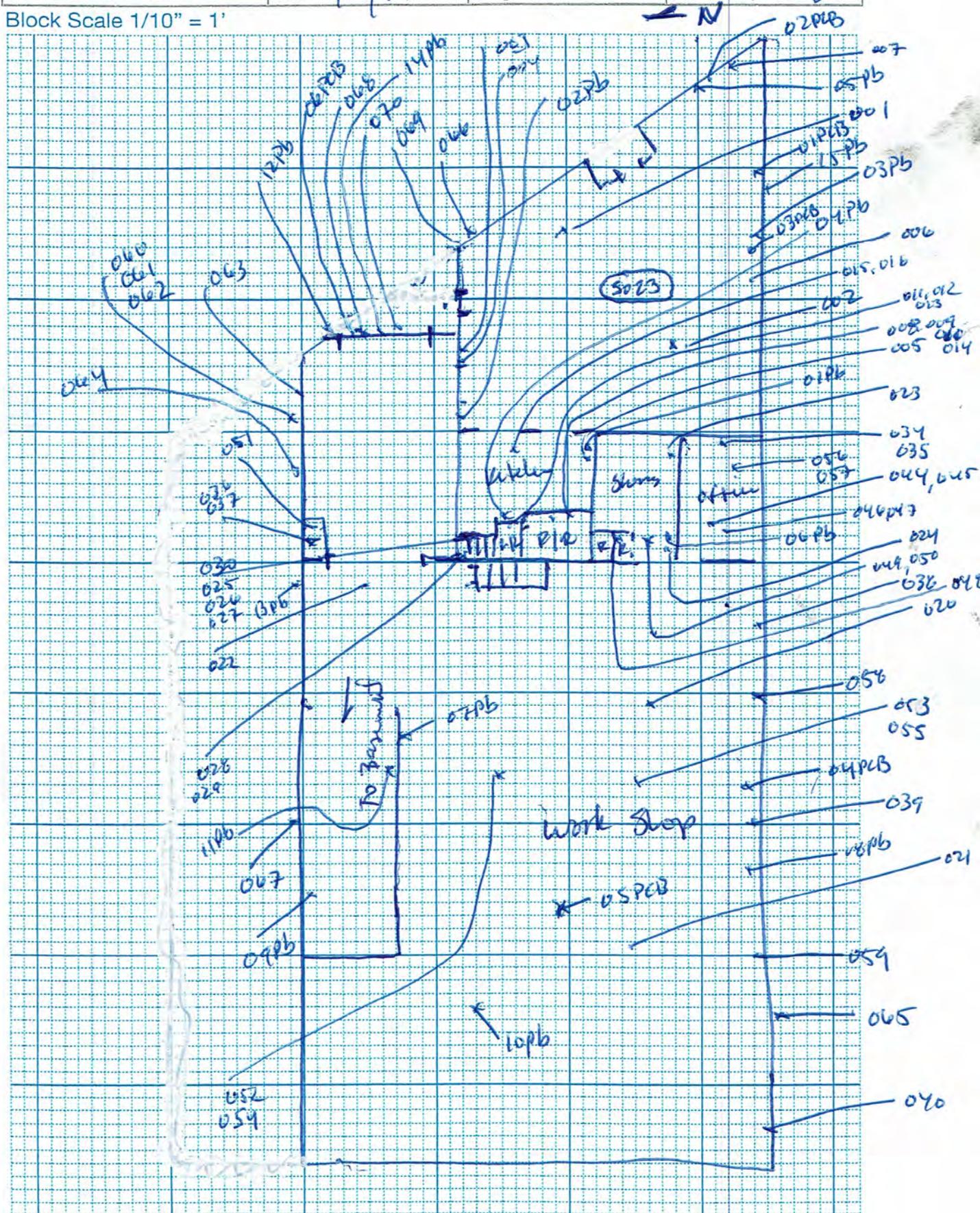
Farallon Consulting
5015, 5021 and 5023 Rainier Avenue South, Seattle, WA
Hazardous Building Materials Survey



Appendix J

Sample Location Drawings

Block Scale 1/10" = 1'



Client *Farrallon*

Project No. *6263.60*

Project *5021 / 5023 Rainier Ave S.*

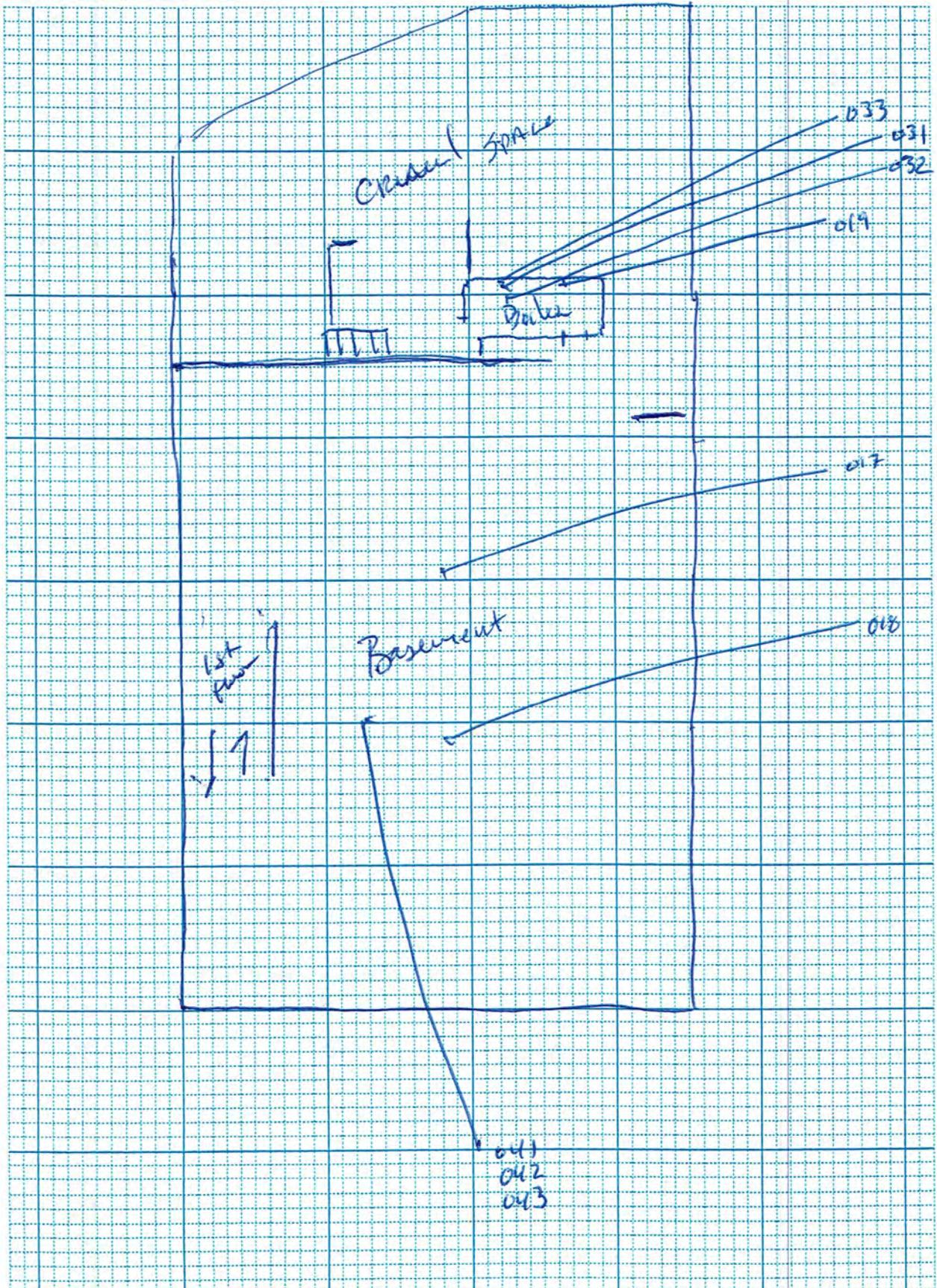
Dwg. Name

Date *8/6/19*

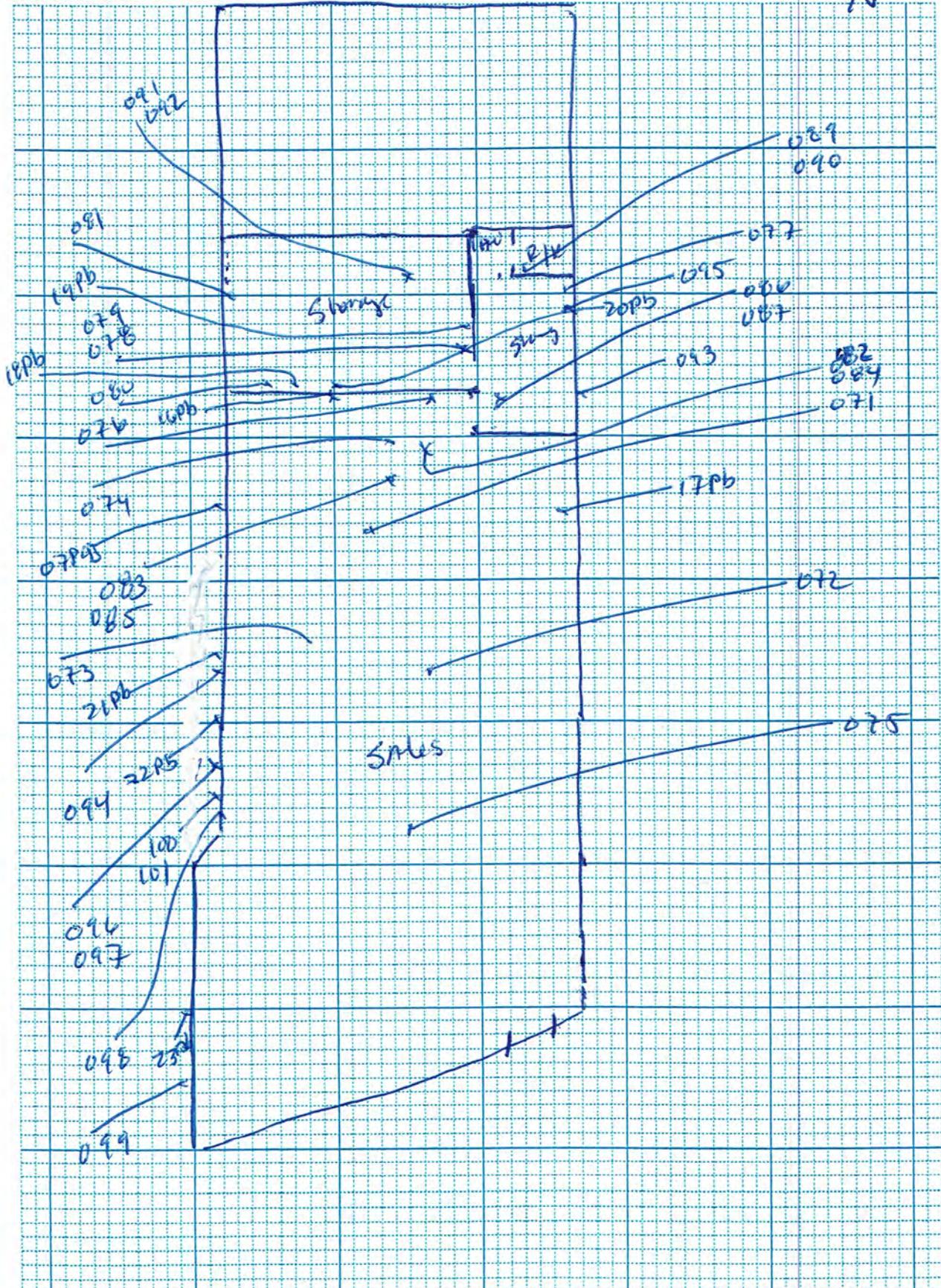
Dwg. No.

Sheet *2 of 2*

Block Scale 1/10" = 1'



Block Scale 1/10" = 1'



APPENDIX B
BORING AND MONITORING WELL CONSTRUCTION LOGS

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY REPORT
Morningside Acres Tracts
5001, 5015, and 5021 Rainier Avenue South
Seattle, Washington

Farallon PN: 1355-001

Note: Logs for monitoring wells/borings MW-1/SB-1, MW-2/SB-2, MW-3/SB-3, MW-4/SB-4, GP-1, and MW-5/GP-2 installed in May and June 2006 (Kleinfelder 2006b) are unavailable.



Log of Boring: MW-19

Client: Zeno Balkalian, P.S.
Project: Morningside Acres Tract
Location: Seattle, WA

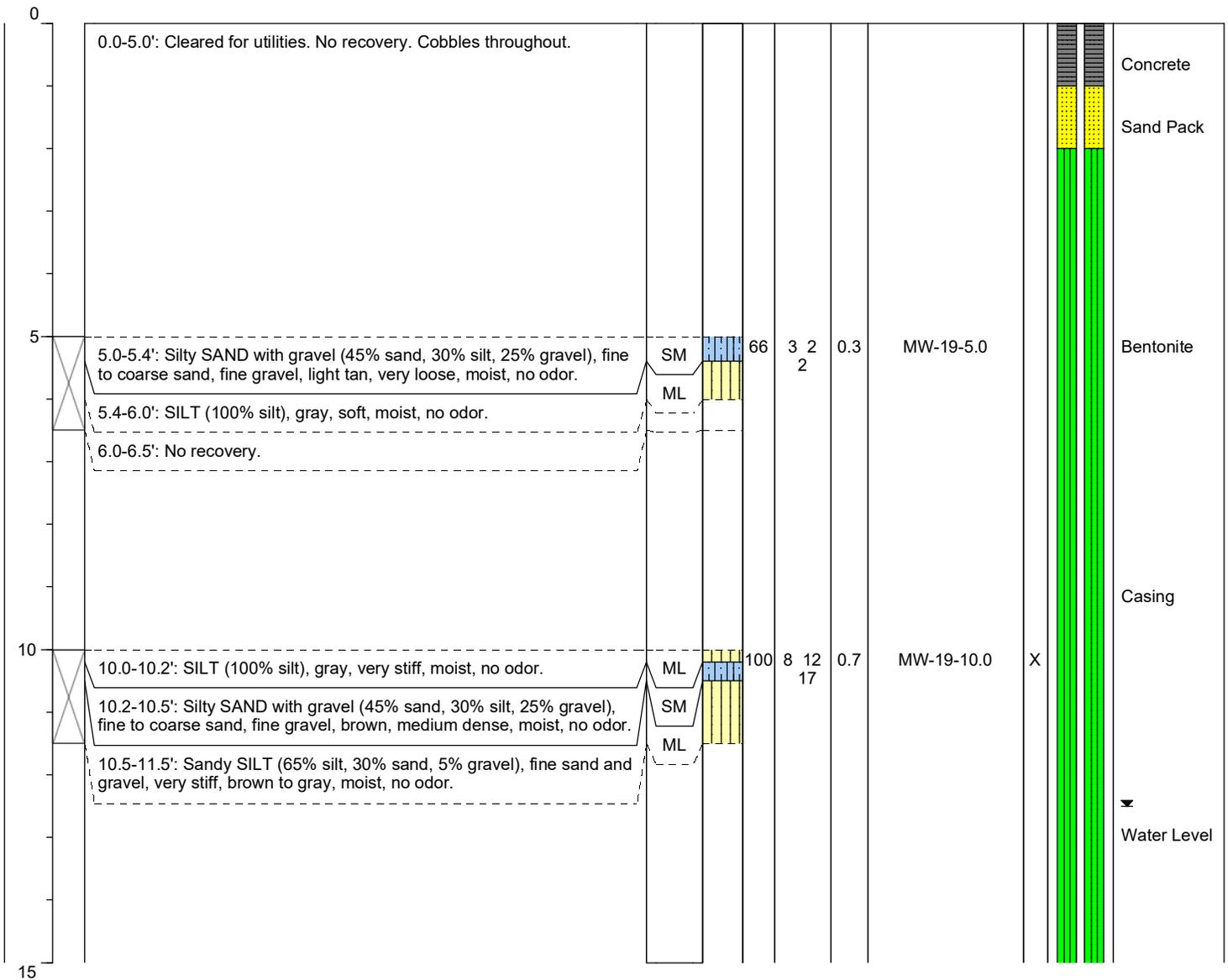
Date/Time Started: 12/11/17 @ 10:00
Date/Time Completed: 12/12/17 @ 15:00
Equipment: CME 85
Drilling Company: Holt Drilling
Drilling Foreman: John
Drilling Method: Hollow Stem Auger

Sampler Type: 1.5' SPT
Drive Hammer (lbs.): 140
Depth of Water ATD (ft bgs): ~12.5
Total Boring Depth (ft bgs): 30.0
Total Well Depth (ft bgs): 30.0

Farallon PN: 1355-001

Logged By: A. Burns

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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Well Construction Information

Monument Type: Flush Mount
Casing Diameter (inches): 2
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 25.0-30.0

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



Log of Boring: MW-19

Client: Zeno Balkalian, P.S.
Project: Morningside Acres Tract
Location: Seattle, WA

Farallon PN: 1355-001

Logged By: A. Burns

Date/Time Started: 12/11/17 @ 10:00
Date/Time Completed: 12/12/17 @ 15:00
Equipment: CME 85
Drilling Company: Holt Drilling
Drilling Foreman: John
Drilling Method: Hollow Stem Auger

Sampler Type: 1.5' SPT
Drive Hammer (lbs.): 140
Depth of Water ATD (ft bgs): ~12.5
Total Boring Depth (ft bgs): 30.0
Total Well Depth (ft bgs): 30.0

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	
15	15.0-15.2'	Well-graded GRAVEL (100% gravel), fine to coarse gravel, gray, very dense, wet, no odor.	GW		100	22 50 for 6"	2.5	MW-19-15.0	X	Casing	
	15.2-16.0'	SILT (90% silt, 10% sand), fine sand, gray, hard, wet, no odor.	ML		100						
20	20.0-20.4'	SILT (95% silt, 5% sand), trace fine gravel, fine sand, gray, hard, moist-wet, no odor.	ML		100	50 for 5"	0.1	MW-19-20.0			
	22.5-23.0'	SILT (95% silt, 5% sand), trace fine gravel, fine sand, gray, hard, moist-wet, no odor.	ML		100	50 for 6"	0.9	MW-19-22.5	X		Bentonite
25	25.0-25.6'	SILT (95% silt, 5% sand), trace fine gravel, fine sand, gray, hard, moist-wet, no odor.	ML		75	42 50 for 3"	0.4	MW-19-25.0			Sand Pack
	25.6-25.8'	No recovery.									
30	28.5-30.0'	SILT (90% silt, 10% sand), fine sand, gray, hard, moist-wet, no odor.	ML			23 50 for 5"	0.4	MW-19-30.0	X	Screen	

Well Construction Information

Monument Type: Flush Mount
Casing Diameter (inches): 2
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 25.0-30.0

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

Client: Mr. Washin Murakami	Date/Time Started: 4/13/18 1110	Sampler Type: SPT
Project: Morningside Acres Tracts	Date/Time Completed: 5/8/18 1155	Drive Hammer (lbs.): 300
Location: Seattle, WA	Equipment: LDS 75 HT	Depth of Water ATD (ft bgs): 19.5
Farallon PN: 1355-001	Drilling Company: Holt Services Inc	Total Boring Depth (ft bgs): 25.0
Logged By: N. Turpen	Drilling Foreman: Rayon Darling	Total Well Depth (ft bgs): 25.0
	Drilling Method: Hollow Stem Auger	

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0.0-0.5'		Asphalt, Airknife to 5.0' for utilities	AC							Concrete
0.3-5.0'		Well graded SAND with silt and gravel (10% silt, 75% sand, 15% gravel), fine to coarse sand, fine to medium gravel, brown, estimated loose, moist, no odor.	SW-SM							
5.0-5.1'		Sandy SILT (60% silt, 30% sand, 10% gravel) fine sand and gravel, brown, estimated dense, moist, no odor	ML				0.3	FB-20-5.0	X	Bentonite
5.1-10.0'		No recovery, rock stuck in shoe				2				
10.0-13.0'		Gravelly SILT (60% silt, 10% sand, 30% gravel), fine sand, fine to medium gravel, gray, estimated dense, dry, no odor.	ML				0.0	FB-20-10.0	X	
13.0-14.5'		No recovery, slough					0.0	FB-20-13.0	X	
14.5-16.0'		Sandy SILT (70% silt, 30% sand) fine to coarse sand, gray, dry, hard, no odor.	ML			15/28/45	0.1	MW-20-15.0	X	
16.0-18.0'		Sandy SILT (70% silt, 30% sand) fine to coarse sand, gray, dry, hard, no odor.	ML							Sand
18.0-20.0'		Sandy SILT with gravel (50% silt, 30% sand, 20% gravel) fine to coarse sand, fine gravel, brown, wet, firm, no odor.	ML							
20.0-22.5'		Sandy SILT with gravel (50% silt, 30% sand, 20% gravel) fine to coarse sand, fine gravel, brown, wet, firm, no odor.	ML			5/5/9	0.0	MW-20-20.0	X	Screen
22.5-25.0'		Sandy SILT with gravel (50% silt, 30% sand, 20% gravel) fine to coarse sand, fine gravel, brown, wet (moist 24.6'-25.0'), firm, no odor.	ML			19/25/33	0.0	MW-20-25.0	X	

Well Construction Information		
Monument Type: Flush mount	Filter Pack: 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
Screened Interval (ft bgs): 15-25	Boring Abandonment: NA	Y: NA



Log of Boring: MW-21

Client: Mr. Washin Murakami
Project: Morningside Acres Tracts
Location: Seattle, WA

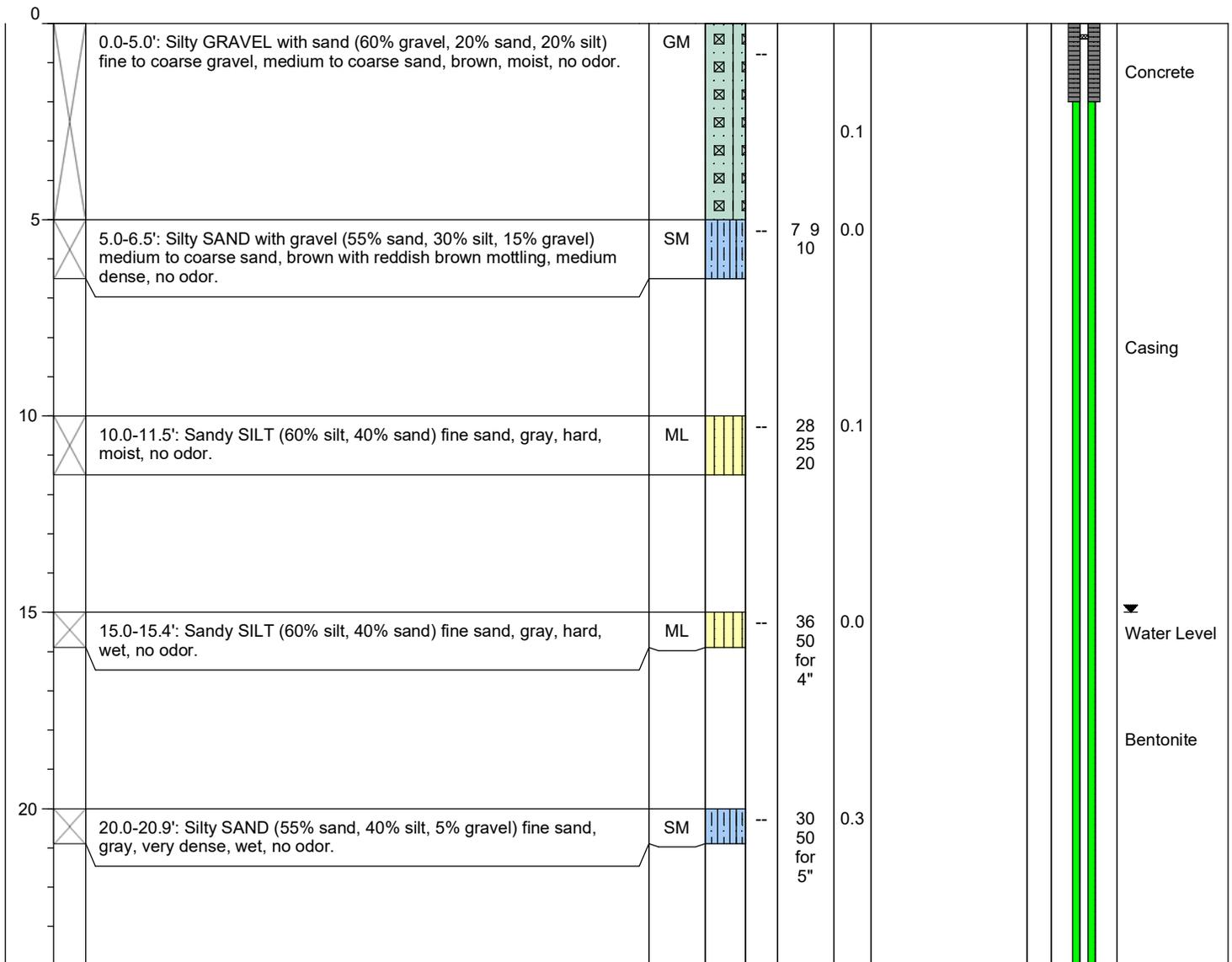
Date/Time Started: 8/28/18 0916
Date/Time Completed: 8/28/18 1430
Equipment: Mobile B59
Drilling Company: Holt Services Inc
Drilling Foreman: Kevin Bacon
Drilling Method: Hollow Stem Auger

Sampler Type: 1.5' SPT
Drive Hammer (lbs.): 140
Depth of Water ATD (ft bgs): 15.0
Total Boring Depth (ft bgs): 45.4
Total Well Depth (ft bgs): 45.0

Farallon PN: 1355-001

Logged By: P. Garvin

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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Well Construction Information

Monument Type: Flush mount
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 35-45

Filter Pack: 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



Log of Boring: MW-21

Client: Mr. Washin Murakami
Project: Morningside Acres Tracts
Location: Seattle, WA

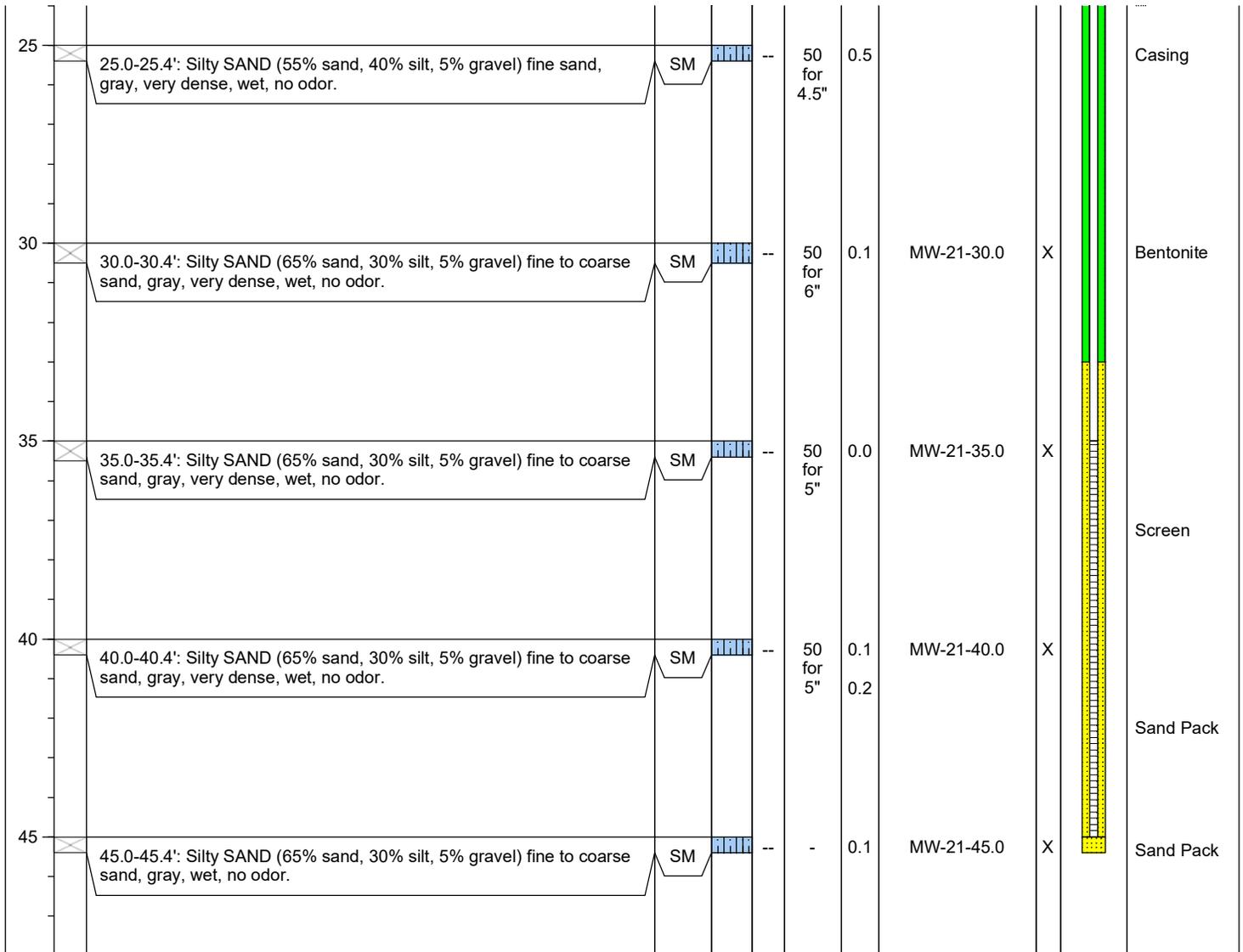
Date/Time Started: 8/28/18 0916
Date/Time Completed: 8/28/18 1430
Equipment: Mobile B59
Drilling Company: Holt Services Inc
Drilling Foreman: Kevin Bacon
Drilling Method: Hollow Stem Auger

Sampler Type: 1.5' SPT
Drive Hammer (lbs.): 140
Depth of Water ATD (ft bgs): 15.0
Total Boring Depth (ft bgs): 45.4
Total Well Depth (ft bgs): 45.0

Farallon PN: 1355-001

Logged By: P. Garvin

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
-------------------	-----------------	------------------------	------	--------------	------------	-------------------	-----------	-----------	-----------------	----------------------------------



Well Construction Information

Monument Type: Flush mount
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 35-45

Filter Pack: 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



Log of Boring: FB-22

Client: Mr. Washin Murakami
Project: Morningside Acres Tracts
Location: Seattle, WA

Date/Time Started: 8/29/18 1015
Date/Time Completed: 8/29/18 1045
Equipment: Direct Probe Rig
Drilling Company: Holt Services Inc
Drilling Foreman: Kevin Bacon
Drilling Method: Direct Push Rig
Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 12.8
Total Boring Depth (ft bgs): 20.0
Total Well Depth (ft bgs): 20.0 (temp.)

Farallon PN: 1355-001

Logged By: P. Garvin

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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0	0.0-1.0'	Asphalt.	AC		--					Asphalt
	1.0-5.0'	No recovery. Cleared to 5.0' bgs for utilities.			--					
5	5.0-9.0'	No recovery. Slough.			--		0.5			
					--		0.5			
10	9.0-10.0'	Sandy SILT (70% silt, 30% sand) fine sand, gray, moist, no odor.	ML		--		1.1	FB-22-10.0	X	Bentonite
	10.0-15.0'	Sandy SILT (70% silt, 30% sand) fine sand, gray, moist, wet at 12.8', no odor.	ML		--		0.4	FB-22-GW	X	Water Level
15	15.0-20.0'	Sandy SILT (60% silt, 30% sand, 10% gravel) fine to medium sand, gray, moist, wet at 16.0', no odor.	ML		--		0.5	FB-22-15.0	X	
					--		0.1			
20					--		0.2	FB-22-20.0	X	

Well Construction Information

Monument Type: NA	Filter Pack: NA	Ground Surface Elevation (ft): NA
Casing Diameter (inches): 3/4" (temp.)	Surface Seal: Asphalt	Top of Casing Elevation (ft): NA
Screen Slot Size (inches): NA	Annular Seal: NA	Surveyed Location: X: NA
Screened Interval (ft bgs): 10-20 (temp.)	Boring Abandonment: Bentonite	Y: NA



Log of Boring: FB-23

Client: Mr. Washin Murakami
Project: Morningside Acres Tracts
Location: Seattle, WA

Date/Time Started: 8/29/18 830
Date/Time Completed: 8/29/18 900
Equipment: Direct Probe Rig
Drilling Company: Holt Services Inc
Drilling Foreman: Kevin Bacon
Drilling Method: Direct Push Rig

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 19.8
Total Boring Depth (ft bgs): 20.0
Total Well Depth (ft bgs): 20.0 (temp.)

