Remedial Investigation Report

7602 and 7702 River Road East
Puyallup, Washington

Farallon PN: 2220-008

June 28, 2024

Prepared by:

Sara Haynes, R.E.P.A.
Associate Environmental Scientist/Engineer

Reviewed by:

Pete Kingston, L.G.
Principal Geologist

For:
REDCO Development LLC
Four Embarcadero Center, Suite 1400
San Francisco, California 94111

Submitted by:
Farallon Consulting, L.L.C.
1809 7th Avenue
Seattle, Washington 98101

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

ACRONYMS AND ABBREVIATIONS

AST	aboveground storage tank
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
COC	constituent of concern
COPC	constituent of potential concern
DAHP	Washington State Department of Archaeology and Historic Preservation
DRO	total petroleum hydrocarbons as diesel-range organics
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
F&B	Friedman & Bruya, Inc.
Farallon	Farallon Consulting, L.L.C.
GRO	total petroleum hydrocarbons as gasoline-range organics

HVOC	halogenated volatile organic compound
LEL	lower explosive limit
µg/l	micrograms per liter
MTCA	Washington State Model Toxics Control Act Cleanup Regulation
NAVD88	North American Vertical Datum of 1988
NFA	No Further Action
ORO	total petroleum hydrocarbons as oil-range organics
PAH	polycyclic aromatic hydrocarbons
PID	photoionization detector
Property	7602 and 7702 River Road East in Puyallup, Washington
Site	The area where hazardous substances originating on or associated with the Property have come to be located at concentrations exceeding applicable cleanup levels.
TEE	Terrestrial Ecological Evaluation
UST	underground storage tank
VOC	volatile organic compound
WAC	Washington Administrative Code

1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this Remedial Investigation Report (RI Report) on behalf of REDCO Development LLC (REDCO) to provide the results of the remedial investigation for the property at 7602 and 7702 River Road East in Puyallup, Washington (herein referred to as the Property) (Figure 1). This RI 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 part of a broader Site, which is defined under MTCA and its implementing regulations as established in WAC 173-340 as comprising the area where hazardous substances originating on or associated with the Property have come to be located at concentrations exceeding applicable cleanup levels.

Current operations at the Property include automotive sales and public self-storage, Historical operations included an unpermitted wood waste landfill, known as the Corliss Wood Waste Landfill, formerly operated on the Property from approximately May 1974 through November 1976. In 1974, the wood waste landfill caught fire and local agencies directed wood waste landfill activities to cease. The remedial investigation was conducted by Farallon and others in multiple phases between 2016 and 2024 to evaluate whether current and/or historical operations resulted in the release of hazardous substances and to adequately characterize contamination.

Based on the results of the remedial investigation, groundwater is the only affected media of concern at the Site. Dissolved arsenic was detected at concentrations exceeding the MTCA cleanup level in groundwater samples collected from two monitoring wells at the Site. Therefore, arsenic in groundwater is a constituent of concern (COC) for the Site. However, dissolved arsenic was detected at concentrations less than the MTCA cleanup level during the most recent groundwater monitoring event conducted in February 2024.

Polar organics have been detected in groundwater at concentrations exceeding screening levels. However, the total organic carbon values detected in groundwater beneath the property confirms that a significant amount of naturally occurring polar organic material (i.e., untreated wood waste) is present in groundwater beneath the Property. The detected concentrations of total polar organics are entirely the result of organic material and not the degradation of petroleum hydrocarbons. Therefore, DRO and ORO are not considered to be COCs for the Site. Since methane gas is not a hazardous substance, it does not qualify as a

COC. However, based on methane concentrations detected at the Property, methane mitigation is likely necessary if future development occurs on the Property.

This RI Report provides sufficient data for use in evaluating potentially feasible cleanup alternatives for the Site. The evaluation and selection process for cleanup action alternatives will be provided in a forthcoming Feasibility Study and Cleanup Action Plan. Following completion of a cleanup action at the Site, REDCO plans to request a No Further Action (NFA) determination from the Washington State Department of Ecology (Ecology).

1.1 PURPOSE AND OBJECTIVE

In accordance with WAC 173-340-350, the purpose of the remedial investigation is to adequately characterize a contaminated site, including the distribution of hazardous substances and the threat they pose to human health and the environment. The results from the remedial investigation will enable the establishment of cleanup standards and the development of and evaluation of cleanup action alternatives in accordance with WAC 173-340-351.