Farallon PN: 1355-001

Logged By: P. Garvin

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-1.0'	Asphalt.	AC		--		0.2			Asphalt
	1.0-5.0'	No recovery. Cleared to 5' for utilities.								
5	5.0-8.0'	No recovery. Slough.					6.1			
	8.0-10.0'	Sandy SILT (60% silt, 35% sand, 5% gravel) fine sand, gray, moist, faint hydrocarbon odor.	ML		--		7.2			
10	10.0-13.0'	Sandy SILT (60% silt, 30% sand, 10% gravel) fine sand, gray, moist, strong hydrocarbon odor.	ML		--		10.3	FB-23-10.0	X	Bentonite
	13.0-15.0'	No recovery.						FB-23-13.0	X	
15	15.0-20.0'	Sandy SILT (60% silt, 30% sand, 10% gravel) fine sand, gray, moist, wet at 19.8', faint hydrocarbon odor.	ML		--		1.5	FB-23-17.0	X	
								FB-23-GW	X	
20								FB-23-20.0	X	Water Level

Well Construction Information

Monument Type: NA	Filter Pack: NA	Ground Surface Elevation (ft): NA
Casing Diameter (inches): 3/4" (temp.)	Surface Seal: Asphalt	Top of Casing Elevation (ft): NA
Screen Slot Size (inches): NA	Annular Seal: NA	Surveyed Location: X: NA
Screened Interval (ft bgs): 10-20 (temp.)	Boring Abandonment: Bentonite	Y: NA

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			3" Asphalt Concrete Pavement				
			SAND, light brown, loose		SP		
			Olive silty SAND with some gravels. Medium dense.		SW		
			1' brown layer	90			
5			Groundwater at 5'				
			Becoming moist	30			
		GLP-01-8.5	Dry, blue-gray SILT, with some organics. Dense.		ML		
10				80			
			Water found at 15 feet while drilling.				
15				80			
		GLP-01-17					
20			Hard, very dense. E.O.B. at 20 feet, Dry at 19.5'	80			
25							
30							

Drilling Method: Direct-Push	Date: 1-5-2007
Drilling Company: Cascade Drilling	Weather: Overcast
Boring Diameter: 2-inches	Page 1 of 1
Logged By: R. Harrison	

Other Information:
 No well constructed. Boring filled with bentonite chips and sealed at surface with asphalt patch

	Boring/Well Log Morningside Acres 5001 Rainier Avenue South Seattle, WA	GLP-1
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BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			3" Asphalt Concrete Pavement				
			Sandy Gravelly SILT to Silty Gravelly SAND	95	SW		
5			Layer of Weathered Asphalt Concrete Pavement, difficult to determine thickness				
		GLP-02-09	Very wet	60	SW		
10			Encountered Portland Cement Concrete @ 9.0' E.O.B. at 9.0, refusal				
15							
20							
25							
30							

Drilling Method: Direct-Push	Date: 1-5-2007	Other Information: Refusal at 9.0' due to encountering Portland cement concrete (slab?). Boring abandoned and backfilled with granular bentonite.
Drilling Company: Cascade Drilling	Weather: Overcast	
Boring Diameter: 2-inches	Page 1 of 1	
Logged By: R. Harrison		

	Boring/Well Log Morningside Acres 5001 Rainier Avenue South Seattle, WA	GLP-2
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BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			3" Asphalt Concrete Pavement				
			SAND, light brown, loose		SP		
		GLP-03-03	Wet, but no water collects in borehole Dry	80			
5			SILT with trace organics	40			
					ML		
10				75			
		GLP-03-14		75			
15							
			Very dense silt at 19.0', dry below	50	▽		
20			Refusal at 19.5'				
25							
30							

Drilling Method: Direct-Push	Date: 1-5-2007	Other Information: No well constructed. Boring filled with bentonite chips and sealed at surface with asphalt patch
Drilling Company: Cascade Drilling	Weather: Overcast	
Boring Diameter: 2-inches	Page 1 of 1	
Logged By: R. Harrison		

	Boring/Well Log Morningside Acres 5001 Rainier Avenue South Seattle, WA	GLP-3
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BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			2" Asphalt Concrete Pavement Gravelly SAND, brown, loose		SP		
			SILT with some organics, blue-gray, very stiff	75	ML		
5			Moist Dry	75			
10				90			
15	GLP-04-14		No sheen Groundwater at 14.5'	90			
20			Refusal @ 19.0'	70			
30							

Drilling Method: Direct-Push

Date: 1-5-2007

Other Information:

Drilling Company: NW Probe

Weather: Overcast, Rain

Elevation at top of well casing = 114.67'
Reference: City of Seattle vertical datum (NAVD88)

Boring Diameter: 2-inches

Page 1 of 1

Logged By: R. Harrison

g•logics

Boring/Well Log
Morningside Acres
5001 Rainier Avenue South
Seattle, WA

GLP-04 /
MW-9

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			3" Asphalt Concrete Pavement Gravelly, silty SAND, brown, medium dense		SP		
5		GLP-05-5	Sandy SILT, oily pocket, petroleum odor SILT, very dense	90	ML	Sheen & Odor	
10		GLP-05-11.5	Increasing sand content Wet, oily, sandy SILT with some gravels SILT, no sand	80	ML/SM		
15			Orange/brown interbedded sandy SILT w/gravels SILT, no sand, oily	100	ML		
17			Groundwater at 17'	100	ML/SM		
20		GLP-05-18		60	ML		
30	Depth in feet						

Drilling Method: Direct-Push	Date: 1-5-2007	Other Information: Elevation at top of well casing = 114.65' Reference: City of Seattle vertical datum (NAVD88)
Drilling Company: NW Probe	Weather: Overcast, Rain	
Boring Diameter: 2-inches	Page 1 of 1	
Logged By: R. Harrison		

	Boring/Well Log Morningside Acres 5001 Rainier Avenue South Seattle, WA	GLP-05 / MW-10

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			3" Asphalt Concrete Pavement				
			SAND, light brown, loose	80	SP		
5			Wet, no sheen or odor SILT with organics	40	ML		
10				75			
15				75			
		GLP-06-17	Sheen present				
		GLP-06-18	Dry, fine sandy SILT, silty SAND, no odor	50	SM/ML		
20							
25							
30							

Drilling Method: Direct-Push	Date: 1-5-2007	Other Information: No well constructed. Boring filled with bentonite chips and sealed at surface with asphalt patch
Drilling Company: Cascade Drilling	Weather: Overcast, Rain	
Boring Diameter: 2-inches	Page <u>1</u> of <u>1</u>	
Logged By: R. Harrison		

	Boring/Well Log Morningside Acres 5001 Rainier Avenue South Seattle, WA	GLP-6
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BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			6" Portland Cement Concrete Slab				
			6" void beneath the concrete slab, standing water				
			SAND, poorly-graded, light brown, loose, (likely UST backfill material). Free-product (dark brown, possibly diesel) globules present on water.		SP		
5			Note: Steel rod probe encountered UST at an approximate depth of 18-inches below finish-floor. UST appeared to be backfilled with sand.				
10							
15							
20							
25							
30							

Drilling Method: Steel-rod Probe	Date: 1-5-2007	Other Information: Drilling not conducted, sand was probed with a steel rod. Water sample collected. Concrete core was placed into hole and concrete was used to patch the hole.
Drilling Company: Cascade Drilling	Weather: Overcast, Rain	
Boring Diameter: 0.25"	Page 1 of 1	
Logged By: R. Harrison		

	Boring/Well Log Morningside Acres 5001 Rainier Avenue South Seattle, WA	GLP-7
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BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			6" Portland Cement Concrete Slab Gravel and sand base course.		Fill		
			Dark olive/gray CLAY, moist				
			Color change to gray, still moist				
5		GLP-08-7	Wet, but no free-water produced	80	ML		
				100			
10		GLP-08-12	Very wet				
				100			
15							
20							
25							
30							

Drilling Method: Direct-Push
 Drilling Company: Cascade Drilling
 Boring Diameter: 2-inches
 Logged By: R. Harrison

Date: 1-8-2007
 Weather: Overcast
 Page 1 of 1

Other Information:
 Hand-dug to 2' depth.
 No well constructed. Boring filled with bentonite chips and sealed at surface with concrete patch.

	Boring/Well Log Morningside Acres 5001 Rainier Avenue South Seattle, WA	GLP-8
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BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			6" Portland Cement Concrete Slab				
		GLP-09-2	6" thickness of gravel base course	Hand Dug	Fill		
			Gray/Dark Olive CLAY, moist, soft Color-change to light gray with brown mottling and dark olive streaks				
5		GLP-09-8		80	CL		
10		GLP-09-12	Gravelly fine SAND and CLAY	80			10/20 Sand
15			Refusal at 13'	60	SC		1.4" O.D. (0.75" I.D.) Pre-packed Well Screen
20							
25							
30							

Drilling Method: Direct-Push	Date: 1-8-2007	Other Information: Hand-dug to 2' depth. Elevation at top of well casing = 108.44' Reference: City of Seattle vertical datum (NAVD88)
Drilling Company: NW Probe	Weather: Overcast	
Boring Diameter: 2-inches	Page 1 of 1	
Logged By: R. Harrison		

	Boring/Well Log Morningside Acres 5001 Rainier Avenue South Seattle, WA	GLP-09 / MW-11
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BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			6" Portland Cement Concrete Slab 6" thickness of gravel base course Gray/Dark Olive CLAY, moist, stiff/dense Possible sheen	Hand Dug	Fill		<p>8" Dia. Seal 2" Dia. Boring</p> <p>Well Box Locking Well Cap Concrete Seal Bentonite Seal 0.75" PVC Blank 10/20 Sand Sloughed/collapsed material 1.4" O.D. (0.75" I.D.) Pre-packed Well Screen</p>
5		GLP-10-2	Mottling Wet	80	CL		
		GLP-10-7					
		GLP-10-8	Sandy SILT to silty SAND with some gravels Refusal at 9'	80	SM /ML		
10				60			
15							
20							
25							
30							

Drilling Method: Direct-Push, Hand-Held

Date: 1-8-2007

Other Information:

Drilling Company: NW Probe

Weather: Overcast

Hand-dug to 2' depth.

Boring Diameter: 2-inches

Page 1 of 1

Elevation at top of well casing = 109.14'

Reference: City of Seattle vertical datum (NAVD88)

Logged By: R. Harrison

g-logics

Boring/Well Log
Morningside Acres
5001 Rainier Avenue South
Seattle, WA

GLP-10 /
MW-12

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			No Pavement or Surfacing (Crawlspace) Gravelly, sandy SILT, medium dense, light brown	Hand Dug	Fill		
		GLP-11-3	Orange-brown mottling Color change to gray, moist		SM / ML		
5			Refusal at 6' (using hand-held percussive hammer)	90	▽		
10							
15							
20							
25							
30							

Drilling Method: Direct-Push (hand-held)		Date: 1-8-2007	Other Information: Hand-dug to 2' depth. No well constructed. Boring filled with bentonite chips to the surface (in crawlspace).
Drilling Company: NW Probe		Weather: Overcast	
Boring Diameter: 2-inches		Page <u>1</u> of <u>1</u>	
Logged By: R. Harrison			

	Boring/Well Log Morningside Acres 5001 Rainier Avenue South Seattle, WA	GLP-11
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BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			6" Portland Cement Concrete Slab Gravel and sand base course.		Fill		Well not constructed
			Light gray CLAY, medium dense, moist		CL		
5		GLP-13-4	Mottling Color change to olive-brown.	90			
		GLP-13-8	Silty CLAY with trace fine sands. Increasing sand content with some gravels		SC/ CL		
10		GLP-13-13		80			
			Refusal, end of boring at 13'	60	SP/SC		
15							
20							
25							
30							

Drilling Method: Direct-Push	Date: 2-16-2007	Other Information: Hand-dug to 2' depth. No well constructed. Boring filled with bentonite chips and sealed at surface with concrete patch.
Drilling Company: Cascade Drilling	Weather: Overcast	
Boring Diameter: 2-inches	Page 1 of 1	
Logged By: R. Harrison		

<i>g•logics</i>	Boring/Well Log Morningside Acres 5001 Rainier Avenue South Seattle, WA	GLP-13
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BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			Asphalt over concrete				
			SAND, yellow-brown, fine-grained, trace of silt, moist	100	SW		
5		GLP-14-4	2"-thick gravel layer at 5'				
			CLAY, gray, stiff, moist	100	CH		
			Color change to dark gray, some organics				
		GLP-14-8	No odor				
10				100			
		GLP-14-13	SILT, gray, wet, soft		ML		
			Groundwater at 13'				
15			No odor	100			
20		GLP-14-22	Clayey GRAVEL, wet, very dense, gray	50	GC		
		GLP-14-24	Sandy GRAVEL, wet, very dense, gray	80	GM		
			Silty SAND, fine to medium grain, very dense		SM		
25							
30							

Drilling Method: Direct-Push	Date: 2-16-2007	Other Information:
Drilling Company: NW Probe	Weather: Partly Cloudy	
Boring Diameter: 2-inches	Page 1 of 1	
Logged By: R. Harrison		

	Boring/Well Log Morningside Acres 5001 Rainier Avenue South Seattle, WA	GLP-14 / MW-14

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			Asphalt				
			Sand and Gravel FILL, yellow-brown		FILL		
			Fill – contained clay tile, coal, gravels, sand, and wire Color change to dark brown	80			
5							
			Dry CLAY, light gray, plastic	90	CH		
10		GLP-15-13	Gravel with Clay and Sand, Brown, Mottling	80	GC/ SC		
15		GLP-15-15	SILT, very dense, gray Refusal, end of boring at 17'	50	ML		
20							
25							
30							

Drilling Method: Direct-Push	Date: 2-16-2007	Other Information: Hand-dug to 2'
Drilling Company: Cascade	Weather: Partly Cloudy, 50F	
Boring Diameter: 2-inches	Page 1 of 1	
Logged By: R. Harrison		

	Boring/Well Log Morningside Acres 5001 Rainier Avenue South Seattle, WA	GLP-15 / MW-15
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BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			6" Portland Cement Concrete Slab Gravel and sand base course.		Fill		
		GLP-16-4	Light gray CLAY, medium dense, moist	25	CL		
5		GLP-16-6	Refusal, end of boring at 6', likely pushing a rock				
10							
15							
20							
25							
30							

Drilling Method: Direct-Push	Date: 2-16-2007	Other Information: Hand-dug to 2' depth.
Drilling Company: Cascade Drilling	Weather: Overcast	
Boring Diameter: 2-inches	Page <u>1</u> of <u>1</u>	
Logged By: R. Harrison		

	Boring/Well Log Morningside Acres 5001 Rainier Avenue South Seattle, WA	GLP-16 / MW-16
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BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			Gravel/Sand surface Sand and Gravel FILL, yellow-brown		FILL		
			Clay lense	60	CL		
5			SAND with gravels and clay, yellow-brown	70	GC/SC		
10		GLP-17-11	Moist	95	SM		
15		GLP-17-15	Silty SAND to Sandy SILT, very fine sand, dense, light gray to gray	50	ML		
			SILT, very dense, gray Refusal, end of boring at 16'				
20							
25							
30							

Drilling Method: Direct-Push

Date: 2-16-2007

Other Information:

Drilling Company: Cascade

Weather: Partly Cloudy, 50F

Augered to 4 feet

Boring Diameter: 2-inches

Page 1 of 1

Logged By: R. Harrison

g-logics

Boring/Well Log
Morningside Acres
5001 Rainier Avenue South
Seattle, WA

GLP-17 /
MW-17

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0			Planter/Landscaped Silty SAND with Gravels, FILL, olive-brown, loose	90	SP/ SM		
5			CLAY with some gravels and sand, light gray to olive brown, coloring intermixed	100	CL/ SC	0.75" PVC Blank	
10		GLP-18-10	Odor				
15			CLAY, light gray	90	CL	10/20 Sand	
15		GLP-18-15	Clay and gravels Very wet	75	GC		
20			Dense, hard, SILT Refusal, end of boring at 17'		ML	1.4" O.D. (0.75" I.D.) Pre-packed Well Screen	
30							

Drilling Method: Direct-Push

Date: 2-16-2007

Other Information:

Drilling Company: Cascade

Weather: Partly Cloudy, 50F

Augered to 4 feet

Boring Diameter: 2-inches

Page 1 of 1

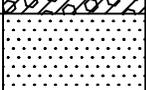
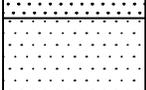
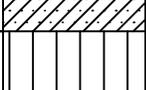
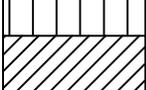
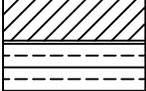
Logged By: R. Harrison



Boring/Well Log
Morningside Acres
5001 Rainier Avenue South
Seattle, WA

GLP-18 /
MW-18

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS	
			GRAPH	LETTER		
COARSE GRAINED SOIL <small>MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE</small>	GRAVEL AND GRAVELLY SOILS <small>MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE</small>	CLEAN GRAVELS <small>(LITTLE OR NO FINES)</small>		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, 0% TO 15% FINES	
		GRAVELS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, 0% TO 15% FINES	
		GRAVELS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		GM	SILTY GRAVELS, SILTY GRAVEL-SAND MIXTURES	
		GRAVELS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		GC	CLAYEY GRAVELS, CLAYEY GRAVEL-SAND MIXTURES	
	SAND AND SANDY SOILS <small>MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE</small>	CLEAN SANDS <small>(LITTLE OR NO FINES)</small>		SW	WELL-GRADED SANDS, GRAVELLY SANDS, 0% TO 15% FINES	
		CLEAN SANDS <small>(LITTLE OR NO FINES)</small>		SP	POORLY-GRADED SANDS, GRAVELLY SAND, 0% TO 15% FINES	
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		SM	SILTY SANDS, SILTY SAND-GRAVEL MIXTURES	
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		SC	CLAYEY SANDS, CLAYEY SAND-GRAVEL MIXTURES	
		SILTS AND CLAYS <small>LIQUID LIMIT LESS THAN 50</small>	SILTS AND CLAYS <small>LIQUID LIMIT LESS THAN 50</small>		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			SILTS AND CLAYS <small>LIQUID LIMIT LESS THAN 50</small>		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
SILTS AND CLAYS <small>LIQUID LIMIT LESS THAN 50</small>			OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY		
SILTS AND CLAYS <small>LIQUID LIMIT GREATER THAN 50</small>	SILTS AND CLAYS <small>LIQUID LIMIT GREATER THAN 50</small>		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS		
	SILTS AND CLAYS <small>LIQUID LIMIT GREATER THAN 50</small>		CH	INORGANIC CLAYS OF HIGH PLASTICITY		
	SILTS AND CLAYS <small>LIQUID LIMIT GREATER THAN 50</small>		OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY		
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS	

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

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Site Assessment
5001, 5015, & 5021 Rainier South
Seattle, Washington

Project: 67508 August 2006

Soil Classification Legend

Appendix
A-1

2000 ENVIRO W/WELL - 67508 GPJ - 2000REV.GDT 8/24/06

DEPTH (feet)	WELL/PIEZO CONSTRUCTION	WATER LEVEL	TESTING PROGRAM				BLOWS/6 in** (uncorrected)	SAMPLER *	SAMPLE NUMBER	U.S.C.S.		SOIL DESCRIPTION
			LAB ANALYSIS		FIELD					NAME	SYMBOL	
			VOCs	PAHs	TPH	BTEX						
0						80		GP-3-1			- ASPHALT.	
						20.8			SM		SILTY SAND (SM): olive-brown, moist, fine to coarse sand. (FILL)	
									SM		SILTY SAND (SM): gray, moist, fine to coarse sand, some fine gravel.	
5						23.0	100	GP-3-2A	ML		SILT (ML): gray to dark brown, moist, very fine, gray mottling, organics, strong petroleum hydrocarbon odor.	
									OL		ORGANIC CLAY (OL): dark brown, moist, soft, very fine, slightly saturated zone, strong petroleum hydrocarbon odor.	
						1.6	100	GP-3-2B	ML		SILT (ML): gray to greenish-gray, moist, very fine, stiff, occasional fine grass, with clay, ironoxide orange staining.	
								GP-3-3A	OL		ORGANIC CLAY (OL): dark brown, moist, very fine, no odor.	
						2.1			ML		SILT (ML): gray to blue-gray, slightly moist, very fine, some fine sand, slightly plastic, ironoxide staining.	
									SM		SILTY SAND (SM): yellow to gray, dry, fine to coarse sand, some fine gravel.	
10								GP-3-3B	SM		SILTY SAND (SM): yellow-brown to dark brown, moist, fine to coarse sand, some fine subrounded gravel.	
						2.1	100	GP-3-4	SP		SAND (SP): gray to olive-gray, wet, fine to coarse sand, some fine gravel, no odor.	
15												
17						1.2					Grades dry. Geoprobe terminated at 17 feet below ground surface. Groundwater encountered at 15 feet bgs during drilling and measured at 11.5 feet bgs after drilling. Geoprobe completed as monitoring well MW-6 on 08/02/06.	

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE STARTED: 8-2-06
 LOGGED BY: A. Speransky
 INTERPRETED BY: Frank Reinart

SURFACE ELEVATION (feet):
 TOTAL DEPTH (feet): 17.0
 DIAMETER OF BORING (in):

DRILLING METHOD: Geoprobe
 DRILLER: Boart Longyear
 CASING SIZE:

APPROV: _____
 BY: _____



Rainier Avenue South
5001 Rainier Avenue South
Seattle, Washington
BORING LOG
GP-3/MW-6

Appendix
 A - 2
 PAGE 1 of 1

PROJECT NUMBER: 67508

2000 ENVIRO W/WELL 67508.GPJ 2000REV.GDT 8/24/06

DEPTH (feet)	WELL/PIEZO CONSTRUCTION	WATER LEVEL	TESTING PROGRAM						BLOWS/6 in** (uncorrected)	SAMPLER *	SAMPLE NUMBER	U.S.C.S.		SOIL DESCRIPTION
			LAB ANALYSIS				FIELD					NAME	SYMBOL	
			VOCs	PAHs	TPH	BTEX	PID (ppmv)	RECOVERY %						
0								40		GP5-1			Surface: Concrete	
0 - 5								3.3			SM		- CONCRETE.	
5 - 10								0.2	100	GP5-2	OL		SILTY SAND (SM): yellow-brown, dry, fine to coarse sand with fine to coarse subangular to subrounded gravel, no odor. (FILL)	
10 - 14.5								0.2		GP5-3A	ML		ORGANIC CLAY (OL): dark brown, dry, very fine, decayed roots, no odor.	
								0.2			SM		SILT (ML): light gray, dry, stiff, very fine, fine roots, mottling, no odor.	
								0.2			SM		SILTY SAND (SM): yellow to dark brown and to orange-brown, dry, fine to coarse sand, some fine to coarse subrounded gravel, occasional clay, ironoxide staining, mottling, no odor.	
								0.1		GP5-3B	SP		SAND (SP): olive-brown, wet, fine sand, occasional medium to coarse sand, some fine gravel, (approximately 7 inch saturated zone) no odor.	
								0.1			SM		SILTY SAND (SM): orange-brown-gray to dark brown, moist to wet, fine to coarse sand, no odor.	
								0.1			ML		SILT (ML): gray, slightly moist, stiff, fine, (very hard drilling).	

Geoprobe terminated at 14.5 feet below ground surface. Groundwater was encountered at 14.5 feet bgs. during drilling. No groundwater was measured in boring after drilling. Geoprobe was constructed at monitoring well MW-8 on 8/2/06.

DATE STARTED: 8-2-06	SURFACE ELEVATION (feet):	DRILLING METHOD: Geoprobe
LOGGED BY: A. Speransky	TOTAL DEPTH (feet): 14.5	DRILLER: Boart Longyear
INTERPRETED BY: Frank Reinart	DIAMETER OF BORING (in):	CASING SIZE:

 KLEINFELDER GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS SOILS AND MATERIALS TESTING PROJECT NUMBER: 67508	Rainier Avenue South 5001 Rainier Avenue South Seattle, Washington BORING LOG GP-5/MW-8	Appendix A - 4 PAGE 1 of 1
	APPROV: _____ BY: _____	

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.



Log of Boring: FB-24

Client: Washin Murakami
Project: Morningside Acres
Location: 5001 Rainier Avenue S

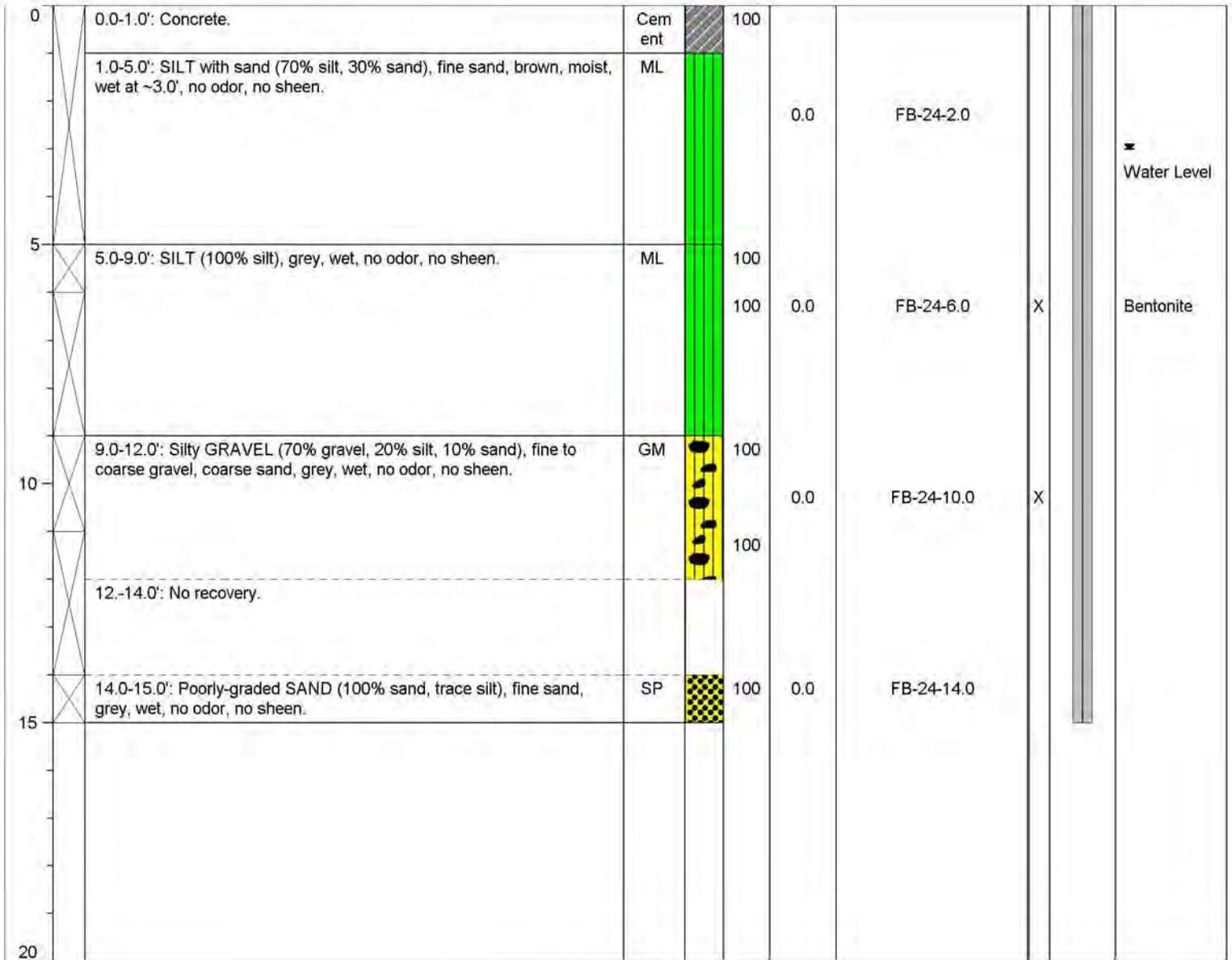
Date/Time Started: 4/13/21 1130
Date/Time Completed: 4/13/21 0853
Equipment: GeoProbe Tractor Mount
Drilling Company: Cascade Drilling
Drilling Foreman: Tim Watson
Drilling Method: Direct Push

Sampler Type: 3' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): ~3.0
Total Boring Depth (ft bgs): 15.0'
Total Well Depth (ft bgs): NA

Farallon PN: 1355-001

Logged By: Elise Bugge

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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Well Construction Information

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



Log of Boring: FB-25

Client: Washin Murakami
Project: Morningside Acres
Location: 5001 Rainier Avenue S

Date/Time Started: 4/13/21 1250
Date/Time Completed: 4/13/21 1130
Equipment: GeoProbe Tractor Mount
Drilling Company: Cascade Drilling
Drilling Foreman: Tim Watson
Drilling Method: Direct Push

Sampler Type: 3' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): ~3.0
Total Boring Depth (ft bgs): 13.0'
Total Well Depth (ft bgs): NA

Farallon PN: 1355-001

Logged By: Elise Bugge

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
-------------------	-----------------	------------------------	------	--------------	------------	-----------	-----------	-----------------	----------------------------------

0	0.0-1.0'	Cement.	CEM ENT		100				
	1.0-5.0'	Sandy SILT (70% silt, 30% sand), fine sand, greyish-brown, moist, wet at ~3.0', no odor, no sheen.	ML			0.0	FB-25-2.0	X	Water Level
5	5.0-6.0'	No recovery.			0				
	6.0-7.0'	SILT (100% silt), grey, wet, no odor, no sheen.	ML		100	0.0	FB-25-6.0	X	Bentonite
	7.0-10.0'	Silty SAND (70% sand, 20% silt, 10% gravel), coarse sand, fine gravel, grey, wet, no odor, no sheen.	SM		100				
10	10.0-12.0'	Silty SAND (70% sand, 20% silt, 10% gravel), fine sand, fine gravel, grey, moist, no odor, no sheen.	SM			0.0	FB-25-10.0	X	
	12.0-13.0'	Well-graded SAND. (100% sand), fine sand, grey, moist, no odor, no sheen.	SP		100				
						0.3	FB-25-13.0		
15									
20									

Well Construction Information

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



Log of Boring: FB-26

Client: Washin Murakami
Project: Morningside Acres
Location: 5001 Rainier Avenue S

Date/Time Started: 4/13/21 1345
Date/Time Completed: 4/13/21 1459
Equipment: GeoProbe Tractor Mount
Drilling Company: Cascade Drilling
Drilling Foreman: Tim Watson
Drilling Method: Direct Push

Sampler Type: 3' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): ~6.0
Total Boring Depth (ft bgs): 15.0'
Total Well Depth (ft bgs): NA

Farallon PN: 1355-001

Logged By: Elise Bugge

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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0	0.0-1.0'	Cement	Cement		100				
	1.0-5.0'	Silty SAND (70% sand, 30% silt), fine sand, brown, moist, no odor, no sheen.	SM			0.0	FB-26-2.0		
5	5.0-6.0'	SILT (100% silt), grey, moist, no odor, no sheen.	ML		100				
	6.0-8.0'	No recovery.			66	0.0	FB-26-6.0	X	Bentonite Water Level
	8.0-9.0'	No recovery.							
10	9.0-12.0'	Silty GRAVEL (70% gravel, 20% silt, 10% sand), fine to coarse gravel, coarse sand, grey, wet, no odor, no sheen.	GM		100				
	12.0-14.0'	Silty SAND (80% sand, 20% silt), fine sand, grey, wet, no odor, no sheen.	SM		66	0.0	FB-26-10.0	X	
	14.0-15.0'	No recovery.				0.0	FB-26-14.0		
15									
20									

Well Construction Information

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



Log of Boring: FB-27

Client: Washin Murakami
Project: Morningside Acres
Location: 5001 Rainier Avenue S

Date/Time Started: 4/13/21 1500
Date/Time Completed: 4/13/21 1615
Equipment: GeoProbe Tractor Mount
Drilling Company: Cascade Drilling
Drilling Foreman: Tim Watson
Drilling Method: Direct Push

Sampler Type: 3' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): ~3.0
Total Boring Depth (ft bgs): 15.0'
Total Well Depth (ft bgs): NA

Farallon PN: 1355-001

Logged By: Elise Bugge

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
-------------------	-----------------	------------------------	------	--------------	------------	-----------	-----------	-----------------	----------------------------------

0	0.0-1.0'	Cement.	Cement		100				
	1.0-5.0'	Sandy SILT (70% silt, 30% sand), fine sand, brown, moist, wet at ~3.0, no odor, no sheen.	ML			0.3	FB-27-2.0		Water Level
5	5.0-9.0'	SILT (100% silt), grey, wet, no odor, no sheen.	ML		100				
					100	0.0	FB-27-6.0		Bentonite
10	9.0-10.5'	Silty GRAVEL (70% gravel, 20% silt, 10% sand), fine to coarse gravel, coarse sand, grey, wet, no odor, no sheen.	GM		50				
	10.5-12.0'	No recovery.				0.0	FB-27-10.0		
	12.0-14.0'	(70% gravel, 20% silt, 10% sand), fine to coarse gravel, coarse sand, grey, wet, no odor, no sheen.	GM		66				
	14.0-15.0'	No recovery.				0.0	FB-27-14.0		
15									
20									

Well Construction Information

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



Log of Boring: FB-28

Client: Washin Murakami
Project: Morningside Acres
Location: 5001 Rainier Avenue S

Date/Time Started: 4/14/21 0800
Date/Time Completed: 4/14/21 0846
Equipment: Hand Auger
Drilling Company: Cascade Drilling
Drilling Foreman: Tim Watson
Drilling Method: Hand Auger

Sampler Type: NA
Drive Hammer (lbs.): NA
Depth of Water ATD (ft bgs): ~5.0
Total Boring Depth (ft bgs): 8.5'
Total Well Depth (ft bgs): NA

Farallon PN: 1355-001

Logged By: Elise Bugge

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-4.5': Sandy SILT (90% silt, 10% sand), fine sand, greyish brown, moist, no odor, no sheen.	ML		100				
						2.6	FB-28-2.0	X	Bentonite
5		0.0-6.0': Sandy SILT (60% silt, 40% sand), fine sand, light brown, wet, no odor, no sheen.	ML		100				
						2.0	FB-28-6.0	X	Water Level
		6.0-8.5': Well-graded GRAVEL with silt and sand (70% gravel, 20% sand, 10% silt), fine to coarse gravel, coarse sand, brown, wet, no odor, no sheen.	GW-GM		100				
10									
15									
20									

Well Construction Information

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



Log of Boring: FB-29

Client: Washin Murakami
Project: Morningside Acres
Location: 5001 Rainier Avenue S

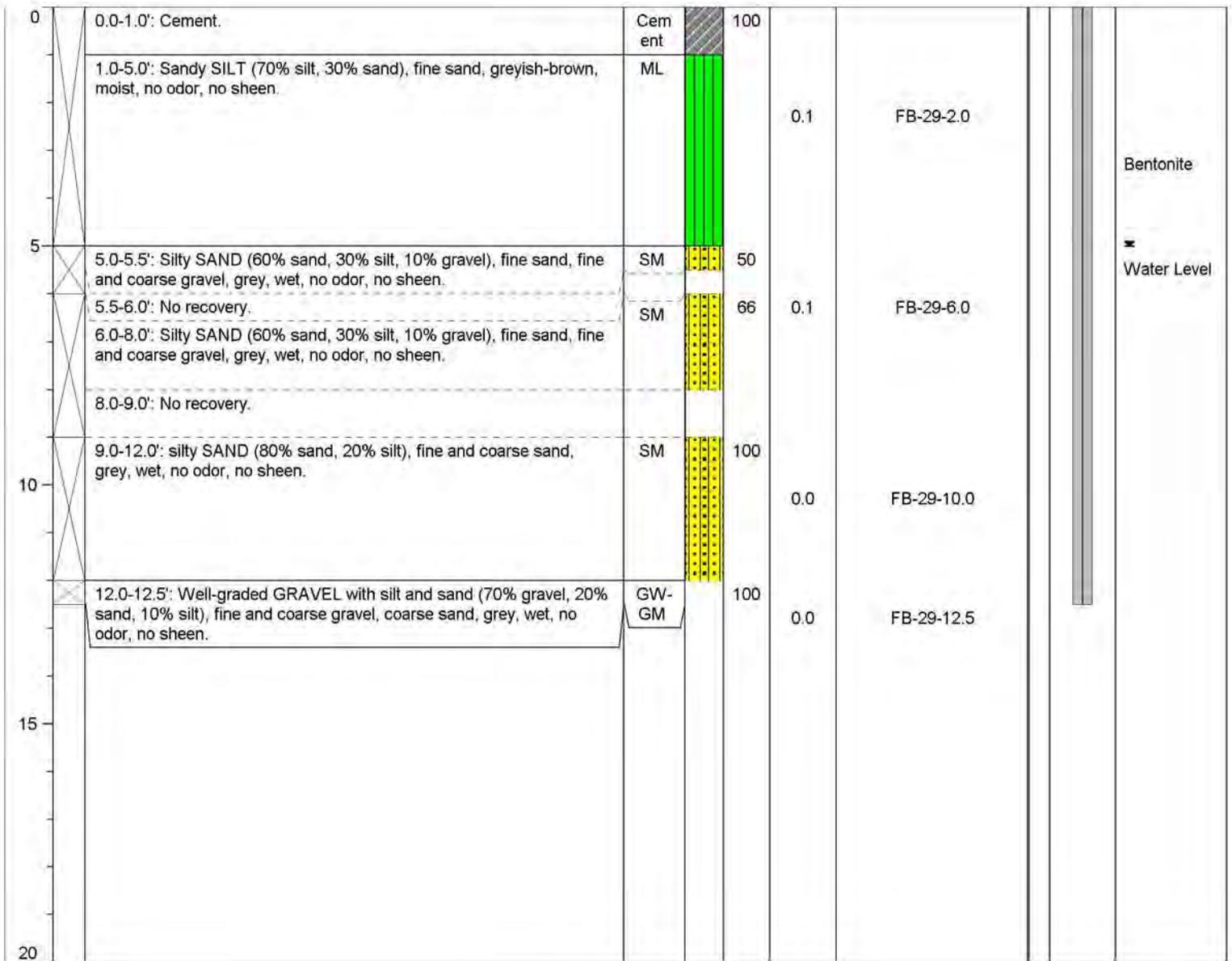
Date/Time Started: 4/14/21 0905
Date/Time Completed: 4/14/21 1015
Equipment: GeoProbe Tractor Mount
Drilling Company: Cascade Drilling
Drilling Foreman: Tim Watson
Drilling Method: Direct Push

Sampler Type: 3' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): ~3.0
Total Boring Depth (ft bgs): 12.5'
Total Well Depth (ft bgs): NA

Farallon PN: 1355-001

Logged By: Elise Bugge

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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Well Construction Information

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

APPENDIX C
LABORATORY ANALYTICAL REPORTS

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY REPORT
Morningside Acres Tracts
5001, 5015, and 5021 Rainier Avenue South
Seattle, Washington

Farallon PN: 1355-001



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

December 27, 2017

Joe Rounds
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 1712-122

Dear Joe:

Enclosed are the analytical results and associated quality control data for samples submitted on December 12, 2017.

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

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

Sincerely,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: December 27, 2017
Samples Submitted: December 12, 2017
Laboratory Reference: 1712-122
Project: 1355-001

Case Narrative

Samples were collected on December 11 and 12, 2017 and received by the laboratory on December 12, 2017. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: December 27, 2017
 Samples Submitted: December 12, 2017
 Laboratory Reference: 1712-122
 Project: 1355-001

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-10.0					
Laboratory ID:	12-122-02					
Benzene	ND	0.020	EPA 8021B	12-18-17	12-18-17	
Toluene	ND	0.073	EPA 8021B	12-18-17	12-18-17	
Ethyl Benzene	ND	0.073	EPA 8021B	12-18-17	12-18-17	
m,p-Xylene	ND	0.073	EPA 8021B	12-18-17	12-18-17	
o-Xylene	ND	0.073	EPA 8021B	12-18-17	12-18-17	
Gasoline	ND	7.3	NWTPH-Gx	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	99	66-130				
Client ID:	MW-19-15.0					
Laboratory ID:	12-122-03					
Benzene	ND	0.020	EPA 8021B	12-18-17	12-18-17	
Toluene	ND	0.087	EPA 8021B	12-18-17	12-18-17	
Ethyl Benzene	ND	0.087	EPA 8021B	12-18-17	12-18-17	
m,p-Xylene	ND	0.087	EPA 8021B	12-18-17	12-18-17	
o-Xylene	ND	0.087	EPA 8021B	12-18-17	12-18-17	
Gasoline	ND	8.7	NWTPH-Gx	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	100	66-130				
Client ID:	MW-19-22.5					
Laboratory ID:	12-122-05					
Benzene	ND	0.020	EPA 8021B	12-18-17	12-18-17	
Toluene	ND	0.086	EPA 8021B	12-18-17	12-18-17	
Ethyl Benzene	ND	0.086	EPA 8021B	12-18-17	12-18-17	
m,p-Xylene	ND	0.086	EPA 8021B	12-18-17	12-18-17	
o-Xylene	ND	0.086	EPA 8021B	12-18-17	12-18-17	
Gasoline	ND	8.6	NWTPH-Gx	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	103	66-130				



Date of Report: December 27, 2017
 Samples Submitted: December 12, 2017
 Laboratory Reference: 1712-122
 Project: 1355-001

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-30.0					
Laboratory ID:	12-122-07					
Benzene	ND	0.020	EPA 8021B	12-18-17	12-18-17	
Toluene	ND	0.076	EPA 8021B	12-18-17	12-18-17	
Ethyl Benzene	ND	0.076	EPA 8021B	12-18-17	12-18-17	
m,p-Xylene	ND	0.076	EPA 8021B	12-18-17	12-18-17	
o-Xylene	ND	0.076	EPA 8021B	12-18-17	12-18-17	
Gasoline	ND	7.6	NWTPH-Gx	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>105</i>	<i>66-130</i>				



Date of Report: December 27, 2017
 Samples Submitted: December 12, 2017
 Laboratory Reference: 1712-122
 Project: 1355-001

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1218S1					
Benzene	ND	0.020	EPA 8021B	12-18-17	12-18-17	
Toluene	ND	0.050	EPA 8021B	12-18-17	12-18-17	
Ethyl Benzene	ND	0.050	EPA 8021B	12-18-17	12-18-17	
m,p-Xylene	ND	0.050	EPA 8021B	12-18-17	12-18-17	
o-Xylene	ND	0.050	EPA 8021B	12-18-17	12-18-17	
Gasoline	ND	5.0	NWTPH-Gx	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	102	66-130				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-069-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	0.114	0.122	NA	NA	NA	7	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	224	212	NA	NA	NA	6	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				107	115	66-130		

SPIKE BLANKS

Laboratory ID:	SB1218S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.925	0.920	1.00	1.00	93	92	70-120	1	11
Toluene	0.979	0.968	1.00	1.00	98	97	73-121	1	14
Ethyl Benzene	0.997	0.985	1.00	1.00	100	99	74-121	1	11
m,p-Xylene	1.03	1.01	1.00	1.00	103	101	75-124	2	13
o-Xylene	1.02	1.01	1.00	1.00	102	101	75-121	1	12
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					99	99	66-130		



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NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-10.0					
Laboratory ID:	12-122-02					
Diesel Range Organics	36	32	NWTPH-Dx	12-18-17	12-18-17	
Lube Oil Range Organics	ND	63	NWTPH-Dx	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	69	50-150				
Client ID:	MW-19-15.0					
Laboratory ID:	12-122-03					
Diesel Range Organics	ND	33	NWTPH-Dx	12-18-17	12-18-17	
Lube Oil Range Organics	ND	66	NWTPH-Dx	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	71	50-150				
Client ID:	MW-19-22.5					
Laboratory ID:	12-122-05					
Diesel Range Organics	ND	34	NWTPH-Dx	12-19-17	12-19-17	
Lube Oil Range Organics	ND	67	NWTPH-Dx	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	53	50-150				
Client ID:	MW-19-30.0					
Laboratory ID:	12-122-07					
Diesel Range Organics	ND	33	NWTPH-Dx	12-18-17	12-18-17	
Lube Oil Range Organics	ND	66	NWTPH-Dx	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	67	50-150				



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 Project: 1355-001

**NWTPH-Dx
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1218S1					
Diesel Range Organics	ND	25	NWTPH-Dx	12-18-17	12-18-17	
Lube Oil Range Organics	ND	50	NWTPH-Dx	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	97	50-150				
Laboratory ID:	MB1219S1					
Diesel Range Organics	ND	25	NWTPH-Dx	12-19-17	12-19-17	
Lube Oil Range Organics	ND	50	NWTPH-Dx	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	99	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-122-07							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				67	73	50-150		
Laboratory ID:	12-186-03							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				96	90	50-150		



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-10.0					
Laboratory ID:	12-122-02					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Chloromethane	ND	0.0061	EPA 8260C	12-18-17	12-18-17	
Vinyl Chloride	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Bromomethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Chloroethane	ND	0.0078	EPA 8260C	12-18-17	12-18-17	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Iodomethane	ND	0.0061	EPA 8260C	12-18-17	12-18-17	
Methylene Chloride	ND	0.0061	EPA 8260C	12-18-17	12-18-17	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Bromochloromethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Chloroform	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Trichloroethene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Dibromomethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Bromodichloromethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
2-Chloroethyl Vinyl Ether	ND	0.0061	EPA 8260C	12-18-17	12-18-17	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-10.0					
Laboratory ID:	12-122-02					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Tetrachloroethene	ND	0.0024	EPA 8260C	12-18-17	12-18-17	
1,3-Dichloropropane	ND	0.0016	EPA 8260C	12-18-17	12-18-17	
Dibromochloromethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Chlorobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Bromoform	ND	0.0061	EPA 8260C	12-18-17	12-18-17	
Bromobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
2-Chlorotoluene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
4-Chlorotoluene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,2-Dibromo-3-chloropropane	ND	0.0061	EPA 8260C	12-18-17	12-18-17	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Hexachlorobutadiene	ND	0.0061	EPA 8260C	12-18-17	12-18-17	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>111</i>	<i>75-131</i>				
<i>Toluene-d8</i>	<i>113</i>	<i>83-130</i>				
<i>4-Bromofluorobenzene</i>	<i>107</i>	<i>78-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-15.0					
Laboratory ID:	12-122-03					
Dichlorodifluoromethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
Chloromethane	ND	0.0083	EPA 8260C	12-18-17	12-18-17	
Vinyl Chloride	0.017	0.0017	EPA 8260C	12-18-17	12-18-17	
Bromomethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
Chloroethane	ND	0.011	EPA 8260C	12-18-17	12-18-17	
Trichlorofluoromethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloroethene	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
Iodomethane	ND	0.0083	EPA 8260C	12-18-17	12-18-17	
Methylene Chloride	ND	0.0083	EPA 8260C	12-18-17	12-18-17	
(trans) 1,2-Dichloroethene	0.0043	0.0017	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloroethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
2,2-Dichloropropane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
(cis) 1,2-Dichloroethene	0.016	0.0017	EPA 8260C	12-18-17	12-18-17	
Bromochloromethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
Chloroform	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
1,1,1-Trichloroethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
Carbon Tetrachloride	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloropropene	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
1,2-Dichloroethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
Trichloroethene	0.18	0.0017	EPA 8260C	12-18-17	12-18-17	
1,2-Dichloropropane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
Dibromomethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
Bromodichloromethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
2-Chloroethyl Vinyl Ether	ND	0.0083	EPA 8260C	12-18-17	12-18-17	
(cis) 1,3-Dichloropropene	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
(trans) 1,3-Dichloropropene	ND	0.0017	EPA 8260C	12-18-17	12-18-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-15.0					
Laboratory ID:	12-122-03					
1,1,2-Trichloroethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
Tetrachloroethene	ND	0.0033	EPA 8260C	12-18-17	12-18-17	
1,3-Dichloropropane	ND	0.0022	EPA 8260C	12-18-17	12-18-17	
Dibromochloromethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
1,2-Dibromoethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
Chlorobenzene	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
1,1,1,2-Tetrachloroethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
Bromoform	ND	0.0083	EPA 8260C	12-18-17	12-18-17	
Bromobenzene	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
1,1,2,2-Tetrachloroethane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
1,2,3-Trichloropropane	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
2-Chlorotoluene	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
4-Chlorotoluene	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
1,3-Dichlorobenzene	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
1,4-Dichlorobenzene	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
1,2-Dichlorobenzene	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
1,2-Dibromo-3-chloropropane	ND	0.0083	EPA 8260C	12-18-17	12-18-17	
1,2,4-Trichlorobenzene	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
Hexachlorobutadiene	ND	0.0083	EPA 8260C	12-18-17	12-18-17	
1,2,3-Trichlorobenzene	ND	0.0017	EPA 8260C	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>128</i>	<i>75-131</i>				
<i>Toluene-d8</i>	<i>125</i>	<i>83-130</i>				
<i>4-Bromofluorobenzene</i>	<i>115</i>	<i>78-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-22.5					
Laboratory ID:	12-122-05					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Chloromethane	ND	0.0063	EPA 8260C	12-18-17	12-18-17	
Vinyl Chloride	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Bromomethane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Chloroethane	ND	0.0080	EPA 8260C	12-18-17	12-18-17	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Iodomethane	ND	0.0063	EPA 8260C	12-18-17	12-18-17	
Methylene Chloride	ND	0.0063	EPA 8260C	12-18-17	12-18-17	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Bromochloromethane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Chloroform	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Trichloroethene	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Dibromomethane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Bromodichloromethane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
2-Chloroethyl Vinyl Ether	ND	0.0063	EPA 8260C	12-18-17	12-18-17	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	12-18-17	12-18-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-22.5					
Laboratory ID:	12-122-05					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Tetrachloroethene	ND	0.0025	EPA 8260C	12-18-17	12-18-17	
1,3-Dichloropropane	ND	0.0016	EPA 8260C	12-18-17	12-18-17	
Dibromochloromethane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Chlorobenzene	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Bromoform	ND	0.0063	EPA 8260C	12-18-17	12-18-17	
Bromobenzene	ND	0.085	EPA 8260C	12-18-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	0.085	EPA 8260C	12-18-17	12-19-17	
1,2,3-Trichloropropane	ND	0.085	EPA 8260C	12-18-17	12-19-17	
2-Chlorotoluene	ND	0.085	EPA 8260C	12-18-17	12-19-17	
4-Chlorotoluene	ND	0.085	EPA 8260C	12-18-17	12-19-17	
1,3-Dichlorobenzene	ND	0.085	EPA 8260C	12-18-17	12-19-17	
1,4-Dichlorobenzene	ND	0.085	EPA 8260C	12-18-17	12-19-17	
1,2-Dichlorobenzene	ND	0.085	EPA 8260C	12-18-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	0.42	EPA 8260C	12-18-17	12-19-17	
1,2,4-Trichlorobenzene	ND	0.085	EPA 8260C	12-18-17	12-19-17	
Hexachlorobutadiene	ND	0.42	EPA 8260C	12-18-17	12-19-17	
1,2,3-Trichlorobenzene	ND	0.085	EPA 8260C	12-18-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>75-131</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>83-130</i>				
<i>4-Bromofluorobenzene</i>	<i>84</i>	<i>78-130</i>				



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Matrix: Soil
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-30.0					
Laboratory ID:	12-122-07					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Chloromethane	ND	0.0062	EPA 8260C	12-18-17	12-18-17	
Vinyl Chloride	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Bromomethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Chloroethane	ND	0.0080	EPA 8260C	12-18-17	12-18-17	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Iodomethane	ND	0.0062	EPA 8260C	12-18-17	12-18-17	
Methylene Chloride	ND	0.0062	EPA 8260C	12-18-17	12-18-17	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Bromochloromethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Chloroform	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Trichloroethene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Dibromomethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Bromodichloromethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
2-Chloroethyl Vinyl Ether	ND	0.0062	EPA 8260C	12-18-17	12-18-17	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-30.0					
Laboratory ID:	12-122-07					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Tetrachloroethene	ND	0.0025	EPA 8260C	12-18-17	12-18-17	
1,3-Dichloropropane	ND	0.0016	EPA 8260C	12-18-17	12-18-17	
Dibromochloromethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Chlorobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Bromoform	ND	0.0062	EPA 8260C	12-18-17	12-18-17	
Bromobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
2-Chlorotoluene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
4-Chlorotoluene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
1,2-Dibromo-3-chloropropane	ND	0.0062	EPA 8260C	12-18-17	12-18-17	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
Hexachlorobutadiene	ND	0.0062	EPA 8260C	12-18-17	12-18-17	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-131</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>83-130</i>				
<i>4-Bromofluorobenzene</i>	<i>91</i>	<i>78-130</i>				



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

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1218S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Chloromethane	ND	0.0050	EPA 8260C	12-18-17	12-18-17	
Vinyl Chloride	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Bromomethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Chloroethane	ND	0.0064	EPA 8260C	12-18-17	12-18-17	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Iodomethane	ND	0.0050	EPA 8260C	12-18-17	12-18-17	
Methylene Chloride	ND	0.0050	EPA 8260C	12-18-17	12-18-17	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Bromochloromethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Chloroform	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Trichloroethene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Dibromomethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Bromodichloromethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	12-18-17	12-18-17	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	



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VOLATILES by EPA 8260C
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1218S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Tetrachloroethene	ND	0.0020	EPA 8260C	12-18-17	12-18-17	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	12-18-17	12-18-17	
Dibromochloromethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Chlorobenzene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Bromoform	ND	0.0050	EPA 8260C	12-18-17	12-18-17	
Bromobenzene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
2-Chlorotoluene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
4-Chlorotoluene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	12-18-17	12-18-17	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	12-18-17	12-18-17	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>75-131</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>83-130</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>78-130</i>				



Date of Report: December 27, 2017
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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1219S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Chloromethane	ND	0.0050	EPA 8260C	12-19-17	12-19-17	
Vinyl Chloride	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Bromomethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Chloroethane	ND	0.0066	EPA 8260C	12-19-17	12-19-17	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Iodomethane	ND	0.0050	EPA 8260C	12-19-17	12-19-17	
Methylene Chloride	ND	0.0065	EPA 8260C	12-19-17	12-19-17	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Bromochloromethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Chloroform	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Trichloroethene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Dibromomethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Bromodichloromethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	12-19-17	12-19-17	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	



Date of Report: December 27, 2017
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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1219S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Tetrachloroethene	ND	0.0020	EPA 8260C	12-19-17	12-19-17	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	12-19-17	12-19-17	
Dibromochloromethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Chlorobenzene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Bromoform	ND	0.0050	EPA 8260C	12-19-17	12-19-17	
Bromobenzene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
2-Chlorotoluene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
4-Chlorotoluene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	12-19-17	12-19-17	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-131</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>83-130</i>				
<i>4-Bromofluorobenzene</i>	<i>104</i>	<i>78-130</i>				



Date of Report: December 27, 2017
 Samples Submitted: December 12, 2017
 Laboratory Reference: 1712-122
 Project: 1355-001

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

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB1218S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0378	0.0391	0.0500	0.0500	76	78	58-126	3	20	
Benzene	0.0416	0.0418	0.0500	0.0500	83	84	72-122	0	19	
Trichloroethene	0.0488	0.0506	0.0500	0.0500	98	101	75-120	4	20	
Toluene	0.0429	0.0434	0.0500	0.0500	86	87	78-123	1	19	
Chlorobenzene	0.0457	0.0466	0.0500	0.0500	91	93	75-120	2	18	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					98	93	75-131			
<i>Toluene-d8</i>					97	95	83-130			
<i>4-Bromofluorobenzene</i>					95	93	78-130			



Date of Report: December 27, 2017
 Samples Submitted: December 12, 2017
 Laboratory Reference: 1712-122
 Project: 1355-001

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

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB1219S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0369	0.0367	0.0500	0.0500	74	73	58-126	1	20	
Benzene	0.0383	0.0376	0.0500	0.0500	77	75	72-122	2	19	
Trichloroethene	0.0530	0.0493	0.0500	0.0500	106	99	75-120	7	20	
Toluene	0.0425	0.0408	0.0500	0.0500	85	82	78-123	4	19	
Chlorobenzene	0.0458	0.0446	0.0500	0.0500	92	89	75-120	3	18	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					99	100	75-131			
<i>Toluene-d8</i>					102	101	83-130			
<i>4-Bromofluorobenzene</i>					99	100	78-130			



Date of Report: December 27, 2017
Samples Submitted: December 12, 2017
Laboratory Reference: 1712-122
Project: 1355-001

% MOISTURE

Date Analyzed: 12-18-17

Client ID	Lab ID	% Moisture
MW-19-10.0	12-122-02	21
MW-19-15.0	12-122-03	25
MW-19-22.5	12-122-05	26
MW-19-30.0	12-122-07	24





Data Qualifiers and Abbreviations

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





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

December 28, 2017

Joe Rounds
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 1712-175

Dear Joe:

Enclosed are the analytical results and associated quality control data for samples submitted on December 15, 2017.

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

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

Sincerely,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: December 28, 2017
Samples Submitted: December 15, 2017
Laboratory Reference: 1712-175
Project: 1355-001

Case Narrative

Samples were collected on December 15, 2017 and received by the laboratory on December 15, 2017. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
 Laboratory Reference: 1712-175
 Project: 1355-001

NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-121517					
Laboratory ID:	12-175-01					
Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Toluene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
o-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Gasoline	ND	100	NWTPH-Gx	12-18-17	12-18-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 76 66-114

Client ID: **MW-2-121517**
 Laboratory ID: 12-175-02

Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Toluene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
o-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Gasoline	ND	100	NWTPH-Gx	12-18-17	12-18-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 76 66-114

Client ID: **MW-6-121517**
 Laboratory ID: 12-175-03

Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Toluene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
o-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Gasoline	ND	100	NWTPH-Gx	12-18-17	12-18-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 73 66-114



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
 Laboratory Reference: 1712-175
 Project: 1355-001

NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-3-121517					
Laboratory ID:	12-175-04					
Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Toluene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
o-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Gasoline	ND	100	NWTPH-Gx	12-18-17	12-18-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 75 66-114

Client ID:	MW-8-121517					
Laboratory ID:	12-175-05					
Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Toluene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
o-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Gasoline	ND	100	NWTPH-Gx	12-18-17	12-18-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 78 66-114

Client ID:	MW-18-121517					
Laboratory ID:	12-175-06					
Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Toluene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
o-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Gasoline	ND	100	NWTPH-Gx	12-18-17	12-18-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 73 66-114



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NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-9-121517					
Laboratory ID:	12-175-07					
Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Toluene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
o-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Gasoline	ND	100	NWTPH-Gx	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>71</i>	<i>66-114</i>				



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**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1218W3					
Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Toluene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
o-Xylene	ND	1.0	EPA 8021B	12-18-17	12-18-17	
Gasoline	ND	100	NWTPH-Gx	12-18-17	12-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	82	66-114				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-168-03							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				80	83	66-114		

SPIKE BLANKS

Laboratory ID:	SB1218W1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	44.8	45.5	50.0	50.0	90	91	80-116	2	11
Toluene	48.9	49.1	50.0	50.0	98	98	82-115	0	12
Ethyl Benzene	50.3	50.5	50.0	50.0	101	101	80-117	0	12
m,p-Xylene	50.8	50.9	50.0	50.0	102	102	79-117	0	12
o-Xylene	50.4	50.6	50.0	50.0	101	101	79-117	0	11
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					79	79	66-114		



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NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-121517					
Laboratory ID:	12-175-01					
Diesel Range Organics	ND	0.27	NWTPH-Dx	12-19-17	12-19-17	
Lube Oil Range Organics	ND	0.44	NWTPH-Dx	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	94	50-150				
Client ID:	MW-2-121517					
Laboratory ID:	12-175-02					
Diesel Range Organics	ND	0.26	NWTPH-Dx	12-19-17	12-19-17	
Lube Oil Range Organics	ND	0.42	NWTPH-Dx	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	75	50-150				
Client ID:	MW-6-121517					
Laboratory ID:	12-175-03					
Diesel Range Organics	ND	0.26	NWTPH-Dx	12-19-17	12-19-17	
Lube Oil Range Organics	ND	0.42	NWTPH-Dx	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	80	50-150				
Client ID:	MW-3-121517					
Laboratory ID:	12-175-04					
Diesel Range Organics	ND	0.26	NWTPH-Dx	12-19-17	12-19-17	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	89	50-150				
Client ID:	MW-8-121517					
Laboratory ID:	12-175-05					
Diesel Range Organics	ND	0.25	NWTPH-Dx	12-19-17	12-19-17	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	98	50-150				
Client ID:	MW-18-121517					
Laboratory ID:	12-175-06					
Diesel Range Organics	ND	0.26	NWTPH-Dx	12-19-17	12-19-17	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	86	50-150				



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NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-9-121517					
Laboratory ID:	12-175-07					
Diesel Range Organics	ND	0.26	NWTPH-Dx	12-19-17	12-19-17	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>102</i>	<i>50-150</i>				



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**NWTPH-Dx
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1219W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	12-19-17	12-19-17	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	83	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-176-01							
	ORIG	DUP						
Diesel Range Organics	0.751	0.813	NA	NA	NA	NA	8	NA M
Lube Oil Range Organics	0.464	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				84	98	50-150		



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-121517					
Laboratory ID:	12-175-01					
Dichlorodifluoromethane	ND	0.31	EPA 8260C	12-22-17	12-22-17	
Chloromethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Iodomethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroform	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Trichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-121517					
Laboratory ID:	12-175-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromoform	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Bromobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	98	75-127				
<i>Toluene-d8</i>	98	80-127				
<i>4-Bromofluorobenzene</i>	100	78-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2-121517					
Laboratory ID:	12-175-02					
Dichlorodifluoromethane	ND	0.31	EPA 8260C	12-22-17	12-22-17	
Chloromethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Iodomethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroform	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Trichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2-121517					
Laboratory ID:	12-175-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromoform	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Bromobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	96	75-127				
<i>Toluene-d8</i>	98	80-127				
<i>4-Bromofluorobenzene</i>	98	78-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6-121517					
Laboratory ID:	12-175-03					
Dichlorodifluoromethane	ND	0.31	EPA 8260C	12-22-17	12-22-17	
Chloromethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Iodomethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroform	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Trichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6-121517					
Laboratory ID:	12-175-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromoform	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Bromobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	99	75-127				
<i>Toluene-d8</i>	99	80-127				
<i>4-Bromofluorobenzene</i>	97	78-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-3-121517					
Laboratory ID:	12-175-04					
Dichlorodifluoromethane	ND	0.31	EPA 8260C	12-22-17	12-22-17	
Chloromethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Iodomethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(cis) 1,2-Dichloroethene	0.48	0.20	EPA 8260C	12-22-17	12-22-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroform	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Trichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-3-121517					
Laboratory ID:	12-175-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromoform	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Bromobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>78-125</i>				



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8-121517					
Laboratory ID:	12-175-05					
Dichlorodifluoromethane	ND	0.31	EPA 8260C	12-22-17	12-22-17	
Chloromethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Iodomethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroform	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Trichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8-121517					
Laboratory ID:	12-175-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromoform	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Bromobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>78-125</i>				



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-18-121517					
Laboratory ID:	12-175-06					
Dichlorodifluoromethane	ND	0.31	EPA 8260C	12-22-17	12-22-17	
Chloromethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Iodomethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroform	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Trichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-18-121517					
Laboratory ID:	12-175-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromoform	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Bromobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>78-125</i>				



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Matrix: Water
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-9-121517					
Laboratory ID:	12-175-07					
Dichlorodifluoromethane	ND	0.31	EPA 8260C	12-22-17	12-22-17	
Chloromethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Iodomethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroform	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Trichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-9-121517					
Laboratory ID:	12-175-07					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromoform	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Bromobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>78-125</i>				



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
 Laboratory Reference: 1712-175
 Project: 1355-001

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1222W1					
Dichlorodifluoromethane	ND	0.31	EPA 8260C	12-22-17	12-22-17	
Chloromethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Iodomethane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chloroform	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Trichloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromomethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-22-17	12-22-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-22-17	12-22-17	



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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:		MB1222W1				
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Bromoform	ND	1.0	EPA 8260C	12-22-17	12-22-17	
Bromobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-22-17	12-22-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-22-17	12-22-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-22-17	12-22-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



Date of Report: December 28, 2017
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 Project: 1355-001

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

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB122W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	11.1	11.0	10.0	10.0	111	110	63-126	1	21	
Benzene	11.2	11.5	10.0	10.0	112	115	78-122	3	19	
Trichloroethene	10.7	11.0	10.0	10.0	107	110	63-120	3	20	
Toluene	11.0	11.9	10.0	10.0	110	119	79-124	8	19	
Chlorobenzene	11.0	11.8	10.0	10.0	110	118	78-120	7	19	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					102	97	75-127			
<i>Toluene-d8</i>					97	101	80-127			
<i>4-Bromofluorobenzene</i>					98	99	78-125			



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
 Laboratory Reference: 1712-175
 Project: 1355-001

**1,2-DIBROMOETHANE (EDB)
 EPA 8011**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-121517					
Laboratory ID:	12-175-01					
EDB	ND	0.0098	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	103	25-143				
Client ID:	MW-2-121517					
Laboratory ID:	12-175-02					
EDB	ND	0.0098	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	100	25-143				
Client ID:	MW-6-121517					
Laboratory ID:	12-175-03					
EDB	ND	0.0098	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	134	25-143				
Client ID:	MW-3-121517					
Laboratory ID:	12-175-04					
EDB	ND	0.0098	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	96	25-143				
Client ID:	MW-8-121517					
Laboratory ID:	12-175-05					
EDB	ND	0.0098	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	100	25-143				
Client ID:	MW-18-121517					
Laboratory ID:	12-175-06					
EDB	ND	0.0096	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	60	25-143				



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
 Laboratory Reference: 1712-175
 Project: 1355-001

**1,2-DIBROMOETHANE (EDB)
 EPA 8011**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-9-121517					
Laboratory ID:	12-175-07					
EDB	ND	0.0097	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>TCMX</i>	123	25-143				



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
 Laboratory Reference: 1712-175
 Project: 1355-001

**1,2-DIBROMOETHANE (EDB)
 EPA 8011
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1227W1					
EDB	ND	0.010	EPA 8011	12-27-17	12-28-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	100	25-143				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB1227W1										
	SB	SBD	SB	SBD		SB	SBD				
EDB	0.0976	0.0976	0.100	0.100	N/A	98	98	72-135	0	10	
<i>Surrogate:</i>											
TCMX						98	102	25-143			





Data Qualifiers and Abbreviations

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





MVA Onsite
Environmental Inc.

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

Chain of Custody

Turnaround Request
 (in working days)

(Check One)

- Same Day 1 Day
 2 Days 3 Days
 Standard (7 Days)
 (TPH analysis 5 Days)

_____ (other)

Laboratory Number: **12-175**

Company: **Farellon**
 Project Number: **1355-001**
 Project Name: **Morningside Acres Tract**
 Project Manager: **J. R. Rouns**
 Sampled by: **AB/SB**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	MW-14-121517	12-15-17	9:35	Water	9
2	MW-2-121517		9:57		9
3	MW-10-121517		10:51		9
4	MW-3-121517		11:15		9
5	MW-8-121517		11:40		8
6	MW-18-121517		11:41		9
7	MW-9-121517		12:43		9
8					
9					
10					

Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C (including EDC)	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
9			X	X		X												
9			X	X														
9			X	X														
9			X	X														
8			X	X														
9			X	X														
9			X	X														

Signature	Company	Date	Time	Comments/Special Instructions
<i>[Signature]</i>	Farellon	12-15-17	14:12	MW-9-121517 should be can lost. Partial bottle collected for MW-8-121517.

Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Reviewed/Date _____

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



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

December 28, 2017

Joe Rounds
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 1712-181

Dear Joe:

Enclosed are the analytical results and associated quality control data for samples submitted on December 15, 2017.

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

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

Sincerely,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: December 28, 2017
Samples Submitted: December 15, 2017
Laboratory Reference: 1712-181
Project: 1355-001

Case Narrative

Samples were collected on December 14, 2017 and received by the laboratory on December 15, 2017. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
 Laboratory Reference: 1712-181
 Project: 1355-001

NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-7-121417					
Laboratory ID:	12-181-01					
Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Toluene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
o-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Gasoline	ND	100	NWTPH-Gx	12-21-17	12-21-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 79 66-114

Client ID: **MW-15-121417**

Laboratory ID:	12-181-02					
Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Toluene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
o-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Gasoline	ND	100	NWTPH-Gx	12-21-17	12-21-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 77 66-114

Client ID: **MW-13-121417**

Laboratory ID:	12-181-03					
Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Toluene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
o-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Gasoline	ND	100	NWTPH-Gx	12-21-17	12-21-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 75 66-114



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
 Laboratory Reference: 1712-181
 Project: 1355-001

NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-12-121417					
Laboratory ID:	12-181-04					
Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Toluene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
o-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Gasoline	ND	100	NWTPH-Gx	12-21-17	12-21-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 74 66-114

Client ID:	MW-4-121417					
Laboratory ID:	12-181-05					
Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Toluene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
o-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Gasoline	ND	100	NWTPH-Gx	12-21-17	12-21-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 73 66-114

Client ID:	MW-19-121417					
Laboratory ID:	12-181-06					
Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Toluene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
o-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Gasoline	ND	100	NWTPH-Gx	12-21-17	12-21-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 70 66-114



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
 Laboratory Reference: 1712-181
 Project: 1355-001

NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11-121417					
Laboratory ID:	12-181-07					
Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Toluene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
o-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Gasoline	ND	100	NWTPH-Gx	12-21-17	12-21-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	77	66-114				
Client ID:	MW-16-121417					
Laboratory ID:	12-181-08					
Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Toluene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
o-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Gasoline	ND	100	NWTPH-Gx	12-21-17	12-21-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	70	66-114				
Client ID:	MW-17-121417					
Laboratory ID:	12-181-09					
Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Toluene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
o-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Gasoline	ND	100	NWTPH-Gx	12-21-17	12-21-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	71	66-114				



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NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DUP-1-121417					
Laboratory ID:	12-181-10					
Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Toluene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
o-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Gasoline	ND	100	NWTPH-Gx	12-21-17	12-21-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 71 66-114

Client ID:	DUP-2-121417					
Laboratory ID:	12-181-11					
Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Toluene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
o-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Gasoline	ND	100	NWTPH-Gx	12-21-17	12-21-17	

Surrogate: *Percent Recovery* *Control Limits*
Fluorobenzene 71 66-114



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**NWTPH-Gx/BTEX
 METHOD BLANK QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB1221W1						
Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Toluene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
o-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Gasoline	ND	100	NWTPH-Gx	12-21-17	12-21-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	75	66-114				
Laboratory ID: MB1221W2						
Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Toluene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Ethyl Benzene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
m,p-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
o-Xylene	ND	1.0	EPA 8021B	12-21-17	12-21-17	
Gasoline	ND	100	NWTPH-Gx	12-21-17	12-21-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	73	66-114				



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**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-181-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
Fluorobenzene				79	87	66-114		
Laboratory ID:	12-181-02							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
Fluorobenzene				77	76	66-114		
SPIKE BLANKS								
Laboratory ID:	SB1221W1							
	SB	SBD	SB	SBD	SB	SBD		
Benzene	43.5	43.2	50.0	50.0	87	86	80-116	1 11
Toluene	48.0	47.6	50.0	50.0	96	95	82-115	1 12
Ethyl Benzene	49.6	49.4	50.0	50.0	99	99	80-117	0 12
m,p-Xylene	49.8	49.5	50.0	50.0	100	99	79-117	1 12
o-Xylene	49.8	49.5	50.0	50.0	100	99	79-117	1 11
<i>Surrogate:</i>								
Fluorobenzene					76	66	66-114	



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NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-7-121417					
Laboratory ID:	12-181-01					
Diesel Range Organics	ND	0.26	NWTPH-Dx	12-20-17	12-20-17	
Lube Oil Range Organics	ND	0.42	NWTPH-Dx	12-20-17	12-20-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	72	50-150				
Client ID:	MW-15-121417					
Laboratory ID:	12-181-02					
Diesel Range Organics	ND	0.29	NWTPH-Dx	12-20-17	12-20-17	
Lube Oil Range Organics	ND	0.47	NWTPH-Dx	12-20-17	12-20-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	75	50-150				
Client ID:	MW-13-121417					
Laboratory ID:	12-181-03					
Diesel Range Organics	ND	0.26	NWTPH-Dx	12-20-17	12-20-17	
Lube Oil Range Organics	ND	0.42	NWTPH-Dx	12-20-17	12-20-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	63	50-150				
Client ID:	MW-12-121417					
Laboratory ID:	12-181-04					
Diesel Range Organics	0.32	0.26	NWTPH-Dx	12-20-17	12-20-17	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	12-20-17	12-20-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	63	50-150				
Client ID:	MW-4-121417					
Laboratory ID:	12-181-05					
Diesel Range Organics	ND	0.25	NWTPH-Dx	12-20-17	12-20-17	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	12-20-17	12-20-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	65	50-150				
Client ID:	MW-19-121417					
Laboratory ID:	12-181-06					
Diesel Range Organics	ND	0.26	NWTPH-Dx	12-20-17	12-20-17	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	12-20-17	12-20-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	72	50-150				