1.2 REPORT ORGANIZATION

The report has been organized into the following sections:

- **Section 2, Property Description and Background,** presents relevant background information pertaining to the Property, including a description of its location and features, a summary of current and historical uses of the Property and surrounding area, geology and hydrogeology, ecological settings, cultural resources, vulnerable populations, and climate change.
- **Section 3, Remedial Investigation,** presents the media and constituents of potential concern (COPCs), which generally comprise the hazardous substances, pollutants, and contaminants that are investigated during an initial investigation, a summary of scope and results of previous investigations conducted at the Property, data gaps, a description of the field program, and the results of the investigations.
- **Section 4, Conceptual Site Model,** provides a summary of the conceptual site model for the Property, including a summary of COCs and confirmed and suspected contaminated areas and media, and exposure pathways and receptors.
- **Section 5, Cleanup Standards,** provides proposed cleanup levels; proposed points of compliance; and applicable local, state, and federal laws.

- **Section 6, Planned Work,** provides a description of work planned for the Property following completion of this RI Report.
- **Section 7, Bibliography**, provides a list of the documents cited in this RI Report.
- **Section 8, Limitations,** provides Farallon's standard limitations associated with this RI Report.

2.0 PROPERTY DESCRIPTION AND BACKGROUND

This section provides a description of the location and features of the Property and relevant background information, including current and historical uses of the Property and surrounding area.

2.1 PROPERTY DESCRIPTION

The Property consists of Pierce County Parcel Nos. 0420202079, 0420202080, and 0420202081, which total 7.67 acres of land developed with two general areas of operation (Figure 2). The northwestern portion of the Property, comprising Pierce County Parcel No. 0420202079, is developed with In-and-Out Auto Sales, a used car sales lot, which includes a one-story 720-square-foot office building (Sales Building) and a one-story 1,680-square-foot garage building (Garage Building), each constructed in 1968. The Sales Building is used for office purposes and the Garage Building is used for automotive maintenance and minor painting operations. An aboveground hydraulic lift is present in the western portion of the Garage Building; however, evidence of a former in-ground hydraulic lift was observed in the same location in addition to an in-ground trench covered with a steel plate. A fill pipe for an underground storage tank (UST) was observed east of the Garage Building.

The central and southern portions of the Property, comprising Pierce County Parcel Nos. 0420202080 and 0420202081, are developed with a public self-storage facility known as Puyallup River Self Storage that includes approximately 10 buildings ranging in size from 800 to 2,400 square feet constructed in 1988 (Storage Buildings), and a manufactured home used as an office (Mobile Home) with an attached 1,632-square-foot canopy constructed in 1988 on the eastern portion of the Property. The Mobile Home was vacant and was most recently used for office purposes. The remaining portions of the public self-storage storage facility consists of unpaved parking and storage areas.

The only underground utility servicing the Property is electric, which is provided by Puget Sound Energy via power drops from overhead power lines along the northern and western Property boundaries. Stormwater on the Property generally infiltrates the ground surface; however, a storm drain situated in the east-central portion of the Property reportedly discharges to a ditch along 76th Avenue East, west of the Property. There is no natural gas, sewer, or water service at the Property. The Sales Building and Mobile Home are connected to an on-site septic system situated east-adjoining the Sales Building. Water is obtained from a water aboveground storage tank (AST) situated adjacent to the Mobile Home and

water is supplied to the Sales Building and Mobile Home via underground piping. The water AST is refilled as needed via a water truck.

The Property is bounded by River Road East followed by the Puyallup River to the north; commercial properties, a wetland, and a trailer park to the east; residential properties to the south and southwest; and 76th Avenue East followed by residential properties and an auto repair facility and auto dealership to the west.

According to Pierce County Planning & Public Works and Title 18A of the Pierce County Code, the Property and surrounding properties are zoned "MUD – Mixed Use Districts," which includes areas for commercial, office, and multifamily developments along major transit routes.

2.2 HISTORICAL PROPERTY USE

Historically, the Property was largely undeveloped with a single-family residence present on the northeastern portion of the Property from the early 1930s through the mid-1940s. The northwestern portion of the Property was developed in 1968 with the Sales and Garage Buildings. The residence on the northeastern portion of the Property appeared demolished between the late 1950s and early 1970s. The Storage Buildings and Mobile Home were constructed in 1988.