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NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11-121417					
Laboratory ID:	12-181-07					
Diesel Range Organics	ND	0.26	NWTPH-Dx	12-20-17	12-20-17	
Lube Oil Range Organics	ND	0.42	NWTPH-Dx	12-20-17	12-20-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	75	50-150				
Client ID:	MW-16-121417					
Laboratory ID:	12-181-08					
Diesel Range Organics	ND	0.26	NWTPH-Dx	12-20-17	12-20-17	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	12-20-17	12-20-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	73	50-150				
Client ID:	MW-17-121417					
Laboratory ID:	12-181-09					
Diesel Range Organics	ND	0.29	NWTPH-Dx	12-20-17	12-20-17	
Lube Oil Range Organics	ND	0.46	NWTPH-Dx	12-20-17	12-20-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	68	50-150				
Client ID:	DUP-1-121417					
Laboratory ID:	12-181-10					
Diesel Range Organics	ND	0.26	NWTPH-Dx	12-20-17	12-20-17	
Lube Oil Range Organics	ND	0.42	NWTPH-Dx	12-20-17	12-20-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	69	50-150				
Client ID:	DUP-2-121417					
Laboratory ID:	12-181-11					
Diesel Range Organics	ND	0.31	NWTPH-Dx	12-20-17	12-20-17	
Lube Oil Range Organics	ND	0.50	NWTPH-Dx	12-20-17	12-20-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	71	50-150				



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**NWTPH-Dx
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1220W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	12-20-17	12-20-17	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	12-20-17	12-20-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	73	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-181-01							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				72	73	50-150		
Laboratory ID:	12-181-02							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				75	77	50-150		



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-7-121417					
Laboratory ID:	12-181-01					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Chloromethane	ND	5.0	EPA 8260C	12-19-17	12-19-17	
Vinyl Chloride	150	1.0	EPA 8260C	12-19-17	12-19-17	
Bromomethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Chloroethane	ND	5.0	EPA 8260C	12-19-17	12-19-17	
Trichlorofluoromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethene	2.9	1.0	EPA 8260C	12-19-17	12-19-17	
Iodomethane	ND	7.0	EPA 8260C	12-19-17	12-19-17	
Methylene Chloride	ND	5.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,2-Dichloroethene	3.7	1.0	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
2,2-Dichloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
(cis) 1,2-Dichloroethene	140	1.0	EPA 8260C	12-19-17	12-19-17	
Bromochloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Chloroform	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,1,1-Trichloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Carbon Tetrachloride	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloropropene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloroethane	5.1	1.0	EPA 8260C	12-19-17	12-19-17	
Trichloroethene	24	1.0	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloropropane	2.4	1.0	EPA 8260C	12-19-17	12-19-17	
Dibromomethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Bromodichloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
2-Chloroethyl Vinyl Ether	ND	13	EPA 8260C	12-19-17	12-19-17	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260C	12-19-17	12-19-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-7-121417					
Laboratory ID:	12-181-01					
1,1,2-Trichloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Tetrachloroethene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,3-Dichloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Dibromochloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromoethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Chlorobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Bromoform	ND	5.0	EPA 8260C	12-19-17	12-19-17	
Bromobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
2-Chlorotoluene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
4-Chlorotoluene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,3-Dichlorobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,4-Dichlorobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2-Dichlorobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260C	12-19-17	12-19-17	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Hexachlorobutadiene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-15-121417					
Laboratory ID:	12-181-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Iodomethane	ND	1.4	EPA 8260C	12-19-17	12-19-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroform	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Trichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chloroethyl Vinyl Ether	ND	2.6	EPA 8260C	12-19-17	12-19-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-15-121417					
Laboratory ID:	12-181-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromoform	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Bromobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>107</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-13-121417					
Laboratory ID:	12-181-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Iodomethane	ND	1.4	EPA 8260C	12-19-17	12-19-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroform	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Trichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chloroethyl Vinyl Ether	ND	2.6	EPA 8260C	12-19-17	12-19-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-13-121417					
Laboratory ID:	12-181-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromoform	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Bromobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>110</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-12-121417					
Laboratory ID:	12-181-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Vinyl Chloride	11	0.20	EPA 8260C	12-19-17	12-19-17	
Bromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethene	0.72	0.20	EPA 8260C	12-19-17	12-19-17	
Iodomethane	ND	1.4	EPA 8260C	12-19-17	12-19-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,2-Dichloroethene	2.7	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(cis) 1,2-Dichloroethene	29	0.20	EPA 8260C	12-19-17	12-19-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroform	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloroethane	0.57	0.20	EPA 8260C	12-19-17	12-19-17	
Trichloroethene	23	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloropropane	0.52	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chloroethyl Vinyl Ether	ND	2.6	EPA 8260C	12-19-17	12-19-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-12-121417					
Laboratory ID:	12-181-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromoform	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Bromobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4-121417					
Laboratory ID:	12-181-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Vinyl Chloride	1.5	0.20	EPA 8260C	12-19-17	12-19-17	
Bromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Iodomethane	ND	1.4	EPA 8260C	12-19-17	12-19-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(cis) 1,2-Dichloroethene	0.71	0.20	EPA 8260C	12-19-17	12-19-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroform	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Trichloroethene	0.31	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chloroethyl Vinyl Ether	ND	2.6	EPA 8260C	12-19-17	12-19-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4-121417					
Laboratory ID:	12-181-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromoform	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Bromobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>111</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>78-125</i>				



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Matrix: Water
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-121417					
Laboratory ID:	12-181-06					
Dichlorodifluoromethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
Chloromethane	ND	2.0	EPA 8260C	12-19-17	12-19-17	
Vinyl Chloride	41	0.40	EPA 8260C	12-19-17	12-19-17	
Bromomethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
Chloroethane	ND	2.0	EPA 8260C	12-19-17	12-19-17	
Trichlorofluoromethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethene	0.72	0.40	EPA 8260C	12-19-17	12-19-17	
Iodomethane	ND	2.8	EPA 8260C	12-19-17	12-19-17	
Methylene Chloride	ND	2.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,2-Dichloroethene	2.7	0.40	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
2,2-Dichloropropane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
(cis) 1,2-Dichloroethene	19	0.40	EPA 8260C	12-19-17	12-19-17	
Bromochloromethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
Chloroform	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,1,1-Trichloroethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
Carbon Tetrachloride	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloropropene	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloroethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
Trichloroethene	6.6	0.40	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloropropane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
Dibromomethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
Bromodichloromethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
2-Chloroethyl Vinyl Ether	ND	5.2	EPA 8260C	12-19-17	12-19-17	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260C	12-19-17	12-19-17	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260C	12-19-17	12-19-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-121417					
Laboratory ID:	12-181-06					
1,1,2-Trichloroethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
Tetrachloroethene	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,3-Dichloropropane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
Dibromochloromethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromoethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
Chlorobenzene	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
Bromoform	ND	2.0	EPA 8260C	12-19-17	12-19-17	
Bromobenzene	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichloropropane	ND	0.40	EPA 8260C	12-19-17	12-19-17	
2-Chlorotoluene	ND	0.40	EPA 8260C	12-19-17	12-19-17	
4-Chlorotoluene	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,3-Dichlorobenzene	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,4-Dichlorobenzene	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,2-Dichlorobenzene	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260C	12-19-17	12-19-17	
1,2,4-Trichlorobenzene	ND	0.40	EPA 8260C	12-19-17	12-19-17	
Hexachlorobutadiene	ND	0.40	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260C	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11-121417					
Laboratory ID:	12-181-07					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Iodomethane	ND	1.4	EPA 8260C	12-19-17	12-19-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(cis) 1,2-Dichloroethene	0.73	0.20	EPA 8260C	12-19-17	12-19-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroform	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Trichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chloroethyl Vinyl Ether	ND	2.6	EPA 8260C	12-19-17	12-19-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11-121417					
Laboratory ID:	12-181-07					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromoform	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Bromobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>109</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-16-121417					
Laboratory ID:	12-181-08					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Vinyl Chloride	8.1	0.20	EPA 8260C	12-19-17	12-19-17	
Bromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethene	0.55	0.20	EPA 8260C	12-19-17	12-19-17	
Iodomethane	ND	1.4	EPA 8260C	12-19-17	12-19-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,2-Dichloroethene	7.2	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(cis) 1,2-Dichloroethene	30	0.20	EPA 8260C	12-19-17	12-19-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroform	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Trichloroethene	1.7	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chloroethyl Vinyl Ether	ND	2.6	EPA 8260C	12-19-17	12-19-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-16-121417					
Laboratory ID:	12-181-08					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromoform	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Bromobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-17-121417					
Laboratory ID:	12-181-09					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Vinyl Chloride	23	0.20	EPA 8260C	12-19-17	12-19-17	
Bromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroethane	8.0	1.0	EPA 8260C	12-19-17	12-19-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethene	0.92	0.20	EPA 8260C	12-19-17	12-19-17	
Iodomethane	ND	1.4	EPA 8260C	12-19-17	12-19-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,2-Dichloroethene	8.4	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(cis) 1,2-Dichloroethene	23	0.20	EPA 8260C	12-19-17	12-19-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroform	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloroethane	0.31	0.20	EPA 8260C	12-19-17	12-19-17	
Trichloroethene	18	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloropropane	0.32	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chloroethyl Vinyl Ether	ND	2.6	EPA 8260C	12-19-17	12-19-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-17-121417					
Laboratory ID:	12-181-09					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromoform	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Bromobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DUP-1-121417					
Laboratory ID:	12-181-10					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Chloromethane	ND	5.0	EPA 8260C	12-19-17	12-19-17	
Vinyl Chloride	140	1.0	EPA 8260C	12-19-17	12-19-17	
Bromomethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Chloroethane	ND	5.0	EPA 8260C	12-19-17	12-19-17	
Trichlorofluoromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethene	2.7	1.0	EPA 8260C	12-19-17	12-19-17	
Iodomethane	ND	7.0	EPA 8260C	12-19-17	12-19-17	
Methylene Chloride	ND	5.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,2-Dichloroethene	3.5	1.0	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
2,2-Dichloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
(cis) 1,2-Dichloroethene	140	1.0	EPA 8260C	12-19-17	12-19-17	
Bromochloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Chloroform	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,1,1-Trichloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Carbon Tetrachloride	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloropropene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloroethane	5.0	1.0	EPA 8260C	12-19-17	12-19-17	
Trichloroethene	24	1.0	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloropropane	2.3	1.0	EPA 8260C	12-19-17	12-19-17	
Dibromomethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Bromodichloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
2-Chloroethyl Vinyl Ether	ND	13	EPA 8260C	12-19-17	12-19-17	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260C	12-19-17	12-19-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DUP-1-121417					
Laboratory ID:	12-181-10					
1,1,2-Trichloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Tetrachloroethene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,3-Dichloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Dibromochloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromoethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Chlorobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Bromoform	ND	5.0	EPA 8260C	12-19-17	12-19-17	
Bromobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
2-Chlorotoluene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
4-Chlorotoluene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,3-Dichlorobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,4-Dichlorobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2-Dichlorobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260C	12-19-17	12-19-17	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Hexachlorobutadiene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260C	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DUP-2-121417					
Laboratory ID:	12-181-11					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Vinyl Chloride	22	0.20	EPA 8260C	12-19-17	12-19-17	
Bromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroethane	7.9	1.0	EPA 8260C	12-19-17	12-19-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethene	0.89	0.20	EPA 8260C	12-19-17	12-19-17	
Iodomethane	ND	1.4	EPA 8260C	12-19-17	12-19-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,2-Dichloroethene	8.3	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(cis) 1,2-Dichloroethene	23	0.20	EPA 8260C	12-19-17	12-19-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroform	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloroethane	0.31	0.20	EPA 8260C	12-19-17	12-19-17	
Trichloroethene	17	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloropropane	0.29	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chloroethyl Vinyl Ether	ND	2.6	EPA 8260C	12-19-17	12-19-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	



Date of Report: December 28, 2017
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 Project: 1355-001

VOLATILES EPA 8260C
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DUP-2-121417					
Laboratory ID:	12-181-11					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromoform	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Bromobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>78-125</i>				



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1219W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloromethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroethane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Iodomethane	ND	1.4	EPA 8260C	12-19-17	12-19-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-19-17	12-19-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chloroform	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Trichloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromomethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chloroethyl Vinyl Ether	ND	2.6	EPA 8260C	12-19-17	12-19-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-19-17	12-19-17	



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:		MB1219W1				
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Bromoform	ND	1.0	EPA 8260C	12-19-17	12-19-17	
Bromobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-19-17	12-19-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-19-17	12-19-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-19-17	12-19-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>107</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>78-125</i>				



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
 Laboratory Reference: 1712-181
 Project: 1355-001

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

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB1219W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	8.29	7.74	10.0	10.0	83	77	63-126	7	21	
Benzene	9.64	9.17	10.0	10.0	96	92	78-122	5	19	
Trichloroethene	8.99	8.53	10.0	10.0	90	85	63-120	5	20	
Toluene	10.1	9.34	10.0	10.0	101	93	79-124	8	19	
Chlorobenzene	9.68	9.07	10.0	10.0	97	91	78-120	7	19	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					103	106	75-127			
<i>Toluene-d8</i>					101	100	80-127			
<i>4-Bromofluorobenzene</i>					95	94	78-125			



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
 Laboratory Reference: 1712-181
 Project: 1355-001

**1,2-DIBROMOETHANE (EDB)
 EPA 8011**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-7-121417					
Laboratory ID:	12-181-01					
EDB	ND	0.0098	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	68	25-143				
Client ID:	MW-15-121417					
Laboratory ID:	12-181-02					
EDB	ND	0.0097	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	67	25-143				
Client ID:	MW-13-121417					
Laboratory ID:	12-181-03					
EDB	ND	0.0096	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	47	25-143				
Client ID:	MW-12-121417					
Laboratory ID:	12-181-04					
EDB	ND	0.0096	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	63	25-143				
Client ID:	MW-4-121417					
Laboratory ID:	12-181-05					
EDB	ND	0.0098	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	69	25-143				
Client ID:	MW-19-121417					
Laboratory ID:	12-181-06					
EDB	ND	0.0097	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	45	25-143				



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
 Laboratory Reference: 1712-181
 Project: 1355-001

**1,2-DIBROMOETHANE (EDB)
 EPA 8011**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11-121417					
Laboratory ID:	12-181-07					
EDB	ND	0.0098	EPA 8011	12-27-17	12-27-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	78	25-143				
Client ID:	MW-16-121417					
Laboratory ID:	12-181-08					
EDB	ND	0.0097	EPA 8011	12-27-17	12-28-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	64	25-143				
Client ID:	MW-17-121417					
Laboratory ID:	12-181-09					
EDB	ND	0.0097	EPA 8011	12-27-17	12-28-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	65	25-143				
Client ID:	DUP-1-121417					
Laboratory ID:	12-181-10					
EDB	ND	0.0096	EPA 8011	12-27-17	12-28-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	68	25-143				
Client ID:	DUP-2-121417					
Laboratory ID:	12-181-11					
EDB	ND	0.0096	EPA 8011	12-27-17	12-28-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	69	25-143				



Date of Report: December 28, 2017
 Samples Submitted: December 15, 2017
 Laboratory Reference: 1712-181
 Project: 1355-001

**1,2-DIBROMOETHANE (EDB)
 EPA 8011
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1227W1					
EDB	ND	0.010	EPA 8011	12-27-17	12-28-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	100	25-143				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB1227W1										
	SB	SBD	SB	SBD		SB	SBD				
EDB	0.0976	0.0976	0.100	0.100	N/A	98	98	72-135	0	10	
<i>Surrogate:</i>											
TCMX						98	102	25-143			





Data Qualifiers and Abbreviations

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





MVA OnSite
Environmental Inc.

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

Chain of Custody

Turnaround Request
 (in working days)

(Check One)

- Same Day 1 Day
 2 Days 3 Days
 Standard (7 Days)
 (1PPH analysis 5 Days)

_____ (other)

Number of Containers

Laboratory Number:

12-181

NWTPH-HCID	
NWTPH-Gx/BTEX	
NWTPH-Gx	X
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	X
Volatiles 8260C	1000
Halogenated Volatiles 8260C (including EDC)	X
EDB EPA 8011 (Waters Only)	
Semivolatiles 8270D/SIM (with low-level PAHs)	
PAHs 8270D/SIM (low-level)	
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals	
Total MTCA Metals	
TCLP Metals	
HEM (oil and grease) 1664A	
BTEX by 8024B	X
EDB	X
% Moisture	

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix
1	MW-7-121417	12-14-17	11:43	Water
2	MW-15-121417	12/14		
3	MW-13-121417	13/10		
4	MW-12-121417	13:55		
5	MW-4-121417	13:55		
6	MW-19-121417	14:45		
7	MW-11-121417	15:10		
8	MW-10-121417	15:20		
9	MW-17-121417	15:55		
10	DUP-1-121417	12:00		

Comments/Special Instructions

Received	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		Forceful	12-14-17	18:22	
Received		Forceful	12/15/17	1800	
Relinquished					
Received					
Relinquished					
Received					
Relinquished					
Received					
Relinquished					
Reviewed/Date					

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

April 23, 2018

Joe Rounds
Farallon Consulting
1809 7th Ave., Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 1804-152

Dear Joe:

Enclosed are the analytical results and associated quality control data for samples submitted on April 13, 2018.

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

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

Sincerely,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: April 23, 2018
Samples Submitted: April 13, 2018
Laboratory Reference: 1804-152
Project: 1355-001

Case Narrative

Samples were collected on April 13, 2018 and received by the laboratory on April 13, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: April 23, 2018
 Samples Submitted: April 13, 2018
 Laboratory Reference: 1804-152
 Project: 1355-001

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-20-10.0					
Laboratory ID:	04-152-02					
Benzene	ND	0.020	EPA 8021B	4-19-18	4-19-18	
Toluene	ND	0.077	EPA 8021B	4-19-18	4-19-18	
Ethyl Benzene	ND	0.077	EPA 8021B	4-19-18	4-19-18	
m,p-Xylene	ND	0.077	EPA 8021B	4-19-18	4-19-18	
o-Xylene	ND	0.077	EPA 8021B	4-19-18	4-19-18	
Gasoline	ND	7.7	NWTPH-Gx	4-19-18	4-19-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>104</i>	<i>66-130</i>				
Client ID:	FB-20-13.0					
Laboratory ID:	04-152-03					
Benzene	ND	0.020	EPA 8021B	4-19-18	4-19-18	
Toluene	ND	0.078	EPA 8021B	4-19-18	4-19-18	
Ethyl Benzene	ND	0.078	EPA 8021B	4-19-18	4-19-18	
m,p-Xylene	ND	0.078	EPA 8021B	4-19-18	4-19-18	
o-Xylene	ND	0.078	EPA 8021B	4-19-18	4-19-18	
Gasoline	ND	7.8	NWTPH-Gx	4-19-18	4-19-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>95</i>	<i>66-130</i>				



Date of Report: April 23, 2018
 Samples Submitted: April 13, 2018
 Laboratory Reference: 1804-152
 Project: 1355-001

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0419S1					
Benzene	ND	0.020	EPA 8021B	4-19-18	4-19-18	
Toluene	ND	0.050	EPA 8021B	4-19-18	4-19-18	
Ethyl Benzene	ND	0.050	EPA 8021B	4-19-18	4-19-18	
m,p-Xylene	ND	0.050	EPA 8021B	4-19-18	4-19-18	
o-Xylene	ND	0.050	EPA 8021B	4-19-18	4-19-18	
Gasoline	ND	5.0	NWTPH-Gx	4-19-18	4-19-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	94	66-130				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-182-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				96	98	66-130		

SPIKE BLANKS

Laboratory ID:	SB0419S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.934	0.971	1.00	1.00	93	97	70-120	4	11
Toluene	0.953	0.988	1.00	1.00	95	99	73-121	4	14
Ethyl Benzene	0.963	1.00	1.00	1.00	96	100	74-121	4	11
m,p-Xylene	0.941	0.977	1.00	1.00	94	98	75-124	4	13
o-Xylene	0.947	0.975	1.00	1.00	95	98	75-121	3	12
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					90	92	66-130		



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 Laboratory Reference: 1804-152
 Project: 1355-001

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-20-10.0					
Laboratory ID:	04-152-02					
Diesel Range Organics	ND	31	NWTPH-Dx	4-18-18	4-18-18	
Lube Oil Range Organics	ND	63	NWTPH-Dx	4-18-18	4-18-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	67	50-150				
Client ID:	FB-20-13.0					
Laboratory ID:	04-152-03					
Diesel Range Organics	ND	32	NWTPH-Dx	4-18-18	4-18-18	
Lube Oil Range Organics	63	63	NWTPH-Dx	4-18-18	4-18-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	63	50-150				



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**NWTPH-Dx
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0418S2					
Diesel Range Organics	ND	25	NWTPH-Dx	4-18-18	4-18-18	
Lube Oil Range Organics	ND	50	NWTPH-Dx	4-18-18	4-18-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>101</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-152-03							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range Organics	50.2	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				63	69	50-150		



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 Samples Submitted: April 13, 2018
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 Project: 1355-001

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-20-10.0					
Laboratory ID:	04-152-02					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Chloromethane	ND	0.0064	EPA 8260C	4-18-18	4-18-18	
Vinyl Chloride	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Bromomethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Chloroethane	ND	0.0084	EPA 8260C	4-18-18	4-18-18	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Iodomethane	ND	0.0082	EPA 8260C	4-18-18	4-18-18	
Methylene Chloride	ND	0.0080	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Bromochloromethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Chloroform	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Dibromomethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Bromodichloromethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
2-Chloroethyl Vinyl Ether	ND	0.0064	EPA 8260C	4-18-18	4-18-18	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-20-10.0					
Laboratory ID:	04-152-02					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Dibromochloromethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Chlorobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Bromoform	ND	0.0064	EPA 8260C	4-18-18	4-18-18	
Bromobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
2-Chlorotoluene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
4-Chlorotoluene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,2-Dibromo-3-chloropropane	ND	0.0064	EPA 8260C	4-18-18	4-18-18	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Hexachlorobutadiene	ND	0.0064	EPA 8260C	4-18-18	4-18-18	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>75-131</i>				
<i>Toluene-d8</i>	<i>91</i>	<i>83-130</i>				
<i>4-Bromofluorobenzene</i>	<i>82</i>	<i>78-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-20-13.0					
Laboratory ID:	04-152-03					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Chloromethane	ND	0.0064	EPA 8260C	4-18-18	4-18-18	
Vinyl Chloride	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Bromomethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Chloroethane	ND	0.0085	EPA 8260C	4-18-18	4-18-18	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Iodomethane	ND	0.0082	EPA 8260C	4-18-18	4-18-18	
Methylene Chloride	ND	0.0081	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Bromochloromethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Chloroform	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Dibromomethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Bromodichloromethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
2-Chloroethyl Vinyl Ether	ND	0.0064	EPA 8260C	4-18-18	4-18-18	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-20-13.0					
Laboratory ID:	04-152-03					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Dibromochloromethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Chlorobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Bromoform	ND	0.0064	EPA 8260C	4-18-18	4-18-18	
Bromobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
2-Chlorotoluene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
4-Chlorotoluene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
1,2-Dibromo-3-chloropropane	ND	0.0064	EPA 8260C	4-18-18	4-18-18	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
Hexachlorobutadiene	ND	0.0064	EPA 8260C	4-18-18	4-18-18	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	4-18-18	4-18-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>75-131</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>83-130</i>				
<i>4-Bromofluorobenzene</i>	<i>86</i>	<i>78-130</i>				



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

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0418S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Chloromethane	ND	0.0050	EPA 8260C	4-18-18	4-18-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Bromomethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Chloroethane	ND	0.0066	EPA 8260C	4-18-18	4-18-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Iodomethane	ND	0.0064	EPA 8260C	4-18-18	4-18-18	
Methylene Chloride	ND	0.0063	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Bromochloromethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Chloroform	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Dibromomethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	4-18-18	4-18-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	



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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0418S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Chlorobenzene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Bromoform	ND	0.0050	EPA 8260C	4-18-18	4-18-18	
Bromobenzene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	4-18-18	4-18-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	4-18-18	4-18-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	4-18-18	4-18-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-131</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>83-130</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-130</i>				



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 Project: 1355-001

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

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0418S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0446	0.0378	0.0500	0.0500	89	76	58-126	17	20	
Benzene	0.0460	0.0401	0.0500	0.0500	92	80	72-122	14	19	
Trichloroethene	0.0453	0.0405	0.0500	0.0500	91	81	75-120	11	20	
Toluene	0.0453	0.0401	0.0500	0.0500	91	80	78-123	12	19	
Chlorobenzene	0.0431	0.0376	0.0500	0.0500	86	75	75-120	14	18	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					<i>101</i>	<i>103</i>	<i>75-131</i>			
<i>Toluene-d8</i>					<i>102</i>	<i>104</i>	<i>83-130</i>			
<i>4-Bromofluorobenzene</i>					<i>99</i>	<i>100</i>	<i>78-130</i>			



Date of Report: April 23, 2018
Samples Submitted: April 13, 2018
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Project: 1355-001

% MOISTURE

Date Analyzed: 4-18-18

Client ID	Lab ID	% Moisture
FB-20-10.0	04-152-02	20
FB-20-13.0	04-152-03	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 method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





Mn OnSite Environmental Inc.

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

Chain of Custody

Turnaround Request (in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)
(TPH analysis 5 Days)

_____ (other)

Laboratory Number: 04-152

Company: Farallon
 Project Number: 1355-001
 Project Name: Morningside Acres
 Project Manager: Joe Rounds
 Sampled by: Ryan Ostrom

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	FB-20-5.0	4/13/18	1200	Soil	5
2	FB-20-10.0		120		
3	FB-20-13.0		1215		

Lab ID	Sample Identification	Date	Time	Analysis
1	FB-20-5.0	4/13/18	1435	NWTPH-HCID
1	FB-20-5.0	4/13/18	1435	NWTPH-Gx/BTEX
1	FB-20-5.0	4/13/18	1435	NWTPH-Gx
1	FB-20-5.0	4/13/18	1435	NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)
1	FB-20-5.0	4/13/18	1435	Volatiles 8260C
1	FB-20-5.0	4/13/18	1435	Halogenated Volatiles 8260C
1	FB-20-5.0	4/13/18	1435	EDB EPA 8011 (Waters Only)
1	FB-20-5.0	4/13/18	1435	Semivolatiles 8270D/SIM (with low-level PAHs)
1	FB-20-5.0	4/13/18	1435	PAHs 8270D/SIM (low-level)
1	FB-20-5.0	4/13/18	1435	PCBs 8082A
1	FB-20-5.0	4/13/18	1435	Organochlorine Pesticides 8081B
1	FB-20-5.0	4/13/18	1435	Organophosphorus Pesticides 8270D/SIM
1	FB-20-5.0	4/13/18	1435	Chlorinated Acid Herbicides 8151A
1	FB-20-5.0	4/13/18	1435	Total RCRA Metals
1	FB-20-5.0	4/13/18	1435	Total MTCA Metals
1	FB-20-5.0	4/13/18	1435	TCLP Metals
1	FB-20-5.0	4/13/18	1435	HEM (oil and grease) 1664A
1	FB-20-5.0	4/13/18	1435	% Moisture

Signature	Company	Date	Time	Comments/Special Instructions
<u>Ryan Ostrom</u>	<u>Farallon</u>	<u>4/13/18</u>	<u>1435</u>	<u>Request Hold - PAH will call for analysis</u>
<u>Michelle Ostrom</u>	<u>OSE</u>	<u>4/13/18</u>	<u>1435</u>	<u>- Added 4/17/18. DR (STAR)</u>

Relinquished _____
 Received _____
 Relinquished _____
 Received _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

May 18, 2018

Joe Rounds
Farallon Consulting
1809 7th Ave., Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 1805-083

Dear Joe:

Enclosed are the analytical results and associated quality control data for samples submitted on May 9, 2018.

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

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

Sincerely,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: May 18, 2018
Samples Submitted: May 9, 2018
Laboratory Reference: 1805-083
Project: 1355-001

Case Narrative

Samples were collected on May 8, 2018 and received by the laboratory on May 9, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: May 18, 2018
 Samples Submitted: May 9, 2018
 Laboratory Reference: 1805-083
 Project: 1355-001

NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-15.0					
Laboratory ID:	05-083-01					
Gasoline	ND	6.9	NWTPH-Gx	5-17-18	5-17-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>91</i>	<i>57-129</i>				
Client ID:	MW-20-20.0					
Laboratory ID:	05-083-02					
Gasoline	ND	6.9	NWTPH-Gx	5-17-18	5-17-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>102</i>	<i>57-129</i>				



Date of Report: May 18, 2018
 Samples Submitted: May 9, 2018
 Laboratory Reference: 1805-083
 Project: 1355-001

**NWTPH-Gx
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0517S1					
Gasoline	ND	5.0	NWTPH-Gx	5-17-18	5-17-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	86	57-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	05-083-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				91	95	57-129		



Date of Report: May 18, 2018
 Samples Submitted: May 9, 2018
 Laboratory Reference: 1805-083
 Project: 1355-001

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-15.0					
Laboratory ID:	05-083-01					
Diesel Range Organics	ND	32	NWTPH-Dx	5-16-18	5-16-18	
Lube Oil Range Organics	ND	64	NWTPH-Dx	5-16-18	5-16-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	90	50-150				
Client ID:	MW-20-20.0					
Laboratory ID:	05-083-02					
Diesel Range Organics	ND	33	NWTPH-Dx	5-16-18	5-16-18	
Lube Oil Range Organics	ND	66	NWTPH-Dx	5-16-18	5-16-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	81	50-150				



Date of Report: May 18, 2018
 Samples Submitted: May 9, 2018
 Laboratory Reference: 1805-083
 Project: 1355-001

**NWTPH-Dx
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0516S1					
Diesel Range Organics	ND	25	NWTPH-Dx	5-16-18	5-16-18	
Lube Oil Range Organics	ND	50	NWTPH-Dx	5-16-18	5-16-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	103	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	05-083-01							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				90	76	50-150		



Date of Report: May 18, 2018
 Samples Submitted: May 9, 2018
 Laboratory Reference: 1805-083
 Project: 1355-001

VOLATILES EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-15.0					
Laboratory ID:	05-083-01					
Dichlorodifluoromethane	ND	0.0017	EPA 8260C	5-16-18	5-16-18	
Chloromethane	ND	0.0060	EPA 8260C	5-16-18	5-16-18	
Vinyl Chloride	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Bromomethane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Chloroethane	ND	0.0060	EPA 8260C	5-16-18	5-16-18	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Iodomethane	ND	0.0060	EPA 8260C	5-16-18	5-16-18	
Methylene Chloride	ND	0.0060	EPA 8260C	5-16-18	5-16-18	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Bromochloromethane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Chloroform	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Benzene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Trichloroethene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Dibromomethane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Bromodichloromethane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
2-Chloroethyl Vinyl Ether	ND	0.0060	EPA 8260C	5-16-18	5-16-18	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Toluene	ND	0.0060	EPA 8260C	5-16-18	5-16-18	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	



Date of Report: May 18, 2018
 Samples Submitted: May 9, 2018
 Laboratory Reference: 1805-083
 Project: 1355-001

VOLATILES EPA 8260C
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-15.0					
Laboratory ID:	05-083-01					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Tetrachloroethene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Dibromochloromethane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Chlorobenzene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Ethylbenzene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
m,p-Xylene	ND	0.0060	EPA 8260C	5-16-18	5-16-18	
o-Xylene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Bromoform	ND	0.0060	EPA 8260C	5-16-18	5-16-18	
Bromobenzene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
2-Chlorotoluene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
4-Chlorotoluene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
1,2-Dibromo-3-chloropropane	ND	0.0060	EPA 8260C	5-16-18	5-16-18	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
Hexachlorobutadiene	ND	0.0060	EPA 8260C	5-16-18	5-16-18	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	5-16-18	5-16-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>115</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>113</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>110</i>	<i>71-132</i>				



Date of Report: May 18, 2018
 Samples Submitted: May 9, 2018
 Laboratory Reference: 1805-083
 Project: 1355-001

VOLATILES EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-20.0					
Laboratory ID:	05-083-02					
Dichlorodifluoromethane	ND	0.0015	EPA 8260C	5-16-18	5-16-18	
Chloromethane	ND	0.0054	EPA 8260C	5-16-18	5-16-18	
Vinyl Chloride	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Bromomethane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Chloroethane	ND	0.0054	EPA 8260C	5-16-18	5-16-18	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Iodomethane	ND	0.0054	EPA 8260C	5-16-18	5-16-18	
Methylene Chloride	ND	0.0054	EPA 8260C	5-16-18	5-16-18	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Bromochloromethane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Chloroform	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Benzene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Trichloroethene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Dibromomethane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Bromodichloromethane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
2-Chloroethyl Vinyl Ether	ND	0.0054	EPA 8260C	5-16-18	5-16-18	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Toluene	ND	0.0054	EPA 8260C	5-16-18	5-16-18	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	



Date of Report: May 18, 2018
 Samples Submitted: May 9, 2018
 Laboratory Reference: 1805-083
 Project: 1355-001

VOLATILES EPA 8260C
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-20.0					
Laboratory ID:	05-083-02					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Tetrachloroethene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Dibromochloromethane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Chlorobenzene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Ethylbenzene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
m,p-Xylene	ND	0.0054	EPA 8260C	5-16-18	5-16-18	
o-Xylene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Bromoform	ND	0.0054	EPA 8260C	5-16-18	5-16-18	
Bromobenzene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
2-Chlorotoluene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
4-Chlorotoluene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
1,2-Dibromo-3-chloropropane	ND	0.0054	EPA 8260C	5-16-18	5-16-18	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
Hexachlorobutadiene	ND	0.0054	EPA 8260C	5-16-18	5-16-18	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	5-16-18	5-16-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>111</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>116</i>	<i>71-132</i>				



Date of Report: May 18, 2018
 Samples Submitted: May 9, 2018
 Laboratory Reference: 1805-083
 Project: 1355-001

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

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0516S1					
Dichlorodifluoromethane	ND	0.0014	EPA 8260C	5-16-18	5-16-18	
Chloromethane	ND	0.0050	EPA 8260C	5-16-18	5-16-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Bromomethane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Chloroethane	ND	0.0050	EPA 8260C	5-16-18	5-16-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Iodomethane	ND	0.0050	EPA 8260C	5-16-18	5-16-18	
Methylene Chloride	ND	0.0050	EPA 8260C	5-16-18	5-16-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Bromochloromethane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Chloroform	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Benzene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Trichloroethene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Dibromomethane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	5-16-18	5-16-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Toluene	ND	0.0050	EPA 8260C	5-16-18	5-16-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	



Date of Report: May 18, 2018
 Samples Submitted: May 9, 2018
 Laboratory Reference: 1805-083
 Project: 1355-001

VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTRON
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0516S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Chlorobenzene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Ethylbenzene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
m,p-Xylene	ND	0.0050	EPA 8260C	5-16-18	5-16-18	
o-Xylene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Bromoform	ND	0.0050	EPA 8260C	5-16-18	5-16-18	
Bromobenzene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	5-16-18	5-16-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	5-16-18	5-16-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	5-16-18	5-16-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>112</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>119</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>123</i>	<i>71-132</i>				



Date of Report: May 18, 2018
 Samples Submitted: May 9, 2018
 Laboratory Reference: 1805-083
 Project: 1355-001

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

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0516S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0508	0.0499	0.0500	0.0500	102	100	53-141	2	17	
Benzene	0.0507	0.0500	0.0500	0.0500	101	100	70-130	1	15	
Trichloroethene	0.0463	0.0456	0.0500	0.0500	93	91	74-122	2	16	
Toluene	0.0488	0.0485	0.0500	0.0500	98	97	76-130	1	15	
Chlorobenzene	0.0449	0.0431	0.0500	0.0500	90	86	75-120	4	14	
<i>Surrogate:</i>										
Dibromofluoromethane					98	94	68-139			
Toluene-d8					95	95	79-128			
4-Bromofluorobenzene					102	100	71-132			



Date of Report: May 18, 2018
Samples Submitted: May 9, 2018
Laboratory Reference: 1805-083
Project: 1355-001

% MOISTURE

Date Analyzed: 5-16-18

Client ID	Lab ID	% Moisture
MW-20-15.0	05-083-01	22
MW-20-20.0	05-083-02	24





Data Qualifiers and Abbreviations

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





OnSite Environmental Inc.

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

Chain of Custody

Turnaround Request (in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days) (TPH analysis 5 Days)

(other) _____

Laboratory Number: 05-083

Company: Ferallon

Project Number: 1355-001

Project Name: Morning Side Acres

Project Manager: Joe Rounds

Sampled by: NT

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	MW-20-15.0	5/8/18	0911	Soil	5
2	MW-20-20.0		0927	Soil	5
3	MW-20-25.0		1010	Soil	5

Analysis	1	2	3
NWTPH-HCID			
NWTPH-Gx/BTEX			
NWTPH-Gx	(X)	(X)	
NWTPH-Dx <input type="checkbox"/> Acid / SG Clean-up)	(X)	(X)	
Volatiles 8260C			
Halogenated Volatiles 8260C + BTEX	(X)	(X)	
EDB EPA 8011 (Waters Only)			
Semivolatiles 8270D/SIM (with low-level PAHs)			
PAHs 8270D/SIM (low-level)			
PCBs 8082A			
Organochlorine Pesticides 8081B			
Organophosphorus Pesticides 8270D/SIM			
Chlorinated Acid Herbicides 8151A			
Total RCRA Metals			
Total MTCA Metals			
TCLP Metals			
HEM (oil and grease) 1664A			
% Moisture	(X)	(X)	

Signature	Company	Date	Time	Comments/Special Instructions
<i>[Signature]</i>	Ferallon	5/9/18	11:25	
<i>[Signature]</i>	Alpha	5/9/18	11:05	
<i>[Signature]</i>	Alpha	5/9/18	11:55	
<i>[Signature]</i>	Alpha	5/9/18	11:55	

Relinquished: *[Signature]*

Received: *[Signature]*

Relinquished: *[Signature]*

Received: *[Signature]*

Relinquished: *[Signature]*

Received: *[Signature]*

Reviewed/Date: _____

Reviewed/Date: _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)

Hold all samples. Will call for analysis. Added 5/15/18 DB (STA)

HOLD



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

May 18, 2018

Joe Rounds
Farallon Consulting
1809 7th Ave., Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 1805-106

Dear Joe:

Enclosed are the analytical results and associated quality control data for samples submitted on May 10, 2018.

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

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

Sincerely,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: May 18, 2018
Samples Submitted: May 10, 2018
Laboratory Reference: 1805-106
Project: 1355-001

Case Narrative

Samples were collected on May 10 2018 and received by the laboratory on May 10, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: May 18, 2018
 Samples Submitted: May 10, 2018
 Laboratory Reference: 1805-106
 Project: 1355-001

NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-051018					
Laboratory ID:	05-106-01					
Gasoline	ND	100	NWTPH-Gx	5-15-18	5-15-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	85	66-117				



Date of Report: May 18, 2018
 Samples Submitted: May 10, 2018
 Laboratory Reference: 1805-106
 Project: 1355-001

**NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0515W1					
Gasoline	ND	100	NWTPH-Gx	5-15-18	5-15-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	85	66-117				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	05-110-02							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				88	86	66-117		



Date of Report: May 18, 2018
 Samples Submitted: May 10, 2018
 Laboratory Reference: 1805-106
 Project: 1355-001

NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-051018					
Laboratory ID:	05-106-01					
Diesel Range Organics	ND	0.26	NWTPH-Dx	5-11-18	5-14-18	
Lube Oil Range Organics	ND	0.42	NWTPH-Dx	5-11-18	5-14-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				



Date of Report: May 18, 2018
 Samples Submitted: May 10, 2018
 Laboratory Reference: 1805-106
 Project: 1355-001

**NWTPH-Dx
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0511W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	5-11-18	5-14-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	5-11-18	5-14-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>88</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	05-106-01							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				92	85	50-150		



Date of Report: May 18, 2018
 Samples Submitted: May 10, 2018
 Laboratory Reference: 1805-106
 Project: 1355-001

VOLATILES EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-051018					
Laboratory ID:	05-106-01					
Dichlorodifluoromethane	ND	0.28	EPA 8260C	5-10-18	5-10-18	
Chloromethane	ND	1.6	EPA 8260C	5-10-18	5-10-18	
Vinyl Chloride	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Bromomethane	ND	0.38	EPA 8260C	5-10-18	5-10-18	
Chloroethane	ND	1.0	EPA 8260C	5-10-18	5-10-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Iodomethane	ND	1.9	EPA 8260C	5-10-18	5-10-18	
Methylene Chloride	ND	1.0	EPA 8260C	5-10-18	5-10-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Bromochloromethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Chloroform	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Benzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Trichloroethene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Dibromomethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Bromodichloromethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	5-10-18	5-10-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Toluene	ND	1.0	EPA 8260C	5-10-18	5-10-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-10-18	5-10-18	



Date of Report: May 18, 2018
 Samples Submitted: May 10, 2018
 Laboratory Reference: 1805-106
 Project: 1355-001

VOLATILES EPA 8260C
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-051018					
Laboratory ID:	05-106-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Tetrachloroethene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Dibromochloromethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Chlorobenzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Ethylbenzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
m,p-Xylene	ND	0.40	EPA 8260C	5-10-18	5-10-18	
o-Xylene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Bromoform	ND	1.3	EPA 8260C	5-10-18	5-10-18	
Bromobenzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,2-Dibromo-3-chloropropane	ND	1.4	EPA 8260C	5-10-18	5-10-18	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260C	5-10-18	5-10-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	5-10-18	5-10-18	
1,2,3-Trichlorobenzene	ND	0.27	EPA 8260C	5-10-18	5-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



Date of Report: May 18, 2018
 Samples Submitted: May 10, 2018
 Laboratory Reference: 1805-106
 Project: 1355-001

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0510W1					
Dichlorodifluoromethane	ND	0.28	EPA 8260C	5-10-18	5-10-18	
Chloromethane	ND	1.6	EPA 8260C	5-10-18	5-10-18	
Vinyl Chloride	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Bromomethane	ND	0.38	EPA 8260C	5-10-18	5-10-18	
Chloroethane	ND	1.0	EPA 8260C	5-10-18	5-10-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Iodomethane	ND	1.9	EPA 8260C	5-10-18	5-10-18	
Methylene Chloride	ND	1.0	EPA 8260C	5-10-18	5-10-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Bromochloromethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Chloroform	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Benzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Trichloroethene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Dibromomethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Bromodichloromethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	5-10-18	5-10-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Toluene	ND	1.0	EPA 8260C	5-10-18	5-10-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-10-18	5-10-18	



Date of Report: May 18, 2018
 Samples Submitted: May 10, 2018
 Laboratory Reference: 1805-106
 Project: 1355-001

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0510W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Tetrachloroethene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Dibromochloromethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Chlorobenzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Ethylbenzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
m,p-Xylene	ND	0.40	EPA 8260C	5-10-18	5-10-18	
o-Xylene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
Bromoform	ND	1.3	EPA 8260C	5-10-18	5-10-18	
Bromobenzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-10-18	5-10-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-10-18	5-10-18	
1,2-Dibromo-3-chloropropane	ND	1.4	EPA 8260C	5-10-18	5-10-18	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260C	5-10-18	5-10-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	5-10-18	5-10-18	
1,2,3-Trichlorobenzene	ND	0.27	EPA 8260C	5-10-18	5-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



Date of Report: May 18, 2018
 Samples Submitted: May 10, 2018
 Laboratory Reference: 1805-106
 Project: 1355-001

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

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0510W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.84	10.2	10.0	10.0	98	102	62-129	4	15	
Benzene	10.1	10.2	10.0	10.0	101	102	77-127	1	15	
Trichloroethene	9.65	9.74	10.0	10.0	97	97	70-120	1	15	
Toluene	10.2	10.2	10.0	10.0	102	102	82-123	0	15	
Chlorobenzene	8.69	8.59	10.0	10.0	87	86	79-120	1	15	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					97	98	75-127			
<i>Toluene-d8</i>					99	99	80-127			
<i>4-Bromofluorobenzene</i>					96	96	78-125			





Data Qualifiers and Abbreviations

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





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

September 10, 2018

Joe Rounds
Farallon Consulting
1809 7th Ave., Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 1808-366

Dear Joe:

Enclosed are the analytical results and associated quality control data for samples submitted on August 30, 2018.

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

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

Sincerely,

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

David Baumeister
Project Manager

Enclosures



Date of Report: September 10, 2018
Samples Submitted: August 30, 2018
Laboratory Reference: 1808-366
Project: 1355-001

Case Narrative

Samples were collected on August 28 and 29, 2018 and received by the laboratory on August 30, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-21-30					
Laboratory ID:	08-366-01					
Gasoline	ND	8.2	NWTPH-Gx	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	88	57-129				
Client ID:	MW-21-35					
Laboratory ID:	08-366-02					
Gasoline	ND	8.1	NWTPH-Gx	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	97	57-129				
Client ID:	MW-21-40					
Laboratory ID:	08-366-03					
Gasoline	ND	6.5	NWTPH-Gx	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	95	57-129				
Client ID:	MW-21-45					
Laboratory ID:	08-366-04					
Gasoline	ND	7.3	NWTPH-Gx	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	95	57-129				
Client ID:	FB-23-10					
Laboratory ID:	08-366-05					
Gasoline	ND	18	NWTPH-Gx	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	93	57-129				
Client ID:	FB-23-13					
Laboratory ID:	08-366-06					
Gasoline	1400	34	NWTPH-Gx	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	100	57-129				



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-23-17					
Laboratory ID:	08-366-07					
Gasoline	ND	8.2	NWTPH-Gx	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	91	57-129				
Client ID:	FB-23-20					
Laboratory ID:	08-366-08					
Gasoline	ND	7.6	NWTPH-Gx	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	93	57-129				
Client ID:	FB-22-10					
Laboratory ID:	08-366-10					
Gasoline	ND	12	NWTPH-Gx	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	94	57-129				
Client ID:	FB-22-15					
Laboratory ID:	08-366-11					
Gasoline	ND	7.9	NWTPH-Gx	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	91	57-129				
Client ID:	FB-22-20					
Laboratory ID:	08-366-12					
Gasoline	ND	6.1	NWTPH-Gx	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	94	57-129				



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

**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:	MB0905S1					
Gasoline	ND	5.0	NWTPH-Gx	9-5-18	9-5-18	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	83	57-129				
Laboratory ID:	MB0905S2					
Gasoline	ND	5.0	NWTPH-Gx	9-5-18	9-5-18	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	78	57-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	09-011-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				103	101	57-129		
Laboratory ID:	08-366-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				88	89	57-129		



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-23-GW					
Laboratory ID:	08-366-09					
Gasoline	ND	100	NWTPH-Gx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	114	66-117				
Client ID:	FB-22-GW					
Laboratory ID:	08-366-13					
Gasoline	ND	100	NWTPH-Gx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	114	66-117				



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

**GASOLINE RANGE ORGANICS
 NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0830W4					
Gasoline	ND	100	NWTPH-Gx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>		<i>Control Limits</i>			
<i>Fluorobenzene</i>	115	66-117				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-345-03							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				114	116	66-117		



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

**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-21-30					
Laboratory ID:	08-366-01					
Diesel Range Organics	ND	32	NWTPH-Dx	8-31-18	8-31-18	
Lube Oil Range Organics	ND	64	NWTPH-Dx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	75	50-150				

Client ID:	MW-21-35					
Laboratory ID:	08-366-02					
Diesel Range Organics	ND	31	NWTPH-Dx	8-31-18	8-31-18	
Lube Oil Range Organics	ND	62	NWTPH-Dx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	102	50-150				

Client ID:	MW-21-40					
Laboratory ID:	08-366-03					
Diesel Range Organics	ND	31	NWTPH-Dx	8-31-18	8-31-18	
Lube Oil Range Organics	ND	62	NWTPH-Dx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	87	50-150				

Client ID:	MW-21-45					
Laboratory ID:	08-366-04					
Diesel Range Organics	ND	33	NWTPH-Dx	8-31-18	8-31-18	
Lube Oil Range Organics	ND	65	NWTPH-Dx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	95	50-150				

Client ID:	FB-23-10					
Laboratory ID:	08-366-05					
Diesel Range Organics	320	35	NWTPH-Dx	8-31-18	8-31-18	
Lube Oil Range Organics	ND	70	NWTPH-Dx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	78	50-150				

Client ID:	FB-23-13					
Laboratory ID:	08-366-06					
Diesel Range Organics	430	34	NWTPH-Dx	8-31-18	8-31-18	
Lube Oil Range Organics	ND	68	NWTPH-Dx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	76	50-150				



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-23-17					
Laboratory ID:	08-366-07					
Diesel Range Organics	ND	33	NWTPH-Dx	8-31-18	8-31-18	
Lube Oil Range Organics	ND	65	NWTPH-Dx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	73	50-150				
Client ID:	FB-23-20					
Laboratory ID:	08-366-08					
Diesel Range Organics	ND	31	NWTPH-Dx	8-31-18	8-31-18	
Lube Oil Range Organics	ND	61	NWTPH-Dx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	86	50-150				
Client ID:	FB-22-10					
Laboratory ID:	08-366-10					
Diesel Range Organics	ND	42	NWTPH-Dx	8-31-18	8-31-18	
Lube Oil Range Organics	ND	84	NWTPH-Dx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	127	50-150				
Client ID:	FB-22-15					
Laboratory ID:	08-366-11					
Diesel Range Organics	ND	33	NWTPH-Dx	8-31-18	8-31-18	
Lube Oil Range Organics	ND	66	NWTPH-Dx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	104	50-150				
Client ID:	FB-22-20					
Laboratory ID:	08-366-12					
Diesel Range Organics	ND	29	NWTPH-Dx	8-31-18	8-31-18	
Lube Oil Range Organics	ND	59	NWTPH-Dx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	121	50-150				



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

**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:	MB0831S2					
Diesel Range Organics	ND	25	NWTPH-Dx	8-31-18	8-31-18	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-31-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	101	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-358-02							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				123	114	50-150		
Laboratory ID:	08-366-12							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				121	118	50-150		



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

**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:	FB-22-GW					
Laboratory ID:	08-366-13					
Diesel Range Organics	0.33	0.27	NWTPH-Dx	9-1-18	9-1-18	
Lube Oil Range Organics	0.51	0.43	NWTPH-Dx	9-1-18	9-1-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	95	50-150				



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

**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:	MB0901W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	9-1-18	9-1-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	9-1-18	9-1-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	88	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-350-04							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				101	93	50-150		



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-21-30					
Laboratory ID:	08-366-01					
Dichlorodifluoromethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Chloromethane	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
Vinyl Chloride	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Bromomethane	ND	0.0020	EPA 8260C	9-4-18	9-4-18	
Chloroethane	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
Trichlorofluoromethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Iodomethane	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
Methylene Chloride	ND	0.013	EPA 8260C	9-4-18	9-4-18	
(trans) 1,2-Dichloroethene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
2,2-Dichloropropane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
(cis) 1,2-Dichloroethene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Bromochloromethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Chloroform	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,1,1-Trichloroethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Carbon Tetrachloride	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloropropene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Benzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloroethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Trichloroethene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloropropane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Dibromomethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Bromodichloromethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
(cis) 1,3-Dichloropropene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Toluene	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
(trans) 1,3-Dichloropropene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-21-30					
Laboratory ID:	08-366-01					
1,1,2-Trichloroethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Tetrachloroethene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,3-Dichloropropane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Dibromochloromethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromoethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Chlorobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,1,1,2-Tetrachloroethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Ethylbenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
m,p-Xylene	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
o-Xylene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Bromoform	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
Bromobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,1,1,2,2-Tetrachloroethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichloropropane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
2-Chlorotoluene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
4-Chlorotoluene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,3-Dichlorobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,4-Dichlorobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,2-Dichlorobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
1,2,4-Trichlorobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Hexachlorobutadiene	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichlorobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>90</i>	<i>71-132</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-21-35					
Laboratory ID:	08-366-02					
Dichlorodifluoromethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Chloromethane	ND	0.0085	EPA 8260C	9-4-18	9-4-18	
Vinyl Chloride	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Bromomethane	ND	0.0022	EPA 8260C	9-4-18	9-4-18	
Chloroethane	ND	0.0085	EPA 8260C	9-4-18	9-4-18	
Trichlorofluoromethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Iodomethane	ND	0.0085	EPA 8260C	9-4-18	9-4-18	
Methylene Chloride	ND	0.014	EPA 8260C	9-4-18	9-4-18	
(trans) 1,2-Dichloroethene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
2,2-Dichloropropane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
(cis) 1,2-Dichloroethene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Bromochloromethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Chloroform	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,1,1-Trichloroethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Carbon Tetrachloride	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloropropene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Benzene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloroethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Trichloroethene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloropropane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Dibromomethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Bromodichloromethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0085	EPA 8260C	9-4-18	9-4-18	
(cis) 1,3-Dichloropropene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Toluene	ND	0.0085	EPA 8260C	9-4-18	9-4-18	
(trans) 1,3-Dichloropropene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-21-35					
Laboratory ID:	08-366-02					
1,1,2-Trichloroethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Tetrachloroethene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,3-Dichloropropane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Dibromochloromethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromoethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Chlorobenzene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,1,1,2-Tetrachloroethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Ethylbenzene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
m,p-Xylene	ND	0.0085	EPA 8260C	9-4-18	9-4-18	
o-Xylene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Bromoform	ND	0.0085	EPA 8260C	9-4-18	9-4-18	
Bromobenzene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,1,2,2-Tetrachloroethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichloropropane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
2-Chlorotoluene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
4-Chlorotoluene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,3-Dichlorobenzene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,4-Dichlorobenzene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,2-Dichlorobenzene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0085	EPA 8260C	9-4-18	9-4-18	
1,2,4-Trichlorobenzene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Hexachlorobutadiene	ND	0.0085	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichlorobenzene	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>92</i>	<i>71-132</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-21-40					
Laboratory ID:	08-366-03					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Chloromethane	ND	0.0067	EPA 8260C	9-4-18	9-4-18	
Vinyl Chloride	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Bromomethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Chloroethane	ND	0.0067	EPA 8260C	9-4-18	9-4-18	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Iodomethane	ND	0.0067	EPA 8260C	9-4-18	9-4-18	
Methylene Chloride	ND	0.011	EPA 8260C	9-4-18	9-4-18	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Bromochloromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Chloroform	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Benzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Trichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Dibromomethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Bromodichloromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0067	EPA 8260C	9-4-18	9-4-18	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Toluene	ND	0.0067	EPA 8260C	9-4-18	9-4-18	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-21-40					
Laboratory ID:	08-366-03					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Tetrachloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Dibromochloromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Chlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Ethylbenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
m,p-Xylene	ND	0.0067	EPA 8260C	9-4-18	9-4-18	
o-Xylene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Bromoform	ND	0.0067	EPA 8260C	9-4-18	9-4-18	
Bromobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
2-Chlorotoluene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
4-Chlorotoluene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0067	EPA 8260C	9-4-18	9-4-18	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Hexachlorobutadiene	ND	0.0067	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>91</i>	<i>71-132</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-21-45					
Laboratory ID:	08-366-04					
Dichlorodifluoromethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Chloromethane	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
Vinyl Chloride	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Bromomethane	ND	0.0020	EPA 8260C	9-4-18	9-4-18	
Chloroethane	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
Trichlorofluoromethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Iodomethane	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
Methylene Chloride	ND	0.013	EPA 8260C	9-4-18	9-4-18	
(trans) 1,2-Dichloroethene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
2,2-Dichloropropane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
(cis) 1,2-Dichloroethene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Bromochloromethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Chloroform	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,1,1-Trichloroethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Carbon Tetrachloride	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloropropene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Benzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloroethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Trichloroethene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloropropane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Dibromomethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Bromodichloromethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
(cis) 1,3-Dichloropropene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Toluene	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
(trans) 1,3-Dichloropropene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-21-45					
Laboratory ID:	08-366-04					
1,1,2-Trichloroethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Tetrachloroethene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,3-Dichloropropane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Dibromochloromethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromoethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Chlorobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,1,1,2-Tetrachloroethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Ethylbenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
m,p-Xylene	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
o-Xylene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Bromoform	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
Bromobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,1,2,2-Tetrachloroethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichloropropane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
2-Chlorotoluene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
4-Chlorotoluene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,3-Dichlorobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,4-Dichlorobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,2-Dichlorobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
1,2,4-Trichlorobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Hexachlorobutadiene	ND	0.0078	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichlorobenzene	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>82</i>	<i>71-132</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-23-10					
Laboratory ID:	08-366-05					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Chloromethane	ND	0.0059	EPA 8260C	9-5-18	9-6-18	
Vinyl Chloride	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Bromomethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Chloroethane	ND	0.0059	EPA 8260C	9-5-18	9-6-18	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Iodomethane	ND	0.0075	EPA 8260C	9-5-18	9-6-18	
Methylene Chloride	ND	0.0071	EPA 8260C	9-5-18	9-6-18	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Bromochloromethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Chloroform	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Benzene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Trichloroethene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Dibromomethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Bromodichloromethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
2-Chloroethyl Vinyl Ether	ND	0.0059	EPA 8260C	9-5-18	9-6-18	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Toluene	ND	0.0059	EPA 8260C	9-5-18	9-6-18	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-23-10					
Laboratory ID:	08-366-05					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Tetrachloroethene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Dibromochloromethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Chlorobenzene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Ethylbenzene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
m,p-Xylene	ND	0.0059	EPA 8260C	9-5-18	9-6-18	
o-Xylene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Bromoform	ND	0.0059	EPA 8260C	9-5-18	9-6-18	
Bromobenzene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
2-Chlorotoluene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
4-Chlorotoluene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
1,2-Dibromo-3-chloropropane	ND	0.0059	EPA 8260C	9-5-18	9-6-18	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
Hexachlorobutadiene	ND	0.0059	EPA 8260C	9-5-18	9-6-18	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	9-5-18	9-6-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>104</i>	<i>71-132</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-23-13					
Laboratory ID:	08-366-06					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Chloromethane	ND	0.0067	EPA 8260C	9-5-18	9-6-18	
Vinyl Chloride	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Bromomethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Chloroethane	ND	0.0067	EPA 8260C	9-5-18	9-6-18	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Iodomethane	ND	0.0084	EPA 8260C	9-5-18	9-6-18	
Methylene Chloride	ND	0.0080	EPA 8260C	9-5-18	9-6-18	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Bromochloromethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Chloroform	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Benzene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Trichloroethene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Dibromomethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Bromodichloromethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
2-Chloroethyl Vinyl Ether	ND	0.0067	EPA 8260C	9-5-18	9-6-18	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Toluene	ND	0.0067	EPA 8260C	9-5-18	9-6-18	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-23-13					
Laboratory ID:	08-366-06					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Tetrachloroethene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Dibromochloromethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Chlorobenzene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Ethylbenzene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
m,p-Xylene	ND	0.0067	EPA 8260C	9-5-18	9-6-18	
o-Xylene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Bromoform	ND	0.0067	EPA 8260C	9-5-18	9-6-18	
Bromobenzene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
2-Chlorotoluene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
4-Chlorotoluene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
1,2-Dibromo-3-chloropropane	ND	0.0067	EPA 8260C	9-5-18	9-6-18	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
Hexachlorobutadiene	ND	0.0067	EPA 8260C	9-5-18	9-6-18	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	9-5-18	9-6-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>107</i>	<i>71-132</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-23-17					
Laboratory ID:	08-366-07					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Chloromethane	ND	0.0063	EPA 8260C	9-4-18	9-4-18	
Vinyl Chloride	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Bromomethane	ND	0.0016	EPA 8260C	9-4-18	9-4-18	
Chloroethane	ND	0.0063	EPA 8260C	9-4-18	9-4-18	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Iodomethane	ND	0.0063	EPA 8260C	9-4-18	9-4-18	
Methylene Chloride	ND	0.010	EPA 8260C	9-4-18	9-4-18	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Bromochloromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Chloroform	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Benzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Trichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Dibromomethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Bromodichloromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0063	EPA 8260C	9-4-18	9-4-18	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Toluene	ND	0.0063	EPA 8260C	9-4-18	9-4-18	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-23-17					
Laboratory ID:	08-366-07					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Tetrachloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Dibromochloromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Chlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Ethylbenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
m,p-Xylene	ND	0.0063	EPA 8260C	9-4-18	9-4-18	
o-Xylene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Bromoform	ND	0.0063	EPA 8260C	9-4-18	9-4-18	
Bromobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
2-Chlorotoluene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
4-Chlorotoluene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0063	EPA 8260C	9-4-18	9-4-18	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Hexachlorobutadiene	ND	0.0063	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>71-132</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-23-20					
Laboratory ID:	08-366-08					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Chloromethane	ND	0.0066	EPA 8260C	9-4-18	9-4-18	
Vinyl Chloride	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Bromomethane	ND	0.0017	EPA 8260C	9-4-18	9-4-18	
Chloroethane	ND	0.0066	EPA 8260C	9-4-18	9-4-18	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Iodomethane	ND	0.0066	EPA 8260C	9-4-18	9-4-18	
Methylene Chloride	ND	0.011	EPA 8260C	9-4-18	9-4-18	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Bromochloromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Chloroform	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Benzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Trichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Dibromomethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Bromodichloromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0066	EPA 8260C	9-4-18	9-4-18	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Toluene	ND	0.0066	EPA 8260C	9-4-18	9-4-18	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-23-20					
Laboratory ID:	08-366-08					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Tetrachloroethene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Dibromochloromethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Chlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Ethylbenzene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
m,p-Xylene	ND	0.0066	EPA 8260C	9-4-18	9-4-18	
o-Xylene	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Bromoform	ND	0.0066	EPA 8260C	9-4-18	9-4-18	
Bromobenzene	ND	0.0012	EPA 8260C	9-5-18	9-5-18	
1,1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	9-5-18	9-5-18	
2-Chlorotoluene	ND	0.0012	EPA 8260C	9-5-18	9-5-18	
4-Chlorotoluene	ND	0.0012	EPA 8260C	9-5-18	9-5-18	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	9-5-18	9-5-18	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	9-5-18	9-5-18	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	9-5-18	9-5-18	
1,2-Dibromo-3-chloropropane	ND	0.0061	EPA 8260C	9-5-18	9-5-18	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	9-5-18	9-5-18	
Hexachlorobutadiene	ND	0.0061	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>78</i>	<i>71-132</i>				



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-22-10					
Laboratory ID:	08-366-10					
Dichlorodifluoromethane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Chloromethane	ND	0.011	EPA 8260C	9-4-18	9-4-18	
Vinyl Chloride	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Bromomethane	ND	0.0028	EPA 8260C	9-4-18	9-4-18	
Chloroethane	ND	0.011	EPA 8260C	9-4-18	9-4-18	
Trichlorofluoromethane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Iodomethane	ND	0.011	EPA 8260C	9-4-18	9-4-18	
Methylene Chloride	ND	0.017	EPA 8260C	9-4-18	9-4-18	
(trans) 1,2-Dichloroethene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
2,2-Dichloropropane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
(cis) 1,2-Dichloroethene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Bromochloromethane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Chloroform	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,1,1-Trichloroethane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Carbon Tetrachloride	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloropropene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Benzene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloroethane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Trichloroethene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloropropane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Dibromomethane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Bromodichloromethane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
2-Chloroethyl Vinyl Ether	ND	0.011	EPA 8260C	9-4-18	9-4-18	
(cis) 1,3-Dichloropropene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Toluene	ND	0.011	EPA 8260C	9-4-18	9-4-18	
(trans) 1,3-Dichloropropene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-22-10					
Laboratory ID:	08-366-10					
1,1,2-Trichloroethane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Tetrachloroethene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,3-Dichloropropane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Dibromochloromethane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromoethane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Chlorobenzene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,1,1,2-Tetrachloroethane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Ethylbenzene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
m,p-Xylene	ND	0.011	EPA 8260C	9-4-18	9-4-18	
o-Xylene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Bromoform	ND	0.011	EPA 8260C	9-4-18	9-4-18	
Bromobenzene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,1,1,2,2-Tetrachloroethane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichloropropane	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
2-Chlorotoluene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
4-Chlorotoluene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,3-Dichlorobenzene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,4-Dichlorobenzene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,2-Dichlorobenzene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromo-3-chloropropane	ND	0.011	EPA 8260C	9-4-18	9-4-18	
1,2,4-Trichlorobenzene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
Hexachlorobutadiene	ND	0.011	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichlorobenzene	ND	0.0021	EPA 8260C	9-4-18	9-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>71-132</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-22-15					
Laboratory ID:	08-366-11					
Dichlorodifluoromethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Chloromethane	ND	0.0068	EPA 8260C	9-4-18	9-5-18	
Vinyl Chloride	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Bromomethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Chloroethane	ND	0.0068	EPA 8260C	9-4-18	9-5-18	
Trichlorofluoromethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,1-Dichloroethene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Iodomethane	ND	0.0068	EPA 8260C	9-4-18	9-5-18	
Methylene Chloride	ND	0.0082	EPA 8260C	9-4-18	9-5-18	
(trans) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,1-Dichloroethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
2,2-Dichloropropane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
(cis) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Bromochloromethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Chloroform	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,1,1-Trichloroethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Carbon Tetrachloride	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,1-Dichloropropene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Benzene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,2-Dichloroethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Trichloroethene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,2-Dichloropropane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Dibromomethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Bromodichloromethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
2-Chloroethyl Vinyl Ether	ND	0.0068	EPA 8260C	9-4-18	9-5-18	
(cis) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Toluene	ND	0.0068	EPA 8260C	9-4-18	9-5-18	
(trans) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-22-15					
Laboratory ID:	08-366-11					
1,1,2-Trichloroethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Tetrachloroethene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,3-Dichloropropane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Dibromochloromethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,2-Dibromoethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Chlorobenzene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,1,1,2-Tetrachloroethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Ethylbenzene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
m,p-Xylene	ND	0.0068	EPA 8260C	9-4-18	9-5-18	
o-Xylene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Bromoform	ND	0.0068	EPA 8260C	9-4-18	9-5-18	
Bromobenzene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,1,2,2-Tetrachloroethane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,2,3-Trichloropropane	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
2-Chlorotoluene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
4-Chlorotoluene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,3-Dichlorobenzene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,4-Dichlorobenzene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,2-Dichlorobenzene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
1,2-Dibromo-3-chloropropane	ND	0.0068	EPA 8260C	9-4-18	9-5-18	
1,2,4-Trichlorobenzene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
Hexachlorobutadiene	ND	0.0068	EPA 8260C	9-4-18	9-5-18	
1,2,3-Trichlorobenzene	ND	0.0014	EPA 8260C	9-4-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>71-132</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-22-20					
Laboratory ID:	08-366-12					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Chloromethane	ND	0.0063	EPA 8260C	9-4-18	9-5-18	
Vinyl Chloride	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Bromomethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Chloroethane	ND	0.0063	EPA 8260C	9-4-18	9-5-18	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Iodomethane	ND	0.0063	EPA 8260C	9-4-18	9-5-18	
Methylene Chloride	ND	0.0076	EPA 8260C	9-4-18	9-5-18	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Bromochloromethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Chloroform	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Benzene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Trichloroethene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Dibromomethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Bromodichloromethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
2-Chloroethyl Vinyl Ether	ND	0.0063	EPA 8260C	9-4-18	9-5-18	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Toluene	ND	0.0063	EPA 8260C	9-4-18	9-5-18	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-22-20					
Laboratory ID:	08-366-12					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Tetrachloroethene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Dibromochloromethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Chlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Ethylbenzene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
m,p-Xylene	ND	0.0063	EPA 8260C	9-4-18	9-5-18	
o-Xylene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Bromoform	ND	0.0063	EPA 8260C	9-4-18	9-5-18	
Bromobenzene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
2-Chlorotoluene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
4-Chlorotoluene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
1,2-Dibromo-3-chloropropane	ND	0.0063	EPA 8260C	9-4-18	9-5-18	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
Hexachlorobutadiene	ND	0.0063	EPA 8260C	9-4-18	9-5-18	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	9-4-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>86</i>	<i>71-132</i>				



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 Laboratory Reference: 1808-366
 Project: 1355-001

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

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0904S2					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Chloromethane	ND	0.0050	EPA 8260C	9-4-18	9-4-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Bromomethane	ND	0.0013	EPA 8260C	9-4-18	9-4-18	
Chloroethane	ND	0.0050	EPA 8260C	9-4-18	9-4-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Iodomethane	ND	0.0050	EPA 8260C	9-4-18	9-4-18	
Methylene Chloride	ND	0.0081	EPA 8260C	9-4-18	9-4-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Bromochloromethane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Chloroform	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Benzene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Trichloroethene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Dibromomethane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	9-4-18	9-4-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Toluene	ND	0.0050	EPA 8260C	9-4-18	9-4-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	



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 Laboratory Reference: 1808-366
 Project: 1355-001

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0904S2					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Chlorobenzene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Ethylbenzene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
m,p-Xylene	ND	0.0050	EPA 8260C	9-4-18	9-4-18	
o-Xylene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Bromoform	ND	0.0050	EPA 8260C	9-4-18	9-4-18	
Bromobenzene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	9-4-18	9-4-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	9-4-18	9-4-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	9-4-18	9-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>71-132</i>				



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

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0905S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Chloromethane	ND	0.0050	EPA 8260C	9-5-18	9-5-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Bromomethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Chloroethane	ND	0.0050	EPA 8260C	9-5-18	9-5-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Iodomethane	ND	0.0050	EPA 8260C	9-5-18	9-5-18	
Methylene Chloride	ND	0.0060	EPA 8260C	9-5-18	9-5-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Bromochloromethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Chloroform	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Benzene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Trichloroethene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Dibromomethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	9-5-18	9-5-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Toluene	ND	0.0050	EPA 8260C	9-5-18	9-5-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0905S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Chlorobenzene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Ethylbenzene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
m,p-Xylene	ND	0.0050	EPA 8260C	9-5-18	9-5-18	
o-Xylene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Bromoform	ND	0.0050	EPA 8260C	9-5-18	9-5-18	
Bromobenzene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	9-5-18	9-5-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>71-132</i>				



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**VOLATILE ORGANICS EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB0904S2									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0437	0.0408	0.0500	0.0500	87	82	53-141	7	17	
Benzene	0.0504	0.0492	0.0500	0.0500	101	98	70-130	2	15	
Trichloroethene	0.0515	0.0513	0.0500	0.0500	103	103	74-122	0	16	
Toluene	0.0486	0.0474	0.0500	0.0500	97	95	76-130	3	15	
Chlorobenzene	0.0516	0.0493	0.0500	0.0500	103	99	75-120	5	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					<i>104</i>	<i>104</i>	<i>68-139</i>			
<i>Toluene-d8</i>					<i>104</i>	<i>102</i>	<i>79-128</i>			
<i>4-Bromofluorobenzene</i>					<i>103</i>	<i>98</i>	<i>71-132</i>			