A historical unpermitted wood waste landfill, known as the Corliss Wood Waste Landfill, formerly operated on the Property from approximately May 1974 through November 1976. In 1974, the wood waste landfill caught fire and local agencies directed wood waste landfill activities to cease. The approximate extent of the former wood waste landfill is shown on Figure 2.

2.3 FUTURE PROPERTY USE

Currently there are no redevelopment plans for the Property. It will continue to be used predominantly as a storage lot with a used car sales lot on the northwestern portion of the Property. Any future development would be subject to local land use codes and regulations. Specifically, a future development would be required to mitigate methane soil gas vapor intrusion into any future buildings to protect human health and the environment.

2.4 TOPOGRAPHY

The Property topography is relatively flat at an elevation of approximately 36 feet North American Vertical Datum of 1988 (NAVD88). Regional topography is generally flat, with a slight slope downward to the west-northwest.

2.5 GEOLOGY AND HYDROGEOLOGY

The Property and surrounding area are situated in the Puget Lowland physiographic province, which is a Quaternary-deposited, broad, low-lying trough situated between the Cascade Mountain range to the east, the Olympic Mountain range to the northwest, and Willapa Hills to the southwest. The geology in the vicinity of the Property consists of alluvial deposits of loose, stratified fluvial silt, sand, and gravel associated with the Puyallup River valley.

During subsurface investigations conducted at the Property, untreated wood waste was encountered at a maximum depth of 16 feet below ground surface (bgs) in the southern portion of the Property, and a depth of 11.5 feet bgs in the northern portion of the Property. The untreated wood waste consisted of untreated lumber, limbs, logs, and wood shavings. The wood waste was underlain by fine to coarse sands with silt and gravel observed to the maximum explored depth of 25 feet bgs. Wood waste was not encountered in the northwestern portion of the Property beneath the used car sales lot. Boring and test pit logs are included in Appendix A.

Groundwater was encountered during drilling at depths ranging from approximately 5 to 16 feet bgs. The depth to groundwater measured in monitoring wells during monitoring events ranged from 11.12 to 17.37 feet bgs (Table 1). Based on groundwater elevations calculated using synoptic measurements collected from September 15, 2023 through May 16, 2024, the interpreted groundwater flow direction is to the north toward the Puyallup River, which is consistent with other groundwater monitoring events (Figures 3 and 4).

2.6 SURFACE WATER BODIES

The Puyallup River is situated approximately 0.03 mile north of the Property across River Road East.

2.7 ECOLOGICAL SETTING

A Terrestrial Ecological Evaluation (TEE) is required by WAC 173-340-7490 at any property where there has been a release of hazardous substances to soil. The regulation requires that one of the following actions be taken:

- 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 Property-specific TEE in accordance with WAC 173-340-7493.

Based on the criteria for TEE exclusion in WAC 173-340-7491(1)(c), the Property is excluded from a TEE because concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709. No further consideration of terrestrial ecological impacts is required under MTCA. The completed Ecology TEE form for the Property is provided in Appendix B.

2.8 CULTURAL RESOURCES

The Washington Information System for Architectural and Archaeological Records Data, managed by the Washington State Department of Archaeology and Historic Preservation (DAHP), was reviewed for the presence of historic and prehistoric cultural resources. No historic or prehistoric cultural resources have been documented either on or adjacent to the Property; however, the Property is situated in a very high-risk area for encountering cultural resources as determined by DAHP's predictive model.

2.9 VULNERABLE POPULATIONS AND OVERBURDENED COMMUNITIES

Farallon conducted an evaluation of potential impacts to likely vulnerable populations and overburdened communities in the vicinity of the Property in accordance with *Implementation Memorandum No. 25: Identifying Likely Vulnerable Populations and Overburdened Communities under the Cleanup Regulations* dated January 2024, prepared by Ecology (2024) (Implementation Memorandum No. 25). The purpose of this evaluation is to identify and reduce the impact of environmental and health disparities in Washington State and improve the health of Washington State residents, and to support Ecology's determinations regarding site prioritization, cleanup decisions, and site hazard rankings. Farallon has performed the assessment required by MTCA and Implementation Memorandum No. 25 and, as more fully discussed below, has determined that vulnerable populations and overburdened communities in the vicinity of the Property have not been impacted by

contamination at this Property and that the proposed cleanup action will mitigate potential exposure to environmental harms.