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**VOLATILE ORGANICS EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB0905S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0554	0.0535	0.0500	0.0500	111	107	53-141	3	17	
Benzene	0.0544	0.0519	0.0500	0.0500	109	104	70-130	5	15	
Trichloroethene	0.0544	0.0524	0.0500	0.0500	109	105	74-122	4	16	
Toluene	0.0503	0.0490	0.0500	0.0500	101	98	76-130	3	15	
Chlorobenzene	0.0513	0.0500	0.0500	0.0500	103	100	75-120	3	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					103	101	68-139			
<i>Toluene-d8</i>					100	103	79-128			
<i>4-Bromofluorobenzene</i>					99	97	71-132			



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

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-23-GW					
Laboratory ID:	08-366-09					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Chloromethane	ND	1.0	EPA 8260C	9-1-18	9-1-18	
Vinyl Chloride	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Bromomethane	ND	2.0	EPA 8260C	9-1-18	9-1-18	
Chloroethane	ND	1.0	EPA 8260C	9-1-18	9-1-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Iodomethane	ND	5.0	EPA 8260C	9-1-18	9-1-18	
Methylene Chloride	ND	1.0	EPA 8260C	9-1-18	9-1-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Bromochloromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Chloroform	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Benzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Trichloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Dibromomethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Bromodichloromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	9-1-18	9-1-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Toluene	ND	1.0	EPA 8260C	9-1-18	9-1-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-1-18	9-1-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-23-GW					
Laboratory ID:	08-366-09					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Tetrachloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Dibromochloromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Chlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Ethylbenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
m,p-Xylene	ND	0.40	EPA 8260C	9-1-18	9-1-18	
o-Xylene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Bromoform	ND	1.0	EPA 8260C	9-1-18	9-1-18	
Bromobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	9-1-18	9-1-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	9-1-18	9-1-18	
1,2,3-Trichlorobenzene	ND	0.25	EPA 8260C	9-1-18	9-1-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-22-GW					
Laboratory ID:	08-366-13					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Chloromethane	ND	1.0	EPA 8260C	9-1-18	9-1-18	
Vinyl Chloride	0.84	0.20	EPA 8260C	9-1-18	9-1-18	
Bromomethane	ND	2.0	EPA 8260C	9-1-18	9-1-18	
Chloroethane	ND	1.0	EPA 8260C	9-1-18	9-1-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Iodomethane	ND	5.0	EPA 8260C	9-1-18	9-1-18	
Methylene Chloride	ND	1.0	EPA 8260C	9-1-18	9-1-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Bromochloromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Chloroform	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Benzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Trichloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Dibromomethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Bromodichloromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	9-1-18	9-1-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Toluene	ND	1.0	EPA 8260C	9-1-18	9-1-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-1-18	9-1-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-22-GW					
Laboratory ID:	08-366-13					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Tetrachloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Dibromochloromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Chlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Ethylbenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
m,p-Xylene	ND	0.40	EPA 8260C	9-1-18	9-1-18	
o-Xylene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Bromoform	ND	1.0	EPA 8260C	9-1-18	9-1-18	
Bromobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	9-1-18	9-1-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	9-1-18	9-1-18	
1,2,3-Trichlorobenzene	ND	0.25	EPA 8260C	9-1-18	9-1-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
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 Project: 1355-001

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0901W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Chloromethane	ND	1.0	EPA 8260C	9-1-18	9-1-18	
Vinyl Chloride	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Bromomethane	ND	2.0	EPA 8260C	9-1-18	9-1-18	
Chloroethane	ND	1.0	EPA 8260C	9-1-18	9-1-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Iodomethane	ND	5.0	EPA 8260C	9-1-18	9-1-18	
Methylene Chloride	ND	1.0	EPA 8260C	9-1-18	9-1-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Bromochloromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Chloroform	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Benzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Trichloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Dibromomethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Bromodichloromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	9-1-18	9-1-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Toluene	ND	1.0	EPA 8260C	9-1-18	9-1-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-1-18	9-1-18	



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0901W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Tetrachloroethene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Dibromochloromethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Chlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Ethylbenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
m,p-Xylene	ND	0.40	EPA 8260C	9-1-18	9-1-18	
o-Xylene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Bromoform	ND	1.0	EPA 8260C	9-1-18	9-1-18	
Bromobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	9-1-18	9-1-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	9-1-18	9-1-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	9-1-18	9-1-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	9-1-18	9-1-18	
1,2,3-Trichlorobenzene	ND	0.25	EPA 8260C	9-1-18	9-1-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



Date of Report: September 10, 2018
 Samples Submitted: August 30, 2018
 Laboratory Reference: 1808-366
 Project: 1355-001

**VOLATILE ORGANICS EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0901W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	8.30	8.30	10.0	10.0	83	83	62-129	0	15	
Benzene	9.31	9.52	10.0	10.0	93	95	77-127	2	15	
Trichloroethene	9.29	9.14	10.0	10.0	93	91	70-120	2	15	
Toluene	9.68	9.57	10.0	10.0	97	96	82-123	1	15	
Chlorobenzene	9.67	9.62	10.0	10.0	97	96	79-120	1	15	
<i>Surrogate:</i>										
Dibromofluoromethane					99	104	75-127			
Toluene-d8					99	100	80-127			
4-Bromofluorobenzene					96	98	78-125			



Date of Report: September 10, 2018
Samples Submitted: August 30, 2018
Laboratory Reference: 1808-366
Project: 1355-001

% MOISTURE

Date Analyzed: 8-31-18

Client ID	Lab ID	% Moisture
MW-21-30	08-366-01	22
MW-21-35	08-366-02	20
MW-21-40	08-366-03	19
MW-21-45	08-366-04	21
FB-23-10	08-366-05	29
FB-23-13	08-366-06	27
FB-23-17	08-366-07	23
FB-23-20	08-366-08	18
FB-22-10	08-366-10	40
FB-22-15	08-366-11	25
FB-22-20	08-366-12	15





Data Qualifiers and Abbreviations

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





Onsite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 853-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: **08-366**

Company: Fallon Consulting
Project Number: 1355-001
Project Name: Wardside acres
Project Manager: Joe Hands
Sampled by: P. Garvin

Lab ID

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

BTEX 8260C

% Moisture

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	BTEX 8260C	% Moisture
11	FB-22-15	8/29/18	1100	S	5			X	X	X	X													X
12	FB-22-20	8/29/18	1120	S	5			X	X	X	X													X
13	FB-22-6W	8/29/18	1130	W	7			X	X	X	X													X

Signature	Company	Date	Time	Comments/Special Instructions
<u>[Signature]</u>	<u>Fallon</u>	<u>8/29/18</u>	<u>0955</u>	
<u>[Signature]</u>	<u>Speedy</u>	<u>8-30-18</u>	<u>0955</u>	
<u>[Signature]</u>	<u>Speedy</u>	<u>8-30-18</u>	<u>1345</u>	
<u>[Signature]</u>	<u>[Signature]</u>	<u>8/30/18</u>	<u>1345</u>	
Received				
Relinquished				
Reviewed/Date	Reviewed/Date			

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



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

October 11, 2018

Joe Rounds
Farallon Consulting
1809 7th Ave., Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 1810-041

Dear Joe:

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

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

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

Sincerely,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: October 11, 2018
Samples Submitted: October 3, 2018
Laboratory Reference: 1810-041
Project: 1355-001

Case Narrative

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

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

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

Volatiles EPA 8260C Analysis

Due to the levels of sediment present in the VOA vials provided for sample MW-21-100218, the aqueous layers from two VOA vials were combined to perform the requested analysis. Some loss of volatiles may have occurred.

EDB by EPA 8011 Analysis

The surrogate recovery for the sample MW-21-100218 (18%) was below the quality control limits of 25 – 143%. This was the result of an elevated amount of sediment in the sample. In view of the fact that all other QC was within limits, no further action was performed.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Date of Report: October 11, 2018
 Samples Submitted: October 3, 2018
 Laboratory Reference: 1810-041
 Project: 1355-001

**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-100218					
Laboratory ID:	10-041-01					
Gasoline	ND	100	NWTPH-Gx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	92	66-117				
Client ID:	MW-21-100218					
Laboratory ID:	10-041-02					
Gasoline	ND	100	NWTPH-Gx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	90	66-117				
Client ID:	MW-4-100218					
Laboratory ID:	10-041-03					
Gasoline	ND	100	NWTPH-Gx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	89	66-117				
Client ID:	MW-17-100218					
Laboratory ID:	10-041-04					
Gasoline	ND	100	NWTPH-Gx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	97	66-117				
Client ID:	MW-6-100218					
Laboratory ID:	10-041-05					
Gasoline	ND	100	NWTPH-Gx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	89	66-117				
Client ID:	MW-3-100218					
Laboratory ID:	10-041-06					
Gasoline	ND	100	NWTPH-Gx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	88	66-117				



Date of Report: October 11, 2018
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 Project: 1355-001

**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2-100218					
Laboratory ID:	10-041-07					
Gasoline	ND	100	NWTPH-Gx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	88	66-117				
Client ID:	MW-13-100218					
Laboratory ID:	10-041-08					
Gasoline	ND	100	NWTPH-Gx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	89	66-117				



Date of Report: October 11, 2018
 Samples Submitted: October 3, 2018
 Laboratory Reference: 1810-041
 Project: 1355-001

**GASOLINE RANGE ORGANICS
 NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1004W1					
Gasoline	ND	100	NWTPH-Gx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	88	66-117				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	10-004-03							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				89	89	66-117		



Date of Report: October 11, 2018
 Samples Submitted: October 3, 2018
 Laboratory Reference: 1810-041
 Project: 1355-001

**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-19-100218					
Laboratory ID:	10-041-01					
Diesel Range Organics	ND	0.25	NWTPH-Dx	10-4-18	10-4-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				

Client ID:	MW-21-100218					
Laboratory ID:	10-041-02					
Diesel Range Organics	0.38	0.25	NWTPH-Dx	10-4-18	10-4-18	
Lube Oil	ND	0.40	NWTPH-Dx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	75	50-150				

Client ID:	MW-4-100218					
Laboratory ID:	10-041-03					
Diesel Range Organics	ND	0.25	NWTPH-Dx	10-4-18	10-4-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	90	50-150				

Client ID:	MW-17-100218					
Laboratory ID:	10-041-04					
Diesel Range Organics	ND	0.25	NWTPH-Dx	10-4-18	10-4-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	90	50-150				

Client ID:	MW-6-100218					
Laboratory ID:	10-041-05					
Diesel Range Organics	0.26	0.26	NWTPH-Dx	10-4-18	10-4-18	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	90	50-150				

Client ID:	MW-3-100218					
Laboratory ID:	10-041-06					
Diesel Range Organics	ND	0.25	NWTPH-Dx	10-4-18	10-4-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	99	50-150				



Date of Report: October 11, 2018
 Samples Submitted: October 3, 2018
 Laboratory Reference: 1810-041
 Project: 1355-001

**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-2-100218					
Laboratory ID:	10-041-07					
Diesel Range Organics	ND	0.25	NWTPH-Dx	10-4-18	10-4-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	102	50-150				
Client ID:	MW-13-100218					
Laboratory ID:	10-041-08					
Diesel Range Organics	ND	0.26	NWTPH-Dx	10-4-18	10-4-18	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	103	50-150				



Date of Report: October 11, 2018
 Samples Submitted: October 3, 2018
 Laboratory Reference: 1810-041
 Project: 1355-001

**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:	MB1004W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	10-4-18	10-4-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	89	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	10-041-01							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				79	81	50-150		



Date of Report: October 11, 2018
 Samples Submitted: October 3, 2018
 Laboratory Reference: 1810-041
 Project: 1355-001

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-100218					
Laboratory ID:	10-041-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloromethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Vinyl Chloride	8.5	0.20	EPA 8260C	10-4-18	10-4-18	
Bromomethane	ND	2.0	EPA 8260C	10-4-18	10-4-18	
Chloroethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Iodomethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,2-Dichloroethene	0.21	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
(cis) 1,2-Dichloroethene	3.7	0.20	EPA 8260C	10-4-18	10-4-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloroform	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Benzene	5.9	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Trichloroethene	0.86	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromomethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Toluene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-100218					
Laboratory ID:	10-041-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
o-Xylene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromoform	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Bromobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>95</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-21-100218					
Laboratory ID:	10-041-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloromethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Vinyl Chloride	7.9	0.20	EPA 8260C	10-4-18	10-4-18	
Bromomethane	ND	2.0	EPA 8260C	10-4-18	10-4-18	
Chloroethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Iodomethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,2-Dichloroethene	0.39	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
(cis) 1,2-Dichloroethene	2.6	0.20	EPA 8260C	10-4-18	10-4-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloroform	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Benzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Trichloroethene	1.2	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromomethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Toluene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-21-100218					
Laboratory ID:	10-041-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
o-Xylene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromoform	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Bromobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4-100218					
Laboratory ID:	10-041-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloromethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Vinyl Chloride	1.5	0.20	EPA 8260C	10-4-18	10-4-18	
Bromomethane	ND	2.0	EPA 8260C	10-4-18	10-4-18	
Chloroethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Iodomethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
(cis) 1,2-Dichloroethene	0.71	0.20	EPA 8260C	10-4-18	10-4-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloroform	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Benzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Trichloroethene	0.24	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromomethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Toluene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4-100218					
Laboratory ID:	10-041-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
o-Xylene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromoform	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Bromobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-17-100218					
Laboratory ID:	10-041-04					
Dichlorodifluoromethane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
Chloromethane	ND	2.0	EPA 8260C	10-4-18	10-4-18	
Vinyl Chloride	46	0.40	EPA 8260C	10-4-18	10-4-18	
Bromomethane	ND	4.0	EPA 8260C	10-4-18	10-4-18	
Chloroethane	22	2.0	EPA 8260C	10-4-18	10-4-18	
Trichlorofluoromethane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethene	2.3	0.40	EPA 8260C	10-4-18	10-4-18	
Iodomethane	ND	2.0	EPA 8260C	10-4-18	10-4-18	
Methylene Chloride	ND	2.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,2-Dichloroethene	15	0.40	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
2,2-Dichloropropane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
(cis) 1,2-Dichloroethene	34	0.40	EPA 8260C	10-4-18	10-4-18	
Bromochloromethane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
Chloroform	ND	0.40	EPA 8260C	10-4-18	10-4-18	
1,1,1-Trichloroethane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
Carbon Tetrachloride	ND	0.40	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloropropene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
Benzene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloroethane	0.41	0.40	EPA 8260C	10-4-18	10-4-18	
Trichloroethene	31	0.40	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloropropane	0.41	0.40	EPA 8260C	10-4-18	10-4-18	
Dibromomethane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
Bromodichloromethane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260C	10-4-18	10-4-18	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
Toluene	ND	2.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260C	10-4-18	10-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-17-100218					
Laboratory ID:	10-041-04					
1,1,2-Trichloroethane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
Tetrachloroethene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
1,3-Dichloropropane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
Dibromochloromethane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromoethane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
Chlorobenzene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
Ethylbenzene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
m,p-Xylene	ND	0.80	EPA 8260C	10-4-18	10-4-18	
o-Xylene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
Bromoform	ND	2.0	EPA 8260C	10-4-18	10-4-18	
Bromobenzene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
1,1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichloropropane	ND	0.40	EPA 8260C	10-4-18	10-4-18	
2-Chlorotoluene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
4-Chlorotoluene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
1,3-Dichlorobenzene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
1,4-Dichlorobenzene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
1,2-Dichlorobenzene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260C	10-4-18	10-4-18	
1,2,4-Trichlorobenzene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
Hexachlorobutadiene	ND	2.0	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>93</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6-100218					
Laboratory ID:	10-041-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloromethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromomethane	ND	2.0	EPA 8260C	10-4-18	10-4-18	
Chloroethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Iodomethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloroform	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Benzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Trichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromomethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Toluene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6-100218					
Laboratory ID:	10-041-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
o-Xylene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromoform	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Bromobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>92</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>95</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-3-100218					
Laboratory ID:	10-041-06					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloromethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromomethane	ND	2.0	EPA 8260C	10-4-18	10-4-18	
Chloroethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Iodomethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
(cis) 1,2-Dichloroethene	1.2	0.20	EPA 8260C	10-4-18	10-4-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloroform	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Benzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Trichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromomethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Toluene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-3-100218					
Laboratory ID:	10-041-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
o-Xylene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromoform	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Bromobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2-100218					
Laboratory ID:	10-041-07					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloromethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromomethane	ND	2.0	EPA 8260C	10-4-18	10-4-18	
Chloroethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Iodomethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloroform	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Benzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Trichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromomethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Toluene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2-100218					
Laboratory ID:	10-041-07					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
o-Xylene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromoform	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Bromobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>93</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-13-100218					
Laboratory ID:	10-041-08					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloromethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromomethane	ND	2.0	EPA 8260C	10-4-18	10-4-18	
Chloroethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Iodomethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloroform	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Benzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Trichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromomethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Toluene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-13-100218					
Laboratory ID:	10-041-08					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
o-Xylene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromoform	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Bromobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>95</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



Date of Report: October 11, 2018
 Samples Submitted: October 3, 2018
 Laboratory Reference: 1810-041
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VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1004W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloromethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromomethane	ND	2.0	EPA 8260C	10-4-18	10-4-18	
Chloroethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Iodomethane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chloroform	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Benzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Trichloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromomethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Toluene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-4-18	10-4-18	



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VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1004W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Dibromochloromethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-4-18	10-4-18	
o-Xylene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Bromoform	ND	1.0	EPA 8260C	10-4-18	10-4-18	
Bromobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-4-18	10-4-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-4-18	10-4-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-4-18	10-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-125</i>				



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 Project: 1355-001

**VOLATILE ORGANICS EPA 8260C
 MS/MSD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD		Flags
	MS	MSD	MS	MSD	Result	Recovery	Limits	RPD	Limit		
MATRIX SPIKES											
Laboratory ID:	10-047-06										
	MS	MSD	MS	MSD		MS	MSD				
1,1-Dichloroethene	10.4	10.5	10.0	10.0	ND	104	105	60-124	1	17	
Benzene	10.0	10.2	10.0	10.0	ND	100	102	67-130	2	22	
Trichloroethene	11.0	10.9	10.0	10.0	1.25	98	97	71-120	1	15	
Toluene	10.4	10.5	10.0	10.0	ND	104	105	79-118	1	24	
Chlorobenzene	9.58	9.91	10.0	10.0	ND	96	99	74-120	3	17	
<i>Surrogate:</i>											
<i>Dibromofluoromethane</i>						93	93	75-127			
<i>Toluene-d8</i>						95	94	80-127			
<i>4-Bromofluorobenzene</i>						98	97	78-125			



Date of Report: October 11, 2018
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 Laboratory Reference: 1810-041
 Project: 1355-001

**1,2-DIBROMOETHANE (EDB)
 EPA 8011**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-100218					
Laboratory ID:	10-041-01					
EDB	ND	0.0097	EPA 8011	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	57	25-143				
Client ID:	MW-21-100218					
Laboratory ID:	10-041-02					
EDB	ND	0.010	EPA 8011	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	18	25-143				Q
Client ID:	MW-4-100218					
Laboratory ID:	10-041-03					
EDB	ND	0.0097	EPA 8011	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	67	25-143				
Client ID:	MW-17-100218					
Laboratory ID:	10-041-04					
EDB	ND	0.0098	EPA 8011	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	47	25-143				
Client ID:	MW-6-100218					
Laboratory ID:	10-041-05					
EDB	ND	0.0097	EPA 8011	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	80	25-143				
Client ID:	MW-3-100218					
Laboratory ID:	10-041-06					
EDB	ND	0.0096	EPA 8011	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	58	25-143				



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**1,2-DIBROMOETHANE (EDB)
 EPA 8011**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2-100218					
Laboratory ID:	10-041-07					
EDB	ND	0.0097	EPA 8011	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	64	25-143				
Client ID:	MW-13-100218					
Laboratory ID:	10-041-08					
EDB	ND	0.0099	EPA 8011	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	87	25-143				



Date of Report: October 11, 2018
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**1,2-DIBROMOETHANE (EDB)
 EPA 8011
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1010W1					
EDB	ND	0.010	EPA 8011	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	110	25-143				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB1010W1										
	SB	SBD	SB	SBD		SB	SBD				
EDB	0.0889	0.0796	0.100	0.100	N/A	89	80	74-131	11	15	
<i>Surrogate:</i>											
TCMX						106	114	25-143			





Data Qualifiers and Abbreviations

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





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

October 12, 2018

Joe Rounds
Farallon Consulting
1809 7th Ave., Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 1810-082

Dear Joe:

Enclosed are the analytical results and associated quality control data for samples submitted on October 4, 2018.

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

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

Sincerely,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: October 12, 2018
Samples Submitted: October 4, 2018
Laboratory Reference: 1810-082
Project: 1355-001

Case Narrative

Samples were collected on October 3, 2018 and received by the laboratory on October 4, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: October 12, 2018
 Samples Submitted: October 4, 2018
 Laboratory Reference: 1810-082
 Project: 1355-001

**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-100318					
Laboratory ID:	10-082-01					
Gasoline	ND	100	NWTPH-Gx	10-8-18	10-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	92	66-117				
Client ID:	MW-20-100318					
Laboratory ID:	10-082-02					
Gasoline	ND	100	NWTPH-Gx	10-8-18	10-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	92	66-117				
Client ID:	MW-18-100318					
Laboratory ID:	10-082-03					
Gasoline	ND	100	NWTPH-Gx	10-8-18	10-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	92	66-117				
Client ID:	MW-15-100318					
Laboratory ID:	10-082-04					
Gasoline	ND	100	NWTPH-Gx	10-8-18	10-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	91	66-117				
Client ID:	MW-12-100318					
Laboratory ID:	10-082-05					
Gasoline	ND	100	NWTPH-Gx	10-8-18	10-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	93	66-117				
Client ID:	MW-7-100318					
Laboratory ID:	10-082-06					
Gasoline	ND	100	NWTPH-Gx	10-8-18	10-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	96	66-117				



Date of Report: October 12, 2018
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**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11-100318					
Laboratory ID:	10-082-07					
Gasoline	ND	100	NWTPH-Gx	10-8-18	10-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	66-117				
Client ID:	MW-16-100318					
Laboratory ID:	10-082-08					
Gasoline	ND	100	NWTPH-Gx	10-8-18	10-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	95	66-117				
Client ID:	MW-8-100318					
Laboratory ID:	10-082-09					
Gasoline	ND	100	NWTPH-Gx	10-8-18	10-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	66-117				
Client ID:	MW-9-100318					
Laboratory ID:	10-082-10					
Gasoline	ND	100	NWTPH-Gx	10-8-18	10-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	66-117				



Date of Report: October 12, 2018
 Samples Submitted: October 4, 2018
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 Project: 1355-001

**GASOLINE RANGE ORGANICS
 NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1005W1					
Gasoline	ND	100	NWTPH-Gx	10-8-18	10-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	66-117				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	10-083-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				92	93	66-117		



Date of Report: October 12, 2018
 Samples Submitted: October 4, 2018
 Laboratory Reference: 1810-082
 Project: 1355-001

**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-14-100318					
Laboratory ID:	10-082-01					
Diesel Range Organics	ND	0.25	NWTPH-Dx	10-5-18	10-5-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	10-5-18	10-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	101	50-150				

Client ID:	MW-20-100318					
Laboratory ID:	10-082-02					
Diesel Range Organics	ND	0.25	NWTPH-Dx	10-5-18	10-5-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	10-5-18	10-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	99	50-150				

Client ID:	MW-18-100318					
Laboratory ID:	10-082-03					
Diesel Range Organics	ND	0.26	NWTPH-Dx	10-5-18	10-5-18	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	10-5-18	10-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	102	50-150				

Client ID:	MW-15-100318					
Laboratory ID:	10-082-04					
Diesel Range Organics	ND	0.25	NWTPH-Dx	10-5-18	10-5-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	10-5-18	10-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	102	50-150				

Client ID:	MW-12-100318					
Laboratory ID:	10-082-05					
Diesel Range Organics	0.26	0.26	NWTPH-Dx	10-5-18	10-5-18	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	10-5-18	10-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	100	50-150				

Client ID:	MW-7-100318					
Laboratory ID:	10-082-06					
Diesel Range Organics	ND	0.25	NWTPH-Dx	10-5-18	10-5-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	10-5-18	10-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	104	50-150				



Date of Report: October 12, 2018
 Samples Submitted: October 4, 2018
 Laboratory Reference: 1810-082
 Project: 1355-001

**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-11-100318					
Laboratory ID:	10-082-07					
Diesel Range Organics	ND	0.28	NWTPH-Dx	10-5-18	10-5-18	
Lube Oil Range Organics	ND	0.44	NWTPH-Dx	10-5-18	10-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	107	50-150				

Client ID:	MW-16-100318					
Laboratory ID:	10-082-08					
Diesel Range Organics	ND	0.26	NWTPH-Dx	10-5-18	10-5-18	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	10-5-18	10-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	94	50-150				

Client ID:	MW-9-100318					
Laboratory ID:	10-082-10					
Diesel Range Organics	ND	0.25	NWTPH-Dx	10-5-18	10-5-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	10-5-18	10-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	98	50-150				



Date of Report: October 12, 2018
 Samples Submitted: October 4, 2018
 Laboratory Reference: 1810-082
 Project: 1355-001

**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:	MB1005W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	10-5-18	10-5-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	10-5-18	10-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	101	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	10-082-01							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				101	99	50-150		



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-100318					
Laboratory ID:	10-082-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chloromethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromomethane	ND	0.25	EPA 8260C	10-9-18	10-9-18	
Chloroethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Iodomethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chloroform	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Benzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Trichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Dibromomethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Toluene	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-100318					
Laboratory ID:	10-082-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Dibromochloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-9-18	10-9-18	
o-Xylene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromoform	ND	1.3	EPA 8260C	10-9-18	10-9-18	
Bromobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-9-18	10-9-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-100318					
Laboratory ID:	10-082-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chloromethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromomethane	ND	0.25	EPA 8260C	10-9-18	10-9-18	
Chloroethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Iodomethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chloroform	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Benzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Trichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Dibromomethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Toluene	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-100318					
Laboratory ID:	10-082-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Dibromochloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-9-18	10-9-18	
o-Xylene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromoform	ND	1.3	EPA 8260C	10-9-18	10-9-18	
Bromobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-9-18	10-9-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-18-100318					
Laboratory ID:	10-082-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chloromethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromomethane	ND	0.25	EPA 8260C	10-9-18	10-9-18	
Chloroethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Iodomethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chloroform	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Benzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Trichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Dibromomethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Toluene	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-18-100318					
Laboratory ID:	10-082-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Dibromochloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-9-18	10-9-18	
o-Xylene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromoform	ND	1.3	EPA 8260C	10-9-18	10-9-18	
Bromobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-9-18	10-9-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-15-100318					
Laboratory ID:	10-082-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chloromethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromomethane	ND	0.25	EPA 8260C	10-9-18	10-9-18	
Chloroethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Iodomethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chloroform	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Benzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Trichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Dibromomethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Toluene	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-15-100318					
Laboratory ID:	10-082-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Dibromochloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-9-18	10-9-18	
o-Xylene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromoform	ND	1.3	EPA 8260C	10-9-18	10-9-18	
Bromobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-9-18	10-9-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-12-100318					
Laboratory ID:	10-082-05					
Dichlorodifluoromethane	ND	0.40	EPA 8260C	10-10-18	10-10-18	
Chloromethane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
Vinyl Chloride	13	0.40	EPA 8260C	10-10-18	10-10-18	
Bromomethane	ND	0.54	EPA 8260C	10-10-18	10-10-18	
Chloroethane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
Trichlorofluoromethane	ND	0.40	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethene	1.1	0.40	EPA 8260C	10-10-18	10-10-18	
Iodomethane	ND	3.8	EPA 8260C	10-10-18	10-10-18	
Methylene Chloride	ND	2.0	EPA 8260C	10-10-18	10-10-18	
(trans) 1,2-Dichloroethene	4.5	0.40	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethane	ND	0.40	EPA 8260C	10-10-18	10-10-18	
2,2-Dichloropropane	ND	0.40	EPA 8260C	10-10-18	10-10-18	
(cis) 1,2-Dichloroethene	46	0.40	EPA 8260C	10-10-18	10-10-18	
Bromochloromethane	ND	0.40	EPA 8260C	10-10-18	10-10-18	
Chloroform	ND	0.40	EPA 8260C	10-10-18	10-10-18	
1,1,1-Trichloroethane	ND	0.40	EPA 8260C	10-10-18	10-10-18	
Carbon Tetrachloride	ND	0.52	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloropropene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
Benzene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloroethane	0.80	0.40	EPA 8260C	10-10-18	10-10-18	
Trichloroethene	38	0.40	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloropropane	0.79	0.40	EPA 8260C	10-10-18	10-10-18	
Dibromomethane	ND	0.40	EPA 8260C	10-10-18	10-10-18	
Bromodichloromethane	ND	0.40	EPA 8260C	10-10-18	10-10-18	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260C	10-10-18	10-10-18	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
Toluene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260C	10-10-18	10-10-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-12-100318					
Laboratory ID:	10-082-05					
1,1,2-Trichloroethane	ND	0.40	EPA 8260C	10-10-18	10-10-18	
Tetrachloroethene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
1,3-Dichloropropane	ND	0.40	EPA 8260C	10-10-18	10-10-18	
Dibromochloromethane	ND	0.60	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromoethane	ND	0.40	EPA 8260C	10-10-18	10-10-18	
Chlorobenzene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
1,1,1,2-Tetrachloroethane	ND	0.56	EPA 8260C	10-10-18	10-10-18	
Ethylbenzene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
m,p-Xylene	ND	0.80	EPA 8260C	10-10-18	10-10-18	
o-Xylene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
Bromoform	ND	3.6	EPA 8260C	10-10-18	10-10-18	
Bromobenzene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichloropropane	ND	0.40	EPA 8260C	10-10-18	10-10-18	
2-Chlorotoluene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
4-Chlorotoluene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
1,3-Dichlorobenzene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
1,4-Dichlorobenzene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
1,2-Dichlorobenzene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromo-3-chloropropane	ND	3.8	EPA 8260C	10-10-18	10-10-18	
1,2,4-Trichlorobenzene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
Hexachlorobutadiene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-7-100318					
Laboratory ID:	10-082-06					
Dichlorodifluoromethane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
Chloromethane	ND	10	EPA 8260C	10-10-18	10-10-18	
Vinyl Chloride	250	2.0	EPA 8260C	10-10-18	10-10-18	
Bromomethane	ND	2.7	EPA 8260C	10-10-18	10-10-18	
Chloroethane	ND	10	EPA 8260C	10-10-18	10-10-18	
Trichlorofluoromethane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethene	4.2	2.0	EPA 8260C	10-10-18	10-10-18	
Iodomethane	ND	19	EPA 8260C	10-10-18	10-10-18	
Methylene Chloride	ND	10	EPA 8260C	10-10-18	10-10-18	
(trans) 1,2-Dichloroethene	5.0	2.0	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
2,2-Dichloropropane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
(cis) 1,2-Dichloroethene	210	2.0	EPA 8260C	10-10-18	10-10-18	
Bromochloromethane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
Chloroform	ND	2.0	EPA 8260C	10-10-18	10-10-18	
1,1,1-Trichloroethane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
Carbon Tetrachloride	ND	2.6	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloropropene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
Benzene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloroethane	6.9	2.0	EPA 8260C	10-10-18	10-10-18	
Trichloroethene	50	2.0	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloropropane	3.9	2.0	EPA 8260C	10-10-18	10-10-18	
Dibromomethane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
Bromodichloromethane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
2-Chloroethyl Vinyl Ether	ND	10	EPA 8260C	10-10-18	10-10-18	
(cis) 1,3-Dichloropropene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
Toluene	ND	10	EPA 8260C	10-10-18	10-10-18	
(trans) 1,3-Dichloropropene	ND	2.0	EPA 8260C	10-10-18	10-10-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-7-100318					
Laboratory ID:	10-082-06					
1,1,2-Trichloroethane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
Tetrachloroethene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
1,3-Dichloropropane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
Dibromochloromethane	ND	3.0	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromoethane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
Chlorobenzene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
1,1,1,2-Tetrachloroethane	ND	2.8	EPA 8260C	10-10-18	10-10-18	
Ethylbenzene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
m,p-Xylene	ND	4.0	EPA 8260C	10-10-18	10-10-18	
o-Xylene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
Bromoform	ND	18	EPA 8260C	10-10-18	10-10-18	
Bromobenzene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
1,1,1,2,2-Tetrachloroethane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichloropropane	ND	2.0	EPA 8260C	10-10-18	10-10-18	
2-Chlorotoluene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
4-Chlorotoluene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
1,3-Dichlorobenzene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
1,4-Dichlorobenzene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
1,2-Dichlorobenzene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromo-3-chloropropane	ND	19	EPA 8260C	10-10-18	10-10-18	
1,2,4-Trichlorobenzene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
Hexachlorobutadiene	ND	10	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichlorobenzene	ND	2.0	EPA 8260C	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11-100318					
Laboratory ID:	10-082-07					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chloromethane	ND	1.0	EPA 8260C	10-10-18	10-10-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromomethane	ND	0.27	EPA 8260C	10-10-18	10-10-18	
Chloroethane	ND	1.0	EPA 8260C	10-10-18	10-10-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Iodomethane	ND	1.9	EPA 8260C	10-10-18	10-10-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
(cis) 1,2-Dichloroethene	1.0	0.20	EPA 8260C	10-10-18	10-10-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chloroform	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Carbon Tetrachloride	ND	0.26	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Benzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Trichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Dibromomethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Toluene	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11-100318					
Laboratory ID:	10-082-07					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Dibromochloromethane	ND	0.30	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1,2-Tetrachloroethane	ND	0.28	EPA 8260C	10-10-18	10-10-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
o-Xylene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromoform	ND	1.8	EPA 8260C	10-10-18	10-10-18	
Bromobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromo-3-chloropropane	ND	1.9	EPA 8260C	10-10-18	10-10-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-16-100318					
Laboratory ID:	10-082-08					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chloromethane	ND	1.0	EPA 8260C	10-10-18	10-10-18	
Vinyl Chloride	7.0	0.20	EPA 8260C	10-10-18	10-10-18	
Bromomethane	ND	0.27	EPA 8260C	10-10-18	10-10-18	
Chloroethane	ND	1.0	EPA 8260C	10-10-18	10-10-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethene	0.44	0.20	EPA 8260C	10-10-18	10-10-18	
Iodomethane	ND	1.9	EPA 8260C	10-10-18	10-10-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(trans) 1,2-Dichloroethene	5.4	0.20	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
(cis) 1,2-Dichloroethene	25	0.20	EPA 8260C	10-10-18	10-10-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chloroform	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Carbon Tetrachloride	ND	0.26	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Benzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Trichloroethene	1.2	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Dibromomethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Toluene	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-16-100318					
Laboratory ID:	10-082-08					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Dibromochloromethane	ND	0.30	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1,2-Tetrachloroethane	ND	0.28	EPA 8260C	10-10-18	10-10-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
o-Xylene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromoform	ND	1.8	EPA 8260C	10-10-18	10-10-18	
Bromobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromo-3-chloropropane	ND	1.9	EPA 8260C	10-10-18	10-10-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8-100318					
Laboratory ID:	10-082-09					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chloromethane	ND	1.0	EPA 8260C	10-10-18	10-10-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromomethane	ND	0.27	EPA 8260C	10-10-18	10-10-18	
Chloroethane	ND	1.0	EPA 8260C	10-10-18	10-10-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Iodomethane	ND	1.9	EPA 8260C	10-10-18	10-10-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chloroform	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Carbon Tetrachloride	ND	0.26	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Benzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Trichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Dibromomethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Toluene	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8-100318					
Laboratory ID:	10-082-09					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Dibromochloromethane	ND	0.30	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1,2-Tetrachloroethane	ND	0.28	EPA 8260C	10-10-18	10-10-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
o-Xylene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromoform	ND	1.8	EPA 8260C	10-10-18	10-10-18	
Bromobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromo-3-chloropropane	ND	1.9	EPA 8260C	10-10-18	10-10-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-9-100318					
Laboratory ID:	10-082-10					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chloromethane	ND	1.0	EPA 8260C	10-10-18	10-10-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromomethane	ND	0.27	EPA 8260C	10-10-18	10-10-18	
Chloroethane	ND	1.0	EPA 8260C	10-10-18	10-10-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Iodomethane	ND	1.9	EPA 8260C	10-10-18	10-10-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chloroform	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Carbon Tetrachloride	ND	0.26	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Benzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Trichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Dibromomethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Toluene	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-9-100318					
Laboratory ID:	10-082-10					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Dibromochloromethane	ND	0.30	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1,2-Tetrachloroethane	ND	0.28	EPA 8260C	10-10-18	10-10-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
o-Xylene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromoform	ND	1.8	EPA 8260C	10-10-18	10-10-18	
Bromobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromo-3-chloropropane	ND	1.9	EPA 8260C	10-10-18	10-10-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