Implementation Memorandum No. 25 indicates that the potentially exposed population includes a likely vulnerable population or overburdened community if the population meets any of the following criteria:

- The potentially exposed population is located in a census tract that ranks a 9 or 10 on the Environmental Health Disparities Index from the Washington State Department of Heath's Environmental Health Disparities Map (EHD Map);
- The potentially exposed population is located in a census tract that is at or above the 80th Washington State percentile of the Demographic Index from the U.S. Environmental Protection Agency's (EPA) Environmental Justice Screening and Mapping Tool (EJ Screening Tool); or
- The potentially exposed population is located in a census tract that is at or above the 80th Washington State percentile of the Supplemental Demographic Index from the EJ Screening Tool.

Farallon used the EPA EJ Screening Tool and the EHD Map to evaluate whether vulnerable populations are present in the vicinity of the Property. The Property is located within Census Tract 53053073408, which is in the 33rd Washington State percentile of the Demographic Index and 48th Washington State percentile of the Supplemental Demographic Index from the EJ Screening Tool (Appendix C). According to the EHD Map, the Site is located in an area that ranks 8 on the Environmental Health Disparities Index (Appendix C).

Based on the overall rank of 8 on the Environmental Health Disparities Index and Demographic Index and Supplemental Demographic Index state percentiles less than 80, vulnerable populations and overburdened communities are not likely part of the potentially impacted population. Therefore, the proposed cleanup action at the Property will protect human health and the environment and eliminate the potential exposure of hazardous substances attributed to the Property to all human receptors, including vulnerable populations and overburdened communities.

2.10 CLIMATE CHANGE

In accordance with WAC 173-340-350(6)(f), Farallon evaluated current and projected local and regional climatological characteristics to determine whether any could potentially affect the migration of hazardous substances or the resilience of cleanup action alternatives for

the Property. According to Ecology's *Sustainable Remediation: Climate Change Resiliency and Green Remediation* dated November 2017, revised January 2023 (Ecology 2017) (Ecology Climate Guidance), sea level rise, flooding, extreme precipitation, wildfires, landslides and erosion, and drought are the climate-related impacts that generally pose the highest potential risk for upland cleanup sites.

Based on the location of the Property in a highly developed area in Puyallup, and the elevation of the Property with respect to sea level, current and projected local and regional climatological characteristics are not anticipated to affect the migration of hazardous substances or the resilience of the cleanup action at the Property. A summary of the climate change evaluation is presented in the following sections.

2.10.1 Sea Level Rise

The Property is located at an elevation of approximately 36 feet NAVD88. Therefore, sea level rise may affect the migration of hazardous substances or the resilience of the cleanup action at the Property.

2.10.2 Flooding

Farallon reviewed Federal Emergency Management Agency flood maps for the vicinity of the Property, which indicate that the Property is in an area of 0.2 percent annual chance of flood hazard (Appendix D). Farallon reviewed the Pierce County PublicGIS Map for the Property, which indicates that the Property is within a potential wetland review area and portions of the Property are within a regulated floodplain (Appendix D). Therefore, climate changes to precipitation may cause increased flooding at the Property that would affect the migration of hazardous substances or the resilience of the cleanup action at the Property.

2.10.3 Wildfires

The Ecology Climate Guidance indicates that increased risk of wildfires is a potential climate-related hazard in areas proximate to fuel sources such as forests and grasslands. Due to the location of the Property in a highly developed area, fuel sources for wildfires are not present and the risk of wildfires is unlikely.

2.10.4 Landslides and Erosion

The Property is in a relatively flat and highly developed area, with no steep slopes in proximity to the Property that could create a landslide or erosion hazard. Therefore, the risk of landslides and erosion is low.

2.10.5 Drought

The Ecology Climate Guidance indicates that cleanup sites vulnerable to drought include groundwater sites vulnerable to a lowered water table, sediment sites in drought-prone waterbodies, and mines and landfills reliant on rain to maintain vegetative cover for slope stability. Groundwater elevations have remained relatively stable at the Property and the Property does not appear to be vulnerable to a lowered water table; however, limited data is available for historical groundwater elevations at the Property. Drought is not considered to be a likely climate-related impact for the Property.

3.0 REMEDIAL INVESTIGATION

The remedial investigation was conducted in accordance with the provisions of WAC 173-340-350 to adequately characterize contamination at the Site, including the distribution of hazardous substances and the threat they pose to human health and the environment. The remedial investigation was conducted in several phases between September 2016 and May 2024, with hydrogeological and chemical analytical data from the early phases used to refine the scope of later phases of the remedial investigation.

This section presents the media and COPCs for the Site, a summary of the environmental investigations conducted at the Site, and the results.

3.1 MEDIA AND CONSTITUENTS OF POTENTIAL CONCERN

Farallon selected the media of potential concern and the COPCs for the Property based on historical operations conducted on the Property, including automotive maintenance operations conducted on the northwestern portion of the Property and historical wood waste landfill operations conducted on the remaining portions of the Property. The media of potential concern identified for the remedial investigation were soil, soil gas, and groundwater. The COPCs evaluated for the remedial investigation consisted of:

- Total petroleum hydrocarbons as diesel-range organics, as oil-range organics, and as gasoline-range organics (DRO, ORO, and GRO, respectively);
- Volatile organic compounds (VOCs);
- Polycyclic aromatic hydrocarbons (PAHs); and
- Metals.

Methane gas is not listed or designated under any of the statutory provisions of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980. Therefore, it is not considered to be a hazardous substance. However, as part of the remedial investigation, methane gas was evaluated to ensure the protection of human health and the environment.

3.2 PREVIOUS INVESTIGATIONS

Previous environmental investigations conducted at the Property by others since 2016 are summarized in the following sections. Sample locations are shown on Figure 2.

3.2.1 2016 Geotechnical Investigation

In 2016, South Sound Geotechnical Consulting conducted a geotechnical investigation to assess the subsurface conditions for construction of a new gravel parking storage area on the southern portion of the Property. The geotechnical investigation consisted of the advancement of test pits TP-1 through TP-4 to depths ranging from 6 to 11.5 feet bgs (Figure 2). Fill material was encountered from 4 to 8 feet bgs and consisted of wood debris (including lumber, limbs, logs, and wood shavings) with silt, sand, and minor amounts of plastic and metal. Fill with gravelly sand with silt and wood debris was observed underlying the wood debris to the maximum depth explored of 11.5 feet bgs. No environmental samples were collected during the geotechnical investigation.

3.2.2 2022 Phase I Environmental Site Assessment

In September 2022, BBG Assessments, LLC (2022) prepared a draft Phase I Environmental Site Assessment (Phase I ESA) for the Property, which identified the following recognized environmental conditions in connection with the Property:

- A fill pipe indicative of a UST observed on the eastern exterior of the Garage Building.
- Indications of a former in-ground hydraulic lift observed inside the Garage Building. Although the former lift had been decommissioned and a concrete patch was observed during the site reconnaissance, hydraulic fluid and potential subsurface components were potentially associated with the hydraulic lift.
- The potential release of hazardous substances associated with long-term automotive operations since at least the 1990s.
- A septic system situated proximate to the buildings on the northwestern portion of the Property used during long-term automotive operations.

In addition to the recognized environmental conditions, the Phase I ESA indicated that a non-operating historical landfill was formerly located on the Property in 1974. The Phase I ESA indicated that there had been no violations or releases to the subsurface reported for the landfill and it was not expected to represent a significant environmental concern.

3.2.3 2022 Phase II Environmental Site Assessment

In October 2022, BBG Assessments, LLC conducted a limited subsurface investigation to evaluate the recognized environmental conditions identified in the Phase I ESA. The scope of work included conducting a ground-penetrating radar survey near the Garage Building to evaluate the subsurface around the vent pipe for the presence of a UST and advancing five borings, B-1 through B-5, on the northwestern portion of the Property to a maximum depth of 24 feet bgs to collect soil and reconnaissance groundwater samples.

The borings were advanced in the vicinity of the Garage Building and septic system situated east of the Sales Building. No anomalies indicating the potential presence of a UST were identified during the ground-penetrating radar survey. VOCs were not detected in soil samples using a photoionization detector. Groundwater was encountered at depths ranging from 17 to 20 feet bgs in the borings advanced.

Soil samples were collected at depths ranging from 4 to 16 feet bgs and submitted for laboratory analysis of VOCs, PAHs, GRO, and DRO. Reconnaissance groundwater samples were collected from four of the five borings and were submitted for laboratory analysis of VOCs, PAHs, GRO, and DRO. VOCs, PAHs, and total petroleum hydrocarbons were detected in soil samples at concentrations less than their respective MTCA Method A cleanup levels (Figure 5; Tables 2 through 4). None of the COPCs were identified at concentrations exceeding the laboratory reporting limit in the reconnaissance groundwater samples analyzed (Figure 7; Tables 6 through 8).

Based on these results of the subsurface investigation, BBG Assessments, LLC determined that historical Property use had not significantly impacted soil or groundwater.

3.3 DATA GAPS

One of Farallon's key objectives was to compile and evaluate historical data generated by others and identify data gaps. The previous investigations did not investigate potential releases of COPCs associated with the historical wood waste landfill, which was considered to be a data gap.

3.4 FIELD PROGRAM

Farallon's remedial investigation field program was conducted between August 2023 and May 2024 to address the data gap listed above. A summary of the field program is provided below. Sampling locations are shown on Figure 2.

3.4.1 Utility Locating

The Northwest Utility Notification Center located public utilities on and in the vicinity of the Property. Linescape of Washington, LLC of Seattle, Washington conducted a private utility locate at the Property. In addition, each boring location was cleared to depths of up to 5 feet bgs using a vacuum truck to verify that no utilities were present prior to using mechanical drilling equipment.

3.4.2 Boring Advancement and Sample Collection

Nine borings were advanced between August and September 2023 (Figure 2). Borings FB-1 through FB-3 were advanced on August 12, 2023, and borings FMW-01 through FMW-05 and FB-4 were advanced on September 11 and 12, 2023. Borings were advanced for collection of soil and reconnaissance groundwater samples, and installation of groundwater monitoring wells. Drilling services were provided by Anderson Environmental Contracting, LLC of Kelso, Washington and Holt Services, Inc. of Edgewood, Washington.

Borings were advanced using a direct-push drill rig and were continuously sampled using 5-foot-long probe rods lined with disposable polyvinyl chloride or acetate liners that were removed and cut to reveal the sample in the driven interval. Soil samples were described in general accordance with the Unified Soil Classification System, and screened in the field for potential visual and olfactory evidence of contamination, and by headspace analysis using a photoionization detector (PID) to detect the presence of VOCs. The PID readings, the Unified Soil Classification System symbol, and visual and olfactory observations for the samples were recorded on boring logs. Boring logs are provided in Appendix A.

Upon reaching total depth, reconnaissance groundwater samples were collected from borings FB-1 through FB-3. The reconnaissance groundwater samples were collected using a temporary well and a peristaltic pump with dedicated tubing. The tubing intake was placed at the approximate middle portion of the water column in each monitoring well. After water turbidity had cleared to acceptable levels, groundwater samples were collected directly from the pump outlet tubing and placed into laboratory-prepared sample containers.

Soil and reconnaissance groundwater samples retained for laboratory analysis were collected in laboratory-supplied containers, placed on ice, and transported to Friedman & Bruya, Inc. of Seattle, Washington (F&B) for potential laboratory analysis as described in Section 3.5.6, Laboratory Analysis.

3.4.3 Groundwater Monitoring Well Installation and Development

Five monitoring wells, FMW-01 through FMW-05, were installed at the Property in September 2023 (Figure 2). Monitoring wells were constructed in accordance with the Minimum Standards for Construction and Maintenance of Wells as established in WAC 173-160. The monitoring wells were constructed using 2-inch-diameter polyvinyl chloride casing with 10 feet of 0.010-inch slotted pre-pack screen. Screen intervals were placed at intervals ranging from depths of 10 to 20 or 15 to 25 feet bgs, depending on the depth to groundwater at each location. Each monitoring well was completed at grade with a traffic-rated flush-mounted steel monument.

The monitoring wells were developed using a submersible pump to surge and purge each well following completion of well installation. Each monitoring well was developed until the majority of fine-grained sediment had been removed from the well screen and adjacent sand pack. The locations and elevations of monitoring wells FMW-01 through FMW-05 were surveyed by Apex Engineering LLC of Tacoma, Washington using the NAVD88 and Washington State Plane North Zone. Monitoring well construction details are provided in Appendix A.

3.4.4 Groundwater Monitoring

Groundwater monitoring events were conducted in September 2023, February 2024, and May 2024. During each groundwater monitoring event, well caps were opened, and groundwater levels were allowed to equilibrate to atmospheric conditions for at least 45 minutes. The depth to groundwater in each monitoring well was then measured to the nearest 0.01 foot using an electronic water level meter (Table 1).