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METHOD BLANK QUALITY CONTROL
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1009W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chloromethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromomethane	ND	0.25	EPA 8260C	10-9-18	10-9-18	
Chloroethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Iodomethane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chloroform	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Benzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Trichloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Dibromomethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Toluene	ND	1.0	EPA 8260C	10-9-18	10-9-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-9-18	10-9-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1009W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Dibromochloromethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-9-18	10-9-18	
o-Xylene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Bromoform	ND	1.3	EPA 8260C	10-9-18	10-9-18	
Bromobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-9-18	10-9-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-9-18	10-9-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-9-18	10-9-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-9-18	10-9-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>78-125</i>				



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METHOD BLANK QUALITY CONTROL
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1010W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chloromethane	ND	1.0	EPA 8260C	10-10-18	10-10-18	
Vinyl Chloride	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromomethane	ND	0.27	EPA 8260C	10-10-18	10-10-18	
Chloroethane	ND	1.0	EPA 8260C	10-10-18	10-10-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Iodomethane	ND	1.9	EPA 8260C	10-10-18	10-10-18	
Methylene Chloride	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromochloromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chloroform	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Carbon Tetrachloride	ND	0.26	EPA 8260C	10-10-18	10-10-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Benzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Trichloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Dibromomethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromodichloromethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Toluene	ND	1.0	EPA 8260C	10-10-18	10-10-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-10-18	10-10-18	



Date of Report: October 12, 2018
 Samples Submitted: October 4, 2018
 Laboratory Reference: 1810-082
 Project: 1355-001

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:		MB1010W1				
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Tetrachloroethene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Dibromochloromethane	ND	0.30	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Chlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,1,2-Tetrachloroethane	ND	0.28	EPA 8260C	10-10-18	10-10-18	
Ethylbenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
m,p-Xylene	ND	0.40	EPA 8260C	10-10-18	10-10-18	
o-Xylene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Bromoform	ND	1.8	EPA 8260C	10-10-18	10-10-18	
Bromobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-10-18	10-10-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
1,2-Dibromo-3-chloropropane	ND	1.9	EPA 8260C	10-10-18	10-10-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	10-10-18	10-10-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-10-18	10-10-18	
<i>Surrogate:</i>		<i>Percent Recovery</i>	<i>Control Limits</i>			
<i>Dibromofluoromethane</i>	<i>101</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>78-125</i>				



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**VOLATILE ORGANICS EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB1009W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	11.0	10.9	10.0	10.0	110	109	62-129	1	15	
Benzene	10.4	10.5	10.0	10.0	104	105	77-127	1	15	
Trichloroethene	9.72	9.31	10.0	10.0	97	93	70-120	4	15	
Toluene	10.7	10.3	10.0	10.0	107	103	82-123	4	15	
Chlorobenzene	9.73	9.54	10.0	10.0	97	95	79-120	2	15	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					99	103	75-127			
<i>Toluene-d8</i>					99	98	80-127			
<i>4-Bromofluorobenzene</i>					98	100	78-125			



Date of Report: October 12, 2018
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 Project: 1355-001

**VOLATILE ORGANICS EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB1010W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	12.6	11.2	10.0	10.0	126	112	62-129	12	15	
Benzene	12.0	10.8	10.0	10.0	120	108	77-127	11	15	
Trichloroethene	10.9	9.99	10.0	10.0	109	100	70-120	9	15	
Toluene	12.0	11.1	10.0	10.0	120	111	82-123	8	15	
Chlorobenzene	10.9	9.93	10.0	10.0	109	99	79-120	9	15	
<i>Surrogate:</i>										
Dibromofluoromethane					100	103	75-127			
Toluene-d8					100	102	80-127			
4-Bromofluorobenzene					100	103	78-125			



Date of Report: October 12, 2018
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 Laboratory Reference: 1810-082
 Project: 1355-001

**1,2-DIBROMOETHANE (EDB)
 EPA 8011**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-100318					
Laboratory ID:	10-082-01					
EDB	ND	0.0097	EPA 8011	10-11-18	10-11-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	38	25-143				
Client ID:	MW-20-100318					
Laboratory ID:	10-082-02					
EDB	ND	0.0098	EPA 8011	10-11-18	10-11-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	61	25-143				
Client ID:	MW-18-100318					
Laboratory ID:	10-082-03					
EDB	ND	0.0096	EPA 8011	10-11-18	10-11-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	70	25-143				
Client ID:	MW-15-100318					
Laboratory ID:	10-082-04					
EDB	ND	0.0098	EPA 8011	10-11-18	10-11-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	67	25-143				
Client ID:	MW-12-100318					
Laboratory ID:	10-082-05					
EDB	ND	0.0097	EPA 8011	10-11-18	10-11-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	41	25-143				
Client ID:	MW-7-100318					
Laboratory ID:	10-082-06					
EDB	ND	0.0097	EPA 8011	10-11-18	10-11-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	81	25-143				



Date of Report: October 12, 2018
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 Project: 1355-001

**1,2-DIBROMOETHANE (EDB)
 EPA 8011**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11-100318					
Laboratory ID:	10-082-07					
EDB	ND	0.0098	EPA 8011	10-11-18	10-11-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	55	25-143				
Client ID:	MW-16-100318					
Laboratory ID:	10-082-08					
EDB	ND	0.0098	EPA 8011	10-11-18	10-11-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	67	25-143				
Client ID:	MW-9-100318					
Laboratory ID:	10-082-10					
EDB	ND	0.0098	EPA 8011	10-11-18	10-11-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	60	25-143				



Date of Report: October 12, 2018
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 Laboratory Reference: 1810-082
 Project: 1355-001

**1,2-DIBROMOETHANE (EDB)
 EPA 8011
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1011W1					
EDB	ND	0.010	EPA 8011	10-11-18	10-11-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	69	25-143				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB1011W1										
	SB	SBD	SB	SBD		SB	SBD				
EDB	0.0818	0.0840	0.100	0.100	N/A	82	84	74-131	3	15	
<i>Surrogate:</i>											
TCMX						64	77	25-143			





Data Qualifiers and Abbreviations

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



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
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July 29, 2019

Joe Rounds, Project Manager
Farallon Consulting, L.L.C.
975 5th Avenue Northwest
Issaquah, WA 98027

Dear Mr Rounds:

Included are the results from the testing of material submitted on July 17, 2019 from the Morning Acres 1355-001, F&BI 907294 project. There are 20 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: jrounds@farallonconsulting.com
FLN0729R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 17, 2019 by Friedman & Bruya, Inc. from the Farallon Consulting, L.L.C. Morning Acres 1355-001, F&BI 907294 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, L.L.C.</u>
907294 -01	IA-1-071619
907294 -02	IA-2-071619
907294 -03	IA-3-071619
907294 -04	IA-4-071619
907294 -05	IA-5-071619
907294 -06	IA-6-071619
907294 -07	OA-1-071619

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-1-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-01
Date Analyzed:	07/18/19	Data File:	071816.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

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

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	100
APH EC9-12 aliphatics	72
APH EC9-10 aromatics	<25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-2-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-02
Date Analyzed:	07/18/19	Data File:	071817.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	180
APH EC9-12 aliphatics	73
APH EC9-10 aromatics	<25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-3-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-03
Date Analyzed:	07/18/19	Data File:	071818.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	79	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	120
APH EC9-12 aliphatics	73
APH EC9-10 aromatics	<25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-4-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-04
Date Analyzed:	07/19/19	Data File:	071819.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	98	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	170
APH EC9-12 aliphatics	120
APH EC9-10 aromatics	33

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-5-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-05
Date Analyzed:	07/19/19	Data File:	071820.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	94	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	100
APH EC9-12 aliphatics	85
APH EC9-10 aromatics	<25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-6-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-06
Date Analyzed:	07/19/19	Data File:	071821.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

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

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	210
APH EC9-12 aliphatics	76
APH EC9-10 aromatics	<25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	OA-1-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-07
Date Analyzed:	07/19/19	Data File:	071822.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	99	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	68
APH EC9-12 aliphatics	63
APH EC9-10 aromatics	<25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	Farallon Consulting, L.L.C.
Date Received:	Not Applicable	Project:	Morning Acres 1355-001
Date Collected:	Not Applicable	Lab ID:	09-1687 mb
Date Analyzed:	07/18/19	Data File:	071811.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	101	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	<46
APH EC9-12 aliphatics	<35
APH EC9-10 aromatics	<25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-1-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-01
Date Analyzed:	07/18/19	Data File:	071816.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.26	<0.1
1,2-Dichloroethane (EDC)	0.42	0.10
Trichloroethene	<0.27	<0.05
1,2-Dichloropropane	<0.23	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-2-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-02
Date Analyzed:	07/18/19	Data File:	071817.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

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

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.26	<0.1
1,2-Dichloroethane (EDC)	0.37	0.091
Trichloroethene	<0.27	<0.05
1,2-Dichloropropane	<0.23	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-3-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-03
Date Analyzed:	07/18/19	Data File:	071818.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	77	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.26	<0.1
1,2-Dichloroethane (EDC)	0.057	0.014
Trichloroethene	0.62	0.12
1,2-Dichloropropane	<0.23	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-4-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-04
Date Analyzed:	07/19/19	Data File:	071819.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	96	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	0.56	0.22
1,2-Dichloroethane (EDC)	0.057	0.014
Trichloroethene	0.59	0.11
1,2-Dichloropropane	<0.23	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-5-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-05
Date Analyzed:	07/19/19	Data File:	071820.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.26	<0.1
1,2-Dichloroethane (EDC)	0.057	0.014
Trichloroethene	0.69	0.13
1,2-Dichloropropane	<0.23	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-6-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-06
Date Analyzed:	07/19/19	Data File:	071821.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	101	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.26	<0.1
1,2-Dichloroethane (EDC)	0.65	0.16
Trichloroethene	<0.27	<0.05
1,2-Dichloropropane	<0.23	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	OA-1-071619	Client:	Farallon Consulting, L.L.C.
Date Received:	07/17/19	Project:	Morning Acres 1355-001
Date Collected:	07/16/19	Lab ID:	907294-07
Date Analyzed:	07/19/19	Data File:	071822.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	96	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.26	<0.1
1,2-Dichloroethane (EDC)	0.057	0.014
Trichloroethene	<0.27	<0.05
1,2-Dichloropropane	<0.23	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	ClientID
Date Received:	Not Applicable	Project:	ProjectID
Date Collected:	Not Applicable	Lab ID:	09-1687 mb
Date Analyzed:	07/18/19	Data File:	071811.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	98	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.26	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01
Trichloroethene	<0.27	<0.05
1,2-Dichloropropane	<0.23	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/29/19

Date Received: 07/17/19

Project: Morning Acres 1355-001, F&BI 907294

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

Laboratory Code: 907307-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	320	290	10
APH EC9-12 aliphatics	ug/m3	140	120	15
APH EC9-10 aromatics	ug/m3	<25	<25	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	45	90	70-130
APH EC9-12 aliphatics	ug/m3	45	120	70-130
APH EC9-10 aromatics	ug/m3	45	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/29/19

Date Received: 07/17/19

Project: Morning Acres 1355-001, F&BI 907294

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	ppbv	5	113	70-130
1,2-Dichloroethane (EDC)	ppbv	5	107	70-130
1,2-Dichloropropane	ppbv	5	109	70-130
Trichloroethene	ppbv	5	98	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

907294

SAMPLE CHAIN OF CUSTODY

ME 07/17/19

Report To: Joe Rounds

Company: Fevallan Consulting

Address: 975 5th AVE NW

City, State, ZIP: Issaquah WA 98027

Phone: 425-285-0843 Email: jr@fevallan.com

SAMPLERS (signature)

PROJECT NAME: Merrimac Acres

REPORTING LEVEL: Reporting Level

Indoor Air Deep Soil Gas

Sub Slab/Soil Gas SVE/Grab

PO #: 1355-001

INVOICE TO

INVOICE TO

TURNAROUND TIME: 1 of 1

Standard RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL: Dispose after 30 days Archive Samples Other _____

ANALYSIS REQUESTED

Sample Name	Lab ID	Canister ID	Flow Contr. ID	Date Sampled	Field Initial Press. (Hg)	Field Initial Time	Field Final Press. (Hg)	Field Final Time	TO-15 Full Scan	TO-15 BTEXN	TO-15 eVOCs	HT	Notes
IA-1-071619	01	18556 33331	07883 07883	7/16/19	30	0951	7	1751			X	HT	Please analyze samples for the following: -per 7/17/19 per CC ME
IA2-071619	02	28561	09182	7/16/19	30	0808	6	1609			X*	X	
IA3-071619	03	23229	07851	7/16/19	29	0819	6	1618			X	X	- Trichloroethane
IA-4-071619	04	18566	05354	7/16/19	30	0815	8	1625			X	X	- Vinyl chloride
IA-5-071619	05	20547	07852	7/16/19	30	0813	8	1613			X	X	- 1,2-dichloroethane
IA-G-071619	06	18553	08181	7/16/19	30	0805	7	1607			X	X	- Volatile petroleum hydrocarbons ADH sent to IQ 7/19/19 by EPA TO-15 using ion monitor
OA-1-071619	07	18580	07847	7/16/19	30	0831	5	1631			X	X	

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by:		Greg Peters		Fevallan		7/17/19	1900
Received by:		M. Rounds		FEB T		7/17/19	1600
Relinquished by:							
Received by:				Samples received at		21	00

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



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

April 20, 2021

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

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 2104-098

Dear Stuart:

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

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: April 20, 2021
Samples Submitted: April 14, 2021
Laboratory Reference: 2104-098
Project: 1355-001

Case Narrative

Samples were collected on April 14, 2021 and received by the laboratory on April 14, 2021. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-24-6.0					
Laboratory ID:	04-098-02					
Dichlorodifluoromethane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Chloromethane	ND	0.010	EPA 8260D	4-15-21	4-15-21	
Vinyl Chloride	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Bromomethane	ND	0.010	EPA 8260D	4-15-21	4-15-21	
Chloroethane	ND	0.010	EPA 8260D	4-15-21	4-15-21	
Trichlorofluoromethane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Iodomethane	ND	0.010	EPA 8260D	4-15-21	4-15-21	
Methylene Chloride	ND	0.010	EPA 8260D	4-15-21	4-15-21	
(trans) 1,2-Dichloroethene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
2,2-Dichloropropane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
(cis) 1,2-Dichloroethene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Bromochloromethane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Chloroform	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,1,1-Trichloroethane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Carbon Tetrachloride	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloropropene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloroethane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Trichloroethene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloropropane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Dibromomethane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Bromodichloromethane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
2-Chloroethyl Vinyl Ether	ND	0.010	EPA 8260D	4-15-21	4-15-21	
(cis) 1,3-Dichloropropene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
(trans) 1,3-Dichloropropene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-24-6.0					
Laboratory ID:	04-098-02					
1,1,2-Trichloroethane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Tetrachloroethene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,3-Dichloropropane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Dibromochloromethane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromoethane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Chlorobenzene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,1,1,2-Tetrachloroethane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Bromoform	ND	0.010	EPA 8260D	4-15-21	4-15-21	
Bromobenzene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,1,1,2,2-Tetrachloroethane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichloropropane	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
2-Chlorotoluene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
4-Chlorotoluene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,3-Dichlorobenzene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,4-Dichlorobenzene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,2-Dichlorobenzene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromo-3-chloropropane	ND	0.010	EPA 8260D	4-15-21	4-15-21	
1,2,4-Trichlorobenzene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
Hexachlorobutadiene	ND	0.010	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichlorobenzene	ND	0.0020	EPA 8260D	4-15-21	4-15-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>91</i>	<i>71-130</i>				



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-24-10.0					
Laboratory ID:	04-098-03					
Dichlorodifluoromethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Chloromethane	ND	0.0053	EPA 8260D	4-15-21	4-15-21	
Vinyl Chloride	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Bromomethane	ND	0.0053	EPA 8260D	4-15-21	4-15-21	
Chloroethane	ND	0.0053	EPA 8260D	4-15-21	4-15-21	
Trichlorofluoromethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Iodomethane	ND	0.0053	EPA 8260D	4-15-21	4-15-21	
Methylene Chloride	ND	0.0053	EPA 8260D	4-15-21	4-15-21	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
2,2-Dichloropropane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Bromochloromethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Chloroform	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Carbon Tetrachloride	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloropropene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloroethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Trichloroethene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloropropane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Dibromomethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Bromodichloromethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
2-Chloroethyl Vinyl Ether	ND	0.0053	EPA 8260D	4-15-21	4-15-21	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-24-10.0					
Laboratory ID:	04-098-03					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Tetrachloroethene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,3-Dichloropropane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Dibromochloromethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromoethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Chlorobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Bromoform	ND	0.0053	EPA 8260D	4-15-21	4-15-21	
Bromobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
2-Chlorotoluene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
4-Chlorotoluene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromo-3-chloropropane	ND	0.0053	EPA 8260D	4-15-21	4-15-21	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Hexachlorobutadiene	ND	0.0053	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>71-130</i>				



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-25-2.0					
Laboratory ID:	04-098-05					
Dichlorodifluoromethane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Chloromethane	ND	0.0094	EPA 8260D	4-15-21	4-15-21	
Vinyl Chloride	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Bromomethane	ND	0.0094	EPA 8260D	4-15-21	4-15-21	
Chloroethane	ND	0.0094	EPA 8260D	4-15-21	4-15-21	
Trichlorofluoromethane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Iodomethane	ND	0.0094	EPA 8260D	4-15-21	4-15-21	
Methylene Chloride	ND	0.0094	EPA 8260D	4-15-21	4-15-21	
(trans) 1,2-Dichloroethene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
2,2-Dichloropropane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
(cis) 1,2-Dichloroethene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Bromochloromethane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Chloroform	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,1,1-Trichloroethane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Carbon Tetrachloride	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloropropene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloroethane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Trichloroethene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloropropane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Dibromomethane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Bromodichloromethane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
2-Chloroethyl Vinyl Ether	ND	0.0094	EPA 8260D	4-15-21	4-15-21	
(cis) 1,3-Dichloropropene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
(trans) 1,3-Dichloropropene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-25-2.0					
Laboratory ID:	04-098-05					
1,1,2-Trichloroethane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Tetrachloroethene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,3-Dichloropropane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Dibromochloromethane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromoethane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Chlorobenzene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,1,1,2-Tetrachloroethane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Bromoform	ND	0.0094	EPA 8260D	4-15-21	4-15-21	
Bromobenzene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,1,1,2,2-Tetrachloroethane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichloropropane	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
2-Chlorotoluene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
4-Chlorotoluene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,3-Dichlorobenzene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,4-Dichlorobenzene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,2-Dichlorobenzene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromo-3-chloropropane	ND	0.0094	EPA 8260D	4-15-21	4-15-21	
1,2,4-Trichlorobenzene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
Hexachlorobutadiene	ND	0.0094	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichlorobenzene	ND	0.0019	EPA 8260D	4-15-21	4-15-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-25-6.0					
Laboratory ID:	04-098-06					
Dichlorodifluoromethane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
Chloromethane	ND	0.0078	EPA 8260D	4-15-21	4-15-21	
Vinyl Chloride	0.0019	0.0016	EPA 8260D	4-15-21	4-15-21	
Bromomethane	ND	0.0078	EPA 8260D	4-15-21	4-15-21	
Chloroethane	ND	0.0078	EPA 8260D	4-15-21	4-15-21	
Trichlorofluoromethane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
Iodomethane	ND	0.0078	EPA 8260D	4-15-21	4-15-21	
Methylene Chloride	ND	0.0078	EPA 8260D	4-15-21	4-15-21	
(trans) 1,2-Dichloroethene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
2,2-Dichloropropane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
(cis) 1,2-Dichloroethene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
Bromochloromethane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
Chloroform	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,1,1-Trichloroethane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
Carbon Tetrachloride	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloropropene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloroethane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
Trichloroethene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloropropane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
Dibromomethane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
Bromodichloromethane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
2-Chloroethyl Vinyl Ether	ND	0.0078	EPA 8260D	4-15-21	4-15-21	
(cis) 1,3-Dichloropropene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
(trans) 1,3-Dichloropropene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-25-6.0					
Laboratory ID:	04-098-06					
1,1,2-Trichloroethane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
Tetrachloroethene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,3-Dichloropropane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
Dibromochloromethane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromoethane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
Chlorobenzene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,1,1,2-Tetrachloroethane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
Bromoform	ND	0.0078	EPA 8260D	4-15-21	4-15-21	
Bromobenzene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,1,1,2,2-Tetrachloroethane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichloropropane	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
2-Chlorotoluene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
4-Chlorotoluene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,3-Dichlorobenzene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,4-Dichlorobenzene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,2-Dichlorobenzene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromo-3-chloropropane	ND	0.0078	EPA 8260D	4-15-21	4-15-21	
1,2,4-Trichlorobenzene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
Hexachlorobutadiene	ND	0.0078	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichlorobenzene	ND	0.0016	EPA 8260D	4-15-21	4-15-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-25-10.0					
Laboratory ID:	04-098-07					
Dichlorodifluoromethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Chloromethane	ND	0.0056	EPA 8260D	4-15-21	4-15-21	
Vinyl Chloride	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Bromomethane	ND	0.0056	EPA 8260D	4-15-21	4-15-21	
Chloroethane	ND	0.0056	EPA 8260D	4-15-21	4-15-21	
Trichlorofluoromethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Iodomethane	ND	0.0056	EPA 8260D	4-15-21	4-15-21	
Methylene Chloride	ND	0.0056	EPA 8260D	4-15-21	4-15-21	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
2,2-Dichloropropane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
(cis) 1,2-Dichloroethene	0.0074	0.0011	EPA 8260D	4-15-21	4-15-21	
Bromochloromethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Chloroform	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Carbon Tetrachloride	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloropropene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloroethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Trichloroethene	0.023	0.0011	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloropropane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Dibromomethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Bromodichloromethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
2-Chloroethyl Vinyl Ether	ND	0.0056	EPA 8260D	4-15-21	4-15-21	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-25-10.0					
Laboratory ID:	04-098-07					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Tetrachloroethene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,3-Dichloropropane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Dibromochloromethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromoethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Chlorobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Bromoform	ND	0.0056	EPA 8260D	4-15-21	4-15-21	
Bromobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
2-Chlorotoluene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
4-Chlorotoluene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromo-3-chloropropane	ND	0.0056	EPA 8260D	4-15-21	4-15-21	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
Hexachlorobutadiene	ND	0.0056	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260D	4-15-21	4-15-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>92</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-26-6.0					
Laboratory ID:	04-098-10					
Dichlorodifluoromethane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
Chloromethane	ND	0.0086	EPA 8260D	4-15-21	4-15-21	
Vinyl Chloride	0.0035	0.0017	EPA 8260D	4-15-21	4-15-21	
Bromomethane	ND	0.0086	EPA 8260D	4-15-21	4-15-21	
Chloroethane	ND	0.0086	EPA 8260D	4-15-21	4-15-21	
Trichlorofluoromethane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethene	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
Iodomethane	ND	0.0086	EPA 8260D	4-15-21	4-15-21	
Methylene Chloride	ND	0.0086	EPA 8260D	4-15-21	4-15-21	
(trans) 1,2-Dichloroethene	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
2,2-Dichloropropane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
(cis) 1,2-Dichloroethene	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
Bromochloromethane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
Chloroform	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
1,1,1-Trichloroethane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
Carbon Tetrachloride	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloropropene	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloroethane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
Trichloroethene	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloropropane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
Dibromomethane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
Bromodichloromethane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
2-Chloroethyl Vinyl Ether	ND	0.0086	EPA 8260D	4-15-21	4-15-21	
(cis) 1,3-Dichloropropene	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
(trans) 1,3-Dichloropropene	ND	0.0017	EPA 8260D	4-15-21	4-15-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-26-6.0					
Laboratory ID:	04-098-10					
1,1,2-Trichloroethane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
Tetrachloroethene	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
1,3-Dichloropropane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
Dibromochloromethane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromoethane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
Chlorobenzene	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
1,1,1,2-Tetrachloroethane	ND	0.0017	EPA 8260D	4-15-21	4-15-21	
Bromoform	ND	0.0086	EPA 8260D	4-15-21	4-15-21	
Bromobenzene	ND	0.11	EPA 8260D	4-19-21	4-19-21	
1,1,1,2-Tetrachloroethane	ND	0.11	EPA 8260D	4-19-21	4-19-21	
1,2,3-Trichloropropane	ND	0.11	EPA 8260D	4-19-21	4-19-21	
2-Chlorotoluene	ND	0.11	EPA 8260D	4-19-21	4-19-21	
4-Chlorotoluene	ND	0.11	EPA 8260D	4-19-21	4-19-21	
1,3-Dichlorobenzene	ND	0.11	EPA 8260D	4-19-21	4-19-21	
1,4-Dichlorobenzene	ND	0.11	EPA 8260D	4-19-21	4-19-21	
1,2-Dichlorobenzene	ND	0.11	EPA 8260D	4-19-21	4-19-21	
1,2-Dibromo-3-chloropropane	ND	0.55	EPA 8260D	4-19-21	4-19-21	
1,2,4-Trichlorobenzene	ND	0.11	EPA 8260D	4-19-21	4-19-21	
Hexachlorobutadiene	ND	0.55	EPA 8260D	4-19-21	4-19-21	
1,2,3-Trichlorobenzene	ND	0.11	EPA 8260D	4-19-21	4-19-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>92</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>84</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-26-10.0					
Laboratory ID:	04-098-11					
Dichlorodifluoromethane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
Chloromethane	ND	0.0092	EPA 8260D	4-15-21	4-15-21	
Vinyl Chloride	0.012	0.0018	EPA 8260D	4-15-21	4-15-21	
Bromomethane	ND	0.0092	EPA 8260D	4-15-21	4-15-21	
Chloroethane	ND	0.0092	EPA 8260D	4-15-21	4-15-21	
Trichlorofluoromethane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
Iodomethane	ND	0.0092	EPA 8260D	4-15-21	4-15-21	
Methylene Chloride	ND	0.0092	EPA 8260D	4-15-21	4-15-21	
(trans) 1,2-Dichloroethene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
2,2-Dichloropropane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
(cis) 1,2-Dichloroethene	0.042	0.0018	EPA 8260D	4-15-21	4-15-21	
Bromochloromethane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
Chloroform	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,1,1-Trichloroethane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
Carbon Tetrachloride	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloropropene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloroethane	0.0025	0.0018	EPA 8260D	4-15-21	4-15-21	
Trichloroethene	0.88	0.092	EPA 8260D	4-19-21	4-19-21	
1,2-Dichloropropane	0.0029	0.0018	EPA 8260D	4-15-21	4-15-21	
Dibromomethane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
Bromodichloromethane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
2-Chloroethyl Vinyl Ether	ND	0.0092	EPA 8260D	4-15-21	4-15-21	
(cis) 1,3-Dichloropropene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
(trans) 1,3-Dichloropropene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-26-10.0					
Laboratory ID:	04-098-11					
1,1,2-Trichloroethane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
Tetrachloroethene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,3-Dichloropropane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
Dibromochloromethane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromoethane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
Chlorobenzene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,1,1,2-Tetrachloroethane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
Bromoform	ND	0.0092	EPA 8260D	4-15-21	4-15-21	
Bromobenzene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,1,1,2,2-Tetrachloroethane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichloropropane	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
2-Chlorotoluene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
4-Chlorotoluene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,3-Dichlorobenzene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,4-Dichlorobenzene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,2-Dichlorobenzene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromo-3-chloropropane	ND	0.0092	EPA 8260D	4-15-21	4-15-21	
1,2,4-Trichlorobenzene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
Hexachlorobutadiene	ND	0.0092	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichlorobenzene	ND	0.0018	EPA 8260D	4-15-21	4-15-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>71-130</i>				



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0415S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Chloromethane	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
Vinyl Chloride	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Bromomethane	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
Chloroethane	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
Trichlorofluoromethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Iodomethane	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
Methylene Chloride	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
2,2-Dichloropropane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Bromochloromethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Chloroform	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Carbon Tetrachloride	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloropropene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Trichloroethene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloropropane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Dibromomethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Bromodichloromethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098
 Project: 1355-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0415S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Tetrachloroethene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,3-Dichloropropane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Dibromochloromethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Chlorobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Bromoform	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
Bromobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
2-Chlorotoluene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
4-Chlorotoluene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Hexachlorobutadiene	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>71-130</i>				



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
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VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0419S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Chloromethane	ND	0.0050	EPA 8260D	4-19-21	4-19-21	
Vinyl Chloride	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Bromomethane	ND	0.0050	EPA 8260D	4-19-21	4-19-21	
Chloroethane	ND	0.0050	EPA 8260D	4-19-21	4-19-21	
Trichlorofluoromethane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,1-Dichloroethene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Iodomethane	ND	0.0076	EPA 8260D	4-19-21	4-19-21	
Methylene Chloride	ND	0.0050	EPA 8260D	4-19-21	4-19-21	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,1-Dichloroethane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
2,2-Dichloropropane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Bromochloromethane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Chloroform	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Carbon Tetrachloride	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,1-Dichloropropene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Trichloroethene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,2-Dichloropropane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Dibromomethane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Bromodichloromethane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
2-Chloroethyl Vinyl Ether	ND	0.078	EPA 8260D	4-19-21	4-19-21	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
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VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0419S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Tetrachloroethene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,3-Dichloropropane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Dibromochloromethane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Chlorobenzene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Bromoform	ND	0.0050	EPA 8260D	4-19-21	4-19-21	
Bromobenzene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
2-Chlorotoluene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
4-Chlorotoluene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260D	4-19-21	4-19-21	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
Hexachlorobutadiene	ND	0.0050	EPA 8260D	4-19-21	4-19-21	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260D	4-19-21	4-19-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>71-130</i>				



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098
 Project: 1355-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0415S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0458	0.0444	0.0500	0.0500	92	89	55-126	3	17	
Benzene	0.0498	0.0488	0.0500	0.0500	100	98	65-121	2	16	
Trichloroethene	0.0503	0.0504	0.0500	0.0500	101	101	74-126	0	16	
Toluene	0.0488	0.0486	0.0500	0.0500	98	97	71-121	0	16	
Chlorobenzene	0.0490	0.0485	0.0500	0.0500	98	97	72-123	1	16	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					98	99	74-131			
<i>Toluene-d8</i>					101	100	78-128			
<i>4-Bromofluorobenzene</i>					103	103	71-130			
Laboratory ID:	SB0419S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0562	0.0555	0.0500	0.0500	112	111	55-126	1	17	
Benzene	0.0571	0.0588	0.0500	0.0500	114	118	65-121	3	16	
Trichloroethene	0.0541	0.0587	0.0500	0.0500	108	117	74-126	8	16	
Toluene	0.0490	0.0508	0.0500	0.0500	98	102	71-121	4	16	
Chlorobenzene	0.0482	0.0490	0.0500	0.0500	96	98	72-123	2	16	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					94	93	74-131			
<i>Toluene-d8</i>					98	98	78-128			
<i>4-Bromofluorobenzene</i>					107	104	71-130			



Date of Report: April 20, 2021
Samples Submitted: April 14, 2021
Laboratory Reference: 2104-098
Project: 1355-001

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-24-6.0	04-098-02	36	4-15-21
FB-24-10.0	04-098-03	21	4-15-21
FB-25-2.0	04-098-05	42	4-15-21
FB-25-6.0	04-098-06	33	4-15-21
FB-25-10.0	04-098-07	17	4-15-21
FB-26-6.0	04-098-10	36	4-15-21
FB-26-10.0	04-098-11	27	4-15-21





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





MVA OnSite Environmental Inc.
Analytical Laboratory Testing Services

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

Chain of Custody

Turnaround Request
(in working days)

(Check One)

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

_____ (other)

Laboratory Number:

04-098

Company: FARALLON
 Project Number: 1355-001
 Project Name: Morningside Acres
 Project Manager: Stuart Brown
 Sampled by: Elise Bugege

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	FB-24-2.0	4/13	0905	S	5
2	FB-24-6.0		1000	S	5
3	FB-24-10.0		1035	S	5
4	FB-24-14.0		1125	S	5
5	FB-25-2.0		1013	S	5
6	FB-25-6.0		1205	S	5
7	FB-25-10.0		1220	S	5
8	FB-25-13.0		1245	S	5
9	FB-26-2.0		1355	S	5
10	FB-26-6.0		1415	S	5

Parameter	4/13/21	4-14-21	4/14/21	1052
NWTPH-HCID				
NWTPH-Gx/BTEX				
NWTPH-Gx				
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)				
Volatiles 8260D				
Halogenated Volatiles 8260D	X			
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				
% Moisture	X			

Signature	Company	Date	Time	Comments/Special Instructions
<u>Elise Bugege</u>	<u>FLN</u>	<u>4/13/21</u>	<u>1700</u>	<u>*CONTACT PM for analysis AND TAT -></u>
<u>Stuart Brown</u>	<u>Speedy</u>	<u>4-14-21</u>	<u>0912</u>	<u>X-Added 4/14/2021. DB (STA)</u>
<u>Michael Salinas</u>	<u>OSI</u>	<u>4/14/21</u>	<u>1052</u>	

Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Reviewed/Date _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



OnSite Environmental Inc.