Groundwater samples were collected in accordance with EPA low-flow sampling procedures. Purging and sampling for each monitoring well was performed using a peristaltic pump and dedicated silicone and polyethylene tubing, at flow rates ranging from approximately 100 to 300 milliliters per minute. The tubing intake was placed at the approximate middle portion of the water column in each monitoring well.

During purging, water quality was monitored using a YSI Pro DSS water-quality system equipped with a flow-through cell. The water-quality parameters temperature, pH, specific conductance, dissolved oxygen, oxidation-reduction potential, and turbidity were monitored and recorded at approximately 3-minute intervals during purging (Table 10). Following purging, groundwater samples were collected from the pump outlet tubing located upstream

of the flow-through cell, and placed directly into laboratory-prepared sample containers. Groundwater samples were placed on ice in a cooler and transported under standard chain-of-custody protocols for F&B for laboratory analysis as described in Section 3.4.6, Laboratory Analysis.

3.4.5 Soil Gas Sample Collection

Multiple sampling points were used to evaluate methane concentrations, including temporary soil gas monitoring points, monitoring wells, and a soil gas vapor pin. These different types of sampling points are constructed differently and results may not be comparable.

The three soil temporary soil gas monitoring points (SG-1 through SG-3) were installed using a direct-push drill rig to a depth of 8 feet bgs in August 2023 (Figure 2). The temporary soil gas monitoring points were constructed using 0.75-inch-diameter Schedule 40 polyvinyl chloride casing and 0.010-inch slotted screens. Soil gas monitoring points were screened between 3 and 8 feet bgs. The borehole annulus surrounding each monitoring point screen was filled with a filter pack consisting of clean 10/20 sand placed from the base of the screen to approximately 1 foot above the screened interval. Following installation, each soil gas monitoring point was fitted with a ball valve assembly to facilitate soil gas monitoring.

In February 2024, a subslab soil gas vapor pin (VP-1) was installed in the Garage Building on the northwestern portion of the Property to evaluate whether methane was present in the occupied building on the Property that was closest to the former wood waste landfill (Figure 2). The vapor pin was flush-mounted with the existing floor surface and was installed using a hand-held rotary hammer drill equipped with an approximately 1-inch-diameter drill bit. The intake for the vapor pin is directly beneath the building slab.

Monitoring wells FMW-01 through FMW-05 were constructed using 2-inch-diameter polyvinyl chloride casing with 10 feet of 0.010-inch slotted pre-pack screen. Screen intervals were placed at intervals ranging from depths of 10 to 20 or 15 to 25 feet bgs within and beneath the wood waste.

Methane in soil gas was measured from the three temporary soil gas monitoring points SG-1 through SG-3 in August 2023, from monitoring wells FMW-01 through FMW-05 in September 2023, and from monitoring wells FMW-01 through FMW-05 and the soil gas vapor pin VP-1 in February and May 2024. Generally, there was limited exposed screen interval in monitoring wells FMW-01 through FMW-04 due to elevated groundwater elevations.

The soil gas monitoring points were screened for methane gas using a Landtec GEM2000 landfill gas meter to evaluate methane concentrations in soil gas in accordance with the *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action* dated March 2022 and ASTM E2993-16 *Standard Guide for Evaluating Potential Hazard as a Result of Methane in the Vadose Zone* dated December 27, 2016 (ASTM International 2016).

Each soil gas monitoring point location was purged using the GEM2000 at a rate of approximately 300 cubic centimeters per minute. Monitoring point casing volumes were calculated using depth-to-water measurements. Readings for methane, carbon dioxide, oxygen, and nitrogen were recorded for every quarter-volume of soil monitoring point casing purged. Readings were recorded every quarter-volume of casing purged until a total of 3 casing volumes were purged or until readings stabilized.

3.4.6 Laboratory Analyses

Samples collected during the remedial investigation were submitted to F&B under standard chain of custody protocols. This section presents the laboratory analytical methods used for each media investigated during the remedial investigation.

3.4.6.1 Soil

Soil samples collected during the field program were analyzed for one or more of the following analytes:

- DRO and ORO by Northwest Method NWTPH-Dx;
- GRO by Northwest Method NWTPH-Gx;
- VOCs, including benzene, toluene, ethylbenzene, and total xylenes (BTEX) and halogenated VOCs (HVOCs) by EPA Method 8260D;
- PAHs by EPA Method 8270E; and
- Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) by EPA Methods 6020B.

3.4.6.2 Groundwater

Groundwater samples collected during the field program were analyzed for one or more of the following analytes:

- DRO and ORO by Northwest Method NWTPH-Dx, with and without Silica Gel Cleanup;

- GRO by Northwest Method NWTPH-Gx;
- VOCs, including BTEX and HVOCs, by EPA Method 8260D;
- Total and dissolved metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) by EPA Methods 200.8 and 6020B; and
- Total organic carbon by Standard Method 5310C.

3.4.6.3 Soil Gas

Soil gas samples collected during the field program were not submitted for laboratory analysis; field measurements were collected for methane, carbon dioxide, oxygen, and nitrogen.

3.5 REMEDIAL INVESTIGATION RESULTS

The following sections summarize the results from the investigations that together constitute the remedial investigation for the Site. The results are presented in Tables 1 through 11 and are shown on Figures 4 through 9. Boring logs are provided in Appendix A. Laboratory analytical reports are provided in Appendix E.

3.5.1 Soil Analytical Results

The laboratory analytical results for soil samples collected during the subsurface investigation were compared with MTCA Method A soil cleanup levels for unrestricted land use based on the current and planned future use of the Property.

Soil samples were analyzed from soil that was present beneath the wood waste. COPCs, including DRO, ORO, GRO, VOCs, PAHS, and metals, were less than the MTCA Method A cleanup levels in the soil samples analyzed (Figures 5 and 6; Tables 2 through 5).

3.5.2 Groundwater Analytical Results

Groundwater analytical results are compared with MTCA Method A groundwater cleanup levels for unrestricted land. The MTCA cleanup level for arsenic was the natural background concentration for arsenic in the Puget Sound lowlands of 8 micrograms per liter (µg/l).

3.5.2.1 August 2023 Analytical Results

Arsenic, DRO, and ORO were the only COPCs detected at concentrations exceeding the MTCA cleanup levels in reconnaissance groundwater samples analyzed. GRO, VOCs, PAHs,

and the remaining metals were less than the MTCA Method A cleanup levels in the reconnaissance groundwater samples analyzed (Figures 7 and 8; Tables 6 through 9).

Dissolved arsenic was detected at concentrations of 10.5 and 12.3 µg/l in reconnaissance groundwater samples collected from borings FB-1 and FB, respectively, slightly exceeding the natural background concentration of 8 µg/l for the Puget Sound lowlands (Figure 8; Table 9). DRO and ORO were detected at concentrations of 2,200 and 7,400 µg/l, respectively, exceeding the MTCA Method A cleanup level of 500 µg/l in the reconnaissance groundwater sample collected from boring FB-3 (Figure 7; Table 7). The reconnaissance groundwater sample collected from boring FB-3 was analyzed with and without silica gel cleanup to evaluate whether DRO and ORO detections were a result of organic interference due to the presence of untreated wood waste present beneath the Property. After reanalysis of the sample following silica gel cleanup, DRO and ORO were detected at concentrations of 700 and 2,900 µg/l (Figure 7; Table 7).

Reconnaissance groundwater samples are collected from open borings with limited to no development prior to sampling. This typically results in increased sample turbidity, which can bias detected chemical concentrations high, particularly for metals and hydrophobic organic compounds. Groundwater samples collected from properly installed and developed monitoring wells are considered to be most representative of groundwater quality. In September 2023, Farallon installed monitoring wells FMW-01 through FMW-05 to collect representative groundwater samples and confirm the August 2023 results.

3.5.2.2 September 2023 Analytical Results

Dissolved arsenic was detected at concentrations exceeding the MTCA cleanup level in the groundwater samples collected from monitoring wells FMW-01 and FMW-02. Dissolved arsenic concentrations were less than the MTCA cleanup level in the remaining groundwater samples analyzed. The remaining metals either were detected at concentrations less than the MTCA Method A cleanup levels or were reported non-detect at the laboratory practical quantitation limit in the remaining groundwater samples analyzed (Figure 8; Table 9).

Groundwater samples were analyzed with and without silica gel cleanup to evaluate whether DRO and ORO detections were a result of organic interference due to the presence of untreated wood waste present beneath the Property. DRO and/or ORO