Analytical Laboratory Testing Services
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Chain of Custody

Turnaround Request (in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number:

04-098

Company: Farallon
Project Number: 1355-001
Project Name: Morningside Acres
Project Manager: Shawrt Brown
Sampled by: Eiise Budge

Lab ID

Sample Identification

Number of Containers

NWTPH-HCID	
NWTPH-Gx/BTEX	
NWTPH-Gx	
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	
Volatiles 8260D	
Halogenated Volatiles 8260D	X
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	

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
11	FB-26-10.0	4/13	1435	S	5
12	FB-26-14.0		1455	S	5
13	FB-27-2.0		1515	S	5
14	FB-27-6.0		1530	S	5
15	FB-27-10.0		1540	S	5
16	FB-27-14.0		1610	S	5

~~Signature: DWNO 4/13/21~~

Signature

Company

Date

Time

Comments/Special Instructions

Relinquished FLN 4/13/21 1700 *CONTACT PM FOR ANALYSIS AND TAT DB

Received Speedy 4-14-21 0912

Relinquished Speedy 4-14-21 1053

Received OSI 4/14/21 1053

Relinquished Speedy

Received

Reviewed/Date

Reviewed/Date

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



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

April 22, 2021

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

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 2104-098B

Dear Stuart:

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

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: April 22, 2021
Samples Submitted: April 14, 2021
Laboratory Reference: 2104-098B
Project: 1355-001

Case Narrative

Samples were collected on April 13, 2021 and received by the laboratory on April 14, 2021. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: April 22, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098B
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-26-14.0					
Laboratory ID:	04-098-12					
Trichloroethene	ND	0.0011	EPA 8260D	4-21-21	4-21-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>110</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>71-130</i>				



Date of Report: April 22, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098B
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-27-10.0					
Laboratory ID:	04-098-15					
Trichloroethene	ND	0.0013	EPA 8260D	4-21-21	4-21-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>113</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>71-130</i>				



Date of Report: April 22, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098B
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-27-14.0					
Laboratory ID:	04-098-16					
Trichloroethene	ND	0.0012	EPA 8260D	4-21-21	4-21-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>71-130</i>				



Date of Report: April 22, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098B
 Project: 1355-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0421S2					
Trichloroethene	ND	0.0010	EPA 8260D	4-21-21	4-21-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	114	74-131				
<i>Toluene-d8</i>	99	78-128				
<i>4-Bromofluorobenzene</i>	98	71-130				



Date of Report: April 22, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-098B
 Project: 1355-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB0421S2									
	SB	SBD	SB	SBD	SB	SBD				
Trichloroethene	0.0519	0.0511	0.0500	0.0500	104	102	74-126	2	16	
<i>Surrogate:</i>										
Dibromofluoromethane					102	108	74-131			
Toluene-d8					99	98	78-128			
4-Bromofluorobenzene					105	103	71-130			



Date of Report: April 22, 2021
Samples Submitted: April 14, 2021
Laboratory Reference: 2104-098B
Project: 1355-001

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-26-14.0	04-098-12	16	4-21-21
FB-27-10.0	04-098-15	21	4-21-21
FB-27-14.0	04-098-16	15	4-21-21





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

Turnaround Request (in working days)
(Check One)

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

_____ (other)

Laboratory Number: **04-098**

Company: **FARALLON**

Project Number: **1355-001**

Project Name: **Morningside Acres**

Project Manager: **Stuart Brown**

Sampled by: **Elise Bugge**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	FB-24-2.0	4/13	0905	S	5
2	FB-24-6.0		1000	S	5
3	FB-24-10.0		1035	S	5
4	FB-24-14.0		1125	S	5
5	FB-25-2.0		1013	S	5
6	FB-25-6.0		1205	S	5
7	FB-25-10.0		1220	S	5
8	FB-25-13.0		1245	S	5
9	FB-26-2.0		1355	S	5
10	FB-26-6.0		1415	S	5

Date	Time	Comments/Special Instructions
4/13/21	1700	*CONTACT PIA for analysis AND FAT →
4-13-21	0912	X-Added 4/14/2021. DB (STA)
4-14-21	1052	⊗ Added 4/21/21. DB (STA)
4/14/21	1052	

Relinquished Signature: **Elise Bugge** Company: **FLN**

Received Signature: **Rob Bortles** Speedy

Relinquished Signature: **Rob Bortles** Speedy

Received Signature: **Nicole Salinas** CST

Relinquished

Received

Reviewed/Date

Reviewed/Date

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



OnSite Environmental Inc.

Analytical Laboratory Testing Services
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Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(In working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: **04-098**

Company: Faxallion
Project Number: 1355-001
Project Name: Morningside Acres
Project Manager: Shurt Brown
Sampled by: Eise Budge

Lab ID Sample Identification Date Sampled Time Sampled Matrix

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
11	FB-26-10.0	4/13	1435	S	5
12	FB-26-14.0		1455	S	5
13	FB-27-2.0		1515	S	5
14	FB-27-6.0		1530	S	5
15	FB-27-10.0		1540	S	5
16	FB-27-14.0		1610	S	5

Number of Containers

NWTPH-HCID	
NWTPH-Gx/BTEX	
NWTPH-Gx	
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	
Volatiles 8260D	
Halogenated Volatiles 8260D	X
EDB EPA 8011 (Waters Only)	X
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	
% Moisture	X

~~2 MW 4/13/21~~

Signature Company Date Time Comments/Special Instructions

Eise Budge FLN 4/13/21 1700 *CONTACT PM FOR ANALYSIS AND TAT DS

OSB Budge Speedy 4-14-21 0912

OSB Budge Speedy 4-14-21 1053

Numerous OSB 4/14/21 1053

Received _____

Reviewed/Date _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

April 20, 2021

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

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 2104-105

Dear Stuart:

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

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: April 20, 2021
Samples Submitted: April 14, 2021
Laboratory Reference: 2104-105
Project: 1355-001

Case Narrative

Samples were collected on April 14, 2021 and received by the laboratory on April 14, 2021. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-105
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-28-2.0					
Laboratory ID:	04-105-01					
Dichlorodifluoromethane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Chloromethane	ND	0.0075	EPA 8260D	4-15-21	4-15-21	
Vinyl Chloride	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Bromomethane	ND	0.0075	EPA 8260D	4-15-21	4-15-21	
Chloroethane	ND	0.0075	EPA 8260D	4-15-21	4-15-21	
Trichlorofluoromethane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Iodomethane	ND	0.0075	EPA 8260D	4-15-21	4-15-21	
Methylene Chloride	ND	0.0075	EPA 8260D	4-15-21	4-15-21	
(trans) 1,2-Dichloroethene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
2,2-Dichloropropane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
(cis) 1,2-Dichloroethene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Bromochloromethane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Chloroform	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,1,1-Trichloroethane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Carbon Tetrachloride	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloropropene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloroethane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Trichloroethene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloropropane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Dibromomethane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Bromodichloromethane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
2-Chloroethyl Vinyl Ether	ND	0.0075	EPA 8260D	4-15-21	4-15-21	
(cis) 1,3-Dichloropropene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
(trans) 1,3-Dichloropropene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-105
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-28-2.0					
Laboratory ID:	04-105-01					
1,1,2-Trichloroethane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Tetrachloroethene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,3-Dichloropropane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Dibromochloromethane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromoethane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Chlorobenzene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,1,1,2-Tetrachloroethane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Bromoform	ND	0.0075	EPA 8260D	4-15-21	4-15-21	
Bromobenzene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,1,1,2-Tetrachloroethane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichloropropane	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
2-Chlorotoluene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
4-Chlorotoluene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,3-Dichlorobenzene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,4-Dichlorobenzene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,2-Dichlorobenzene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromo-3-chloropropane	ND	0.0075	EPA 8260D	4-15-21	4-15-21	
1,2,4-Trichlorobenzene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
Hexachlorobutadiene	ND	0.0075	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichlorobenzene	ND	0.0015	EPA 8260D	4-15-21	4-15-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>71-130</i>				



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-105
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-28-6.0					
Laboratory ID:	04-105-02					
Dichlorodifluoromethane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
Chloromethane	ND	0.0064	EPA 8260D	4-15-21	4-15-21	
Vinyl Chloride	0.0066	0.0013	EPA 8260D	4-15-21	4-15-21	
Bromomethane	ND	0.0064	EPA 8260D	4-15-21	4-15-21	
Chloroethane	ND	0.0064	EPA 8260D	4-15-21	4-15-21	
Trichlorofluoromethane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
Iodomethane	ND	0.0064	EPA 8260D	4-15-21	4-15-21	
Methylene Chloride	ND	0.0064	EPA 8260D	4-15-21	4-15-21	
(trans) 1,2-Dichloroethene	0.0080	0.0013	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
2,2-Dichloropropane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
(cis) 1,2-Dichloroethene	0.039	0.0013	EPA 8260D	4-15-21	4-15-21	
Bromochloromethane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
Chloroform	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
Carbon Tetrachloride	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloropropene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloroethane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
Trichloroethene	0.034	0.0013	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloropropane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
Dibromomethane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
Bromodichloromethane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
2-Chloroethyl Vinyl Ether	ND	0.0064	EPA 8260D	4-15-21	4-15-21	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-105
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-28-6.0					
Laboratory ID:	04-105-02					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
Tetrachloroethene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
1,3-Dichloropropane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
Dibromochloromethane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromoethane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
Chlorobenzene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
Bromoform	ND	0.0064	EPA 8260D	4-15-21	4-15-21	
Bromobenzene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
1,1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
2-Chlorotoluene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
4-Chlorotoluene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromo-3-chloropropane	ND	0.0064	EPA 8260D	4-15-21	4-15-21	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
Hexachlorobutadiene	ND	0.0064	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260D	4-15-21	4-15-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>71-130</i>				



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-105
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0415S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Chloromethane	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
Vinyl Chloride	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Bromomethane	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
Chloroethane	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
Trichlorofluoromethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Iodomethane	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
Methylene Chloride	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloroethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
2,2-Dichloropropane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Bromochloromethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Chloroform	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Carbon Tetrachloride	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,1-Dichloropropene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Trichloroethene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,2-Dichloropropane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Dibromomethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Bromodichloromethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-105
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0415S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Tetrachloroethene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,3-Dichloropropane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Dibromochloromethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Chlorobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Bromoform	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
Bromobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
2-Chlorotoluene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
4-Chlorotoluene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
Hexachlorobutadiene	ND	0.0050	EPA 8260D	4-15-21	4-15-21	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260D	4-15-21	4-15-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>74-131</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>71-130</i>				



Date of Report: April 20, 2021
 Samples Submitted: April 14, 2021
 Laboratory Reference: 2104-105
 Project: 1355-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0415S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0458	0.0444	0.0500	0.0500	92	89	55-126	3	17	
Benzene	0.0498	0.0488	0.0500	0.0500	100	98	65-121	2	16	
Trichloroethene	0.0503	0.0504	0.0500	0.0500	101	101	74-126	0	16	
Toluene	0.0488	0.0486	0.0500	0.0500	98	97	71-121	0	16	
Chlorobenzene	0.0490	0.0485	0.0500	0.0500	98	97	72-123	1	16	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					98	99	74-131			
<i>Toluene-d8</i>					101	100	78-128			
<i>4-Bromofluorobenzene</i>					103	103	71-130			



Date of Report: April 20, 2021
Samples Submitted: April 14, 2021
Laboratory Reference: 2104-105
Project: 1355-001

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-28-2.0	04-105-01	36	4-15-21
FB-28-6.0	04-105-02	29	4-15-21





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





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

August 18, 2021

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

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 2108-102

Dear Brani:

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

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: August 18, 2021
Samples Submitted: August 10, 2021
Laboratory Reference: 2108-102
Project: 1355-001

Case Narrative

Samples were collected on August 9, 2021 and received by the laboratory on August 10, 2021. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: August 18, 2021
 Samples Submitted: August 10, 2021
 Laboratory Reference: 2108-102
 Project: 1355-001

**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-3-080921					
Laboratory ID:	08-102-01					
Gasoline	ND	100	NWTPH-Gx	8-11-21	8-11-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	104	66-117				
Client ID:	MW-7-080921					
Laboratory ID:	08-102-02					
Gasoline	ND	100	NWTPH-Gx	8-11-21	8-11-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	98	66-117				
Client ID:	MW-11-080921					
Laboratory ID:	08-102-03					
Gasoline	ND	100	NWTPH-Gx	8-11-21	8-11-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	98	66-117				
Client ID:	MW-12-080921					
Laboratory ID:	08-102-04					
Gasoline	ND	100	NWTPH-Gx	8-11-21	8-11-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	117	66-117				
Client ID:	MW-13-080921					
Laboratory ID:	08-102-05					
Gasoline	ND	100	NWTPH-Gx	8-11-21	8-11-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	99	66-117				
Client ID:	MW-15-080921					
Laboratory ID:	08-102-06					
Gasoline	ND	100	NWTPH-Gx	8-11-21	8-11-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	102	66-117				
Client ID:	MW-16-080921					
Laboratory ID:	08-102-07					
Gasoline	ND	100	NWTPH-Gx	8-11-21	8-11-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	94	66-117				



Date of Report: August 18, 2021
 Samples Submitted: August 10, 2021
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**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-17-080921					
Laboratory ID:	08-102-08					
Gasoline	ND	100	NWTPH-Gx	8-11-21	8-11-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	100	66-117				
Client ID:	MW-19-080921					
Laboratory ID:	08-102-09					
Gasoline	ND	100	NWTPH-Gx	8-11-21	8-11-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	108	66-117				
Client ID:	MW-21-080921					
Laboratory ID:	08-102-10					
Gasoline	ND	100	NWTPH-Gx	8-11-21	8-11-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	101	66-117				



Date of Report: August 18, 2021
 Samples Submitted: August 10, 2021
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 Project: 1355-001

**GASOLINE RANGE ORGANICS
 NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0811W1					
Gasoline	ND	100	NWTPH-Gx	8-11-21	8-11-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	96	66-117				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-102-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
Fluorobenzene			104	97	66-117			



Date of Report: August 18, 2021
 Samples Submitted: August 10, 2021
 Laboratory Reference: 2108-102
 Project: 1355-001

**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-3-080921					
Laboratory ID:	08-102-01					
Diesel Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-17-21	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-17-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				

Client ID:	MW-7-080921					
Laboratory ID:	08-102-02					
Diesel Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-17-21	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-17-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	86	50-150				

Client ID:	MW-11-080921					
Laboratory ID:	08-102-03					
Diesel Range Organics	0.32	0.21	NWTPH-Dx	8-16-21	8-17-21	
Lube Oil Range Organics	0.69	0.21	NWTPH-Dx	8-16-21	8-17-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	95	50-150				

Client ID:	MW-12-080921					
Laboratory ID:	08-102-04					
Diesel Range Organics	0.40	0.21	NWTPH-Dx	8-16-21	8-17-21	
Lube Oil Range Organics	0.23	0.21	NWTPH-Dx	8-16-21	8-17-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	87	50-150				

Client ID:	MW-13-080921					
Laboratory ID:	08-102-05					
Diesel Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-17-21	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-17-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	72	50-150				

Client ID:	MW-15-080921					
Laboratory ID:	08-102-06					
Diesel Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-17-21	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-17-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	91	50-150				



Date of Report: August 18, 2021
 Samples Submitted: August 10, 2021
 Laboratory Reference: 2108-102
 Project: 1355-001

**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-16-080921					
Laboratory ID:	08-102-07					
Diesel Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-17-21	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-17-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	75	50-150				
Client ID:	MW-17-080921					
Laboratory ID:	08-102-08					
Diesel Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-17-21	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-17-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	87	50-150				
Client ID:	MW-19-080921					
Laboratory ID:	08-102-09					
Diesel Range Organics	ND	0.20	NWTPH-Dx	8-16-21	8-17-21	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	8-16-21	8-17-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	100	50-150				
Client ID:	MW-21-080921					
Laboratory ID:	08-102-10					
Diesel Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-18-21	
Lube Oil Range Organics	0.26	0.21	NWTPH-Dx	8-16-21	8-18-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	76	50-150				



Date of Report: August 18, 2021
 Samples Submitted: August 10, 2021
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 Project: 1355-001

**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:	MB0816W1					
Diesel Range Organics	ND	0.20	NWTPH-Dx	8-16-21	8-17-21	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	8-16-21	8-17-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>108</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-102-01							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				92	90	50-150		



Date of Report: August 18, 2021
 Samples Submitted: August 10, 2021
 Laboratory Reference: 2108-102
 Project: 1355-001

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

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-3-080921					
Laboratory ID:	08-102-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	0.51	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



Date of Report: August 18, 2021
 Samples Submitted: August 10, 2021
 Laboratory Reference: 2108-102
 Project: 1355-001

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-3-080921					
Laboratory ID:	08-102-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-7-080921					
Laboratory ID:	08-102-02					
Dichlorodifluoromethane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	4.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	150	0.80	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	4.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	2.5	0.80	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	4.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	4.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	2.6	0.80	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	120	0.80	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.80	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.80	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	4.2	0.80	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	34	0.80	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	2.4	0.80	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	4.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	4.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.80	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-7-080921					
Laboratory ID:	08-102-02					
1,1,2-Trichloroethane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	1.6	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	4.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.80	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	1.1	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	4.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	4.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11-080921					
Laboratory ID:	08-102-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	0.62	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11-080921					
Laboratory ID:	08-102-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-12-080921					
Laboratory ID:	08-102-04					
Dichlorodifluoromethane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	2.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	20	0.40	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	2.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	1.2	0.40	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	2.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	2.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	4.7	0.40	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	57	0.40	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.40	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.40	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	0.91	0.40	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	47	0.40	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	0.75	0.40	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	2.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-12-080921					
Laboratory ID:	08-102-04					
1,1,2-Trichloroethane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.80	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	2.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.54	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	2.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-13-080921					
Laboratory ID:	08-102-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-13-080921					
Laboratory ID:	08-102-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-15-080921					
Laboratory ID:	08-102-06					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-15-080921					
Laboratory ID:	08-102-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-16-080921					
Laboratory ID:	08-102-07					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	7.1	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	0.41	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	4.7	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	25	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	1.2	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-16-080921					
Laboratory ID:	08-102-07					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-17-080921					
Laboratory ID:	08-102-08					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	22	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	4.2	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	1.2	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	8.8	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	23	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	0.20	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	16	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	0.26	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-17-080921					
Laboratory ID:	08-102-08					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-080921					
Laboratory ID:	08-102-09					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	15	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	0.51	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	7.1	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	2.8	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	1.2	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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VOLATILE ORGANICS EPA 8260D

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-19-080921					
Laboratory ID:	08-102-09					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-21-080921					
Laboratory ID:	08-102-10					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	0.98	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	0.55	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-21-080921					
Laboratory ID:	08-102-10					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>78-125</i>				



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**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0813W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



Date of Report: August 18, 2021
 Samples Submitted: August 10, 2021
 Laboratory Reference: 2108-102
 Project: 1355-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0813W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



Date of Report: August 18, 2021
 Samples Submitted: August 10, 2021
 Laboratory Reference: 2108-102
 Project: 1355-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0813W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.59	9.05	10.0	10.0	96	91	78-124	6	19	
Benzene	9.54	9.11	10.0	10.0	95	91	80-119	5	16	
Trichloroethene	9.81	9.49	10.0	10.0	98	95	80-121	3	18	
Toluene	9.74	9.29	10.0	10.0	97	93	80-117	5	18	
Chlorobenzene	9.86	9.26	10.0	10.0	99	93	80-117	6	17	
<i>Surrogate:</i>										
Dibromofluoromethane					98	99	75-127			
Toluene-d8					99	100	80-127			
4-Bromofluorobenzene					100	101	78-125			





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





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

August 19, 2021

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

Re: Analytical Data for Project 1355-001
Laboratory Reference No. 2108-109

Dear Brani:

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

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: August 19, 2021
Samples Submitted: August 10, 2021
Laboratory Reference: 2108-109
Project: 1355-001

Case Narrative

Samples were collected on August 10, 2021 and received by the laboratory on August 10, 2021. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: August 19, 2021
 Samples Submitted: August 10, 2021
 Laboratory Reference: 2108-109
 Project: 1355-001

**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-081021					
Laboratory ID:	08-109-01					
Gasoline	ND	100	NWTPH-Gx	8-12-21	8-12-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	98	66-117				
Client ID:	MW-18-081021					
Laboratory ID:	08-109-02					
Gasoline	ND	100	NWTPH-Gx	8-12-21	8-12-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	95	66-117				
Client ID:	MW-8-081021					
Laboratory ID:	08-109-03					
Gasoline	ND	100	NWTPH-Gx	8-12-21	8-12-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	109	66-117				
Client ID:	MW-9-081021					
Laboratory ID:	08-109-04					
Gasoline	ND	100	NWTPH-Gx	8-12-21	8-12-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	101	66-117				
Client ID:	MW-6-081021					
Laboratory ID:	08-109-05					
Gasoline	ND	100	NWTPH-Gx	8-12-21	8-12-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	98	66-117				
Client ID:	MW-20-081021					
Laboratory ID:	08-109-06					
Gasoline	ND	100	NWTPH-Gx	8-12-21	8-12-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	109	66-117				
Client ID:	MW-2-081021					
Laboratory ID:	08-109-07					
Gasoline	ND	100	NWTPH-Gx	8-12-21	8-12-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	105	66-117				



Date of Report: August 19, 2021
 Samples Submitted: August 10, 2021
 Laboratory Reference: 2108-109
 Project: 1355-001

**GASOLINE RANGE ORGANICS
 NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0812W1					
Gasoline	ND	100	NWTPH-Gx	8-12-21	8-12-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	97	66-117				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-122-03							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				105	104	66-117		



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 Samples Submitted: August 10, 2021
 Laboratory Reference: 2108-109
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**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-14-081021					
Laboratory ID:	08-109-01					
Diesel Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-18-21	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-18-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>84</i>	<i>50-150</i>				

Client ID:	MW-18-081021					
Laboratory ID:	08-109-02					
Diesel Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-18-21	
Lube Oil Range Organics	0.26	0.21	NWTPH-Dx	8-16-21	8-18-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>84</i>	<i>50-150</i>				

Client ID:	MW-8-081021					
Laboratory ID:	08-109-03					
Diesel Range Organics	ND	0.26	NWTPH-Dx	8-16-21	8-18-21	
Lube Oil Range Organics	ND	0.26	NWTPH-Dx	8-16-21	8-18-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>77</i>	<i>50-150</i>				

Client ID:	MW-9-081021					
Laboratory ID:	08-109-04					
Diesel Range Organics	0.28	0.21	NWTPH-Dx	8-16-21	8-18-21	
Lube Oil Range Organics	0.33	0.21	NWTPH-Dx	8-16-21	8-18-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>87</i>	<i>50-150</i>				

Client ID:	MW-6-081021					
Laboratory ID:	08-109-05					
Diesel Range Organics	0.46	0.21	NWTPH-Dx	8-16-21	8-18-21	
Lube Oil Range Organics	0.52	0.21	NWTPH-Dx	8-16-21	8-18-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>92</i>	<i>50-150</i>				

Client ID:	MW-20-081021					
Laboratory ID:	08-109-06					
Diesel Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-18-21	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	8-16-21	8-18-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>89</i>	<i>50-150</i>				



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**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-2-081021					
Laboratory ID:	08-109-07					
Diesel Range Organics	ND	0.20	NWTPH-Dx	8-16-21	8-18-21	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	8-16-21	8-18-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>60</i>	<i>50-150</i>				



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**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:	MB0816W1					
Diesel Range Organics	ND	0.20	NWTPH-Dx	8-16-21	8-17-21	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	8-16-21	8-17-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	108	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0816W1							
	ORIG	DUP						
Diesel Fuel #2	0.519	0.503	NA	NA	NA	NA	3	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				100	98	50-150		



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-081021					
Laboratory ID:	08-109-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-081021					
Laboratory ID:	08-109-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-18-081021					
Laboratory ID:	08-109-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-18-081021					
Laboratory ID:	08-109-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8-081021					
Laboratory ID:	08-109-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8-081021					
Laboratory ID:	08-109-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-9-081021					
Laboratory ID:	08-109-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-9-081021					
Laboratory ID:	08-109-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6-081021					
Laboratory ID:	08-109-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6-081021					
Laboratory ID:	08-109-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-081021					
Laboratory ID:	08-109-06					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20-081021					
Laboratory ID:	08-109-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2-081021					
Laboratory ID:	08-109-07					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2-081021					
Laboratory ID:	08-109-07					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>78-125</i>				



Date of Report: August 19, 2021
 Samples Submitted: August 10, 2021
 Laboratory Reference: 2108-109
 Project: 1355-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0813W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloromethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Vinyl Chloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Iodomethane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Methylene Chloride	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chloroform	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Benzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Trichloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromomethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromodichloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Toluene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-13-21	8-13-21	



Date of Report: August 19, 2021
 Samples Submitted: August 10, 2021
 Laboratory Reference: 2108-109
 Project: 1355-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0813W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Tetrachloroethene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Dibromochloromethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Chlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Ethylbenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
m,p-Xylene	ND	0.40	EPA 8260D	8-13-21	8-13-21	
o-Xylene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Bromoform	ND	1.0	EPA 8260D	8-13-21	8-13-21	
Bromobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichloropropane	ND	0.27	EPA 8260D	8-13-21	8-13-21	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-13-21	8-13-21	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-13-21	8-13-21	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



Date of Report: August 19, 2021
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 Laboratory Reference: 2108-109
 Project: 1355-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0813W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.59	9.05	10.0	10.0	96	91	78-124	6	19	
Benzene	9.54	9.11	10.0	10.0	95	91	80-119	5	16	
Trichloroethene	9.81	9.49	10.0	10.0	98	95	80-121	3	18	
Toluene	9.74	9.29	10.0	10.0	97	93	80-117	5	18	
Chlorobenzene	9.86	9.26	10.0	10.0	99	93	80-117	6	17	
<i>Surrogate:</i>										
Dibromofluoromethane					98	99	75-127			
Toluene-d8					99	100	80-127			
4-Bromofluorobenzene					100	101	78-125			





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

Turnaround Request (in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: **08-109**

Company: Ferallon

Project Number: 1355-001

Project Name:

Project Manager: Branii, Justin, Russell Laiten

Sampled by: Barela Luktari, Erise Bugge

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	MW-10-081021	8/10/21	0850	H ₂ O	7
2	MW-14-081021		0905	H ₂ O	7
3	MW-18-081021		0950	H ₂ O	7
4	MW-8-081021		1150	H ₂ O	6
5	MW-9-081021		1101	H ₂ O	7
6	MW-6-081021		1038	H ₂ O	7
7	MW-20-081021		1210	H ₂ O	7
8	MW-2-081021		1125	H ₂ O	7

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	% Moisture
7			X	X	X	X												
7			X	X	X	X												
7			X	X	X	X												
6			X	X	X	X												
7			X	X	X	X												
7			X	X	X	X												
7			X	X	X	X												

Signature	Company	Date	Time	Comments/Special Instructions
<u>Barela Luktari</u>	<u>Ferallon</u>	<u>8/10/21</u>	<u>1650</u>	<u>* BTEX, toluene, ethylbenzene, and Xylenes</u>
<u>Nicholas</u>	<u>OSE</u>	<u>8/10/21</u>	<u>1450</u>	

Relinquished

Received

Relinquished

Received

Relinquished

Received

Reviewed/Date

Reviewed/Date

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)

APPENDIX D
TERRESTRIAL ECOLOGICAL EVALUATION FORM

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY REPORT
Morningside Acres Tracts
5001, 5015, and 5021 Rainier Avenue South
Seattle, Washington

Farallon PN: 1355-001



Voluntary Cleanup Program

Washington State Department of Ecology Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation>.

Step 1: IDENTIFY HAZARDOUS WASTE SITE

Please identify below the hazardous waste site for which you are documenting an evaluation.

Facility/Site Names: Morningside Acres Tracts North, Morningside Acres Tracts South

Facility/Site Addresses: 5001 Rainier Avenue South, 5015 and 5021 Rainier Avenue South

Facility/Site Nos: 8101, 4321

VCP Project No.: To be determined

Step 2: IDENTIFY EVALUATOR

Please identify below the person who conducted the evaluation and their contact information.

Name: Robert Leet

Title: Senior Geologist

Organization: Farallon Consulting, L.L.C.

Mailing address: 1809 7th Ave, Suite 1111

City: Seattle

State: WA

Zip code: 98101

Phone: 425-295-6010

Fax: NA

E-mail: rleet@farallonconsulting.com

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

- Yes *If you answered "YES," then answer **Question 2**.*
- No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? Check all that apply. Then skip to **Step 4** of this form.

Point of Compliance: WAC 173-340-7491(1)(a)

- All soil contamination is, or will be,* at least 15 feet below the surface.
- All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

- All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

- There is less than 0.25 acres of contiguous# undeveloped± land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.
- For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous# undeveloped± land on or within 500 feet of any area of the Site. (See attached Figure C-1)

Background Concentrations: WAC 173-340-7491(1)(d)

- Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

± "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

"Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

- Yes *If you answered "YES," then answer **Question 2** below.*
- No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

- Yes *If you answered "YES," then answer **Question 3** below.*
- No *If you answered "NO," then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

- Yes *If you answered "YES," then answer **Question 4** below.*
- No *If you answered "NO," then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

- Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*
- Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? Check all that apply. Then skip to **Step 4** of this form.

Exposure Analysis: WAC 173-340-7492(2)(a)

- Area of soil contamination at the Site is not more than 350 square feet.
- Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

- No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

- No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. See WAC 173-340-7493(1)(c).

1. Was there a problem? See WAC 173-340-7493(2).

- Yes *If you answered “YES,” then answer **Question 2** below.*
- No *If you answered “NO,” then identify the reason here and then skip to **Question 5** below:*
- No issues were identified during the problem formulation step.
 - While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? See WAC 173-340-7493(3).

- Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?

Check all that apply. See WAC 173-340-7493(3).

- Literature surveys.
- Soil bioassays.
- Wildlife exposure model.
- Biomarkers.
- Site-specific field studies.
- Weight of evidence.
- Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

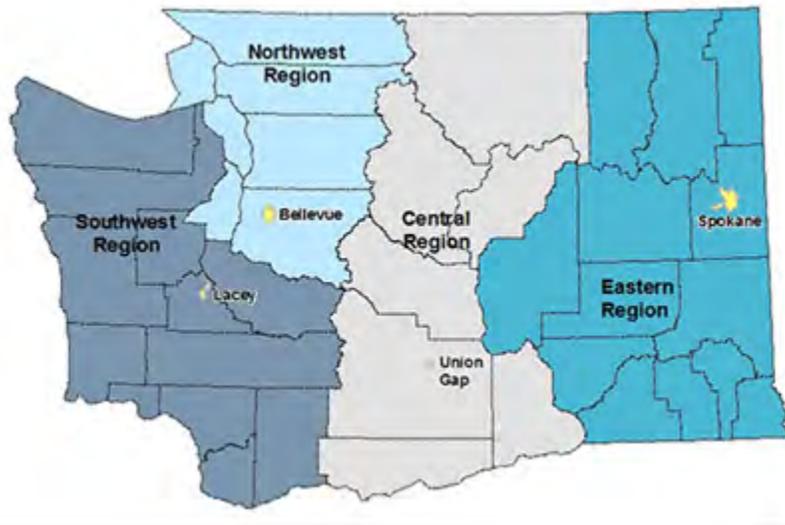
- Confirmed there was no problem.
- Confirmed there was a problem and established site-specific cleanup levels.

5. Have you already obtained Ecology’s approval of both your problem formulation and problem resolution steps?

- Yes If so, please identify the Ecology staff who approved those steps:
- No

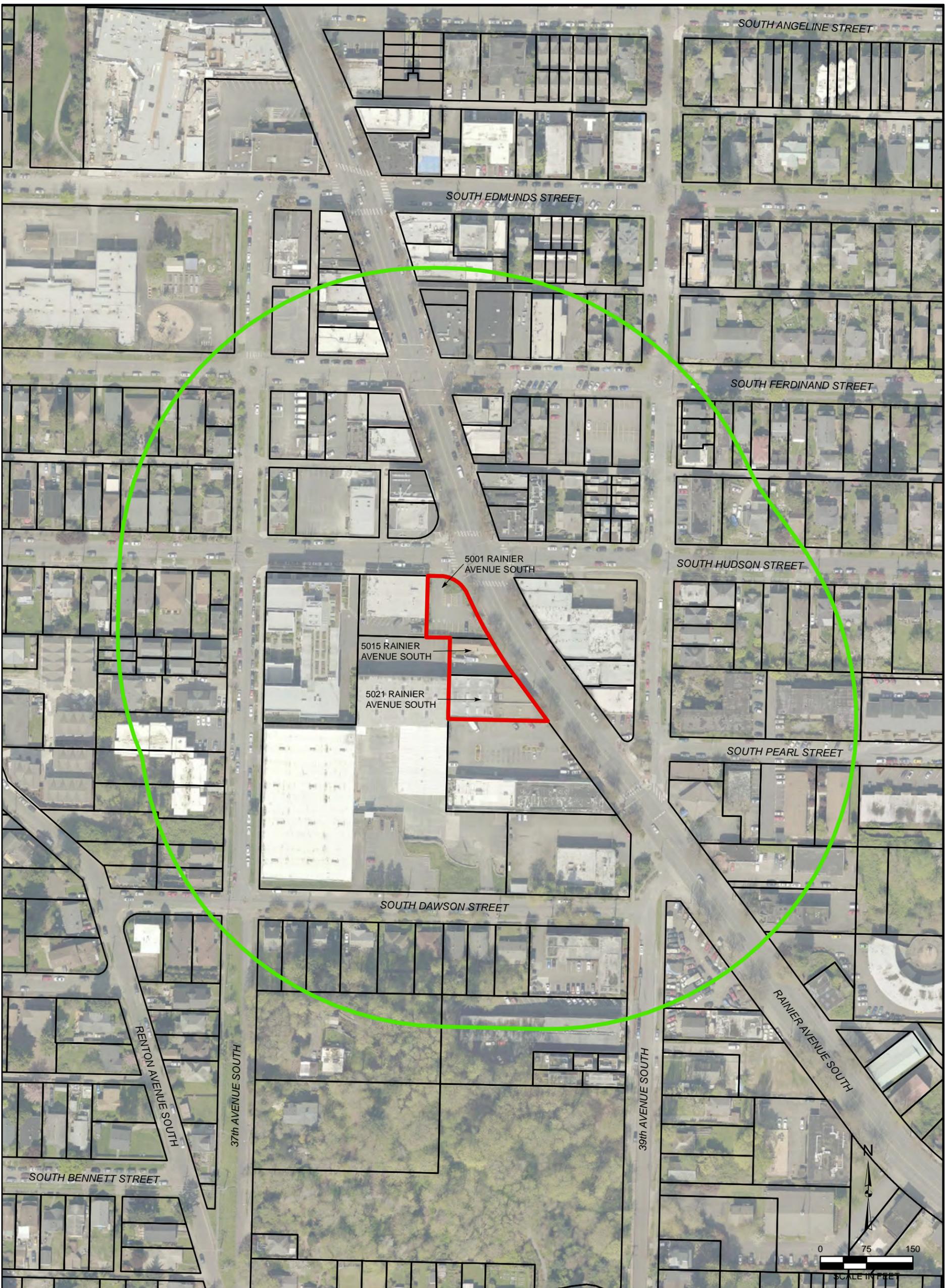
Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.



Northwest Region: Attn: VCP Coordinator 3190 160 th Ave. SE Bellevue, WA 98008-5452	Central Region: Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	Eastern Region: Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call 877-833-6341.



LEGEND

- 500-FOOT TERRESTRIAL ECOLOGICAL EVALUATION EXCLUSION BOUNDARY
- PROPERTY BOUNDARY
- KING COUNTY PARCEL

NOTES:

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



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FIGURE C-1
500-FOOT TERRESTRIAL ECOLOGICAL
EVALUATION EXCLUSION BOUNDARY
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021
RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON
FARALLON PN: 1355-001

Drawn By: jjones

Checked By: RL

Date: 6/14/2019

Disc Reference:

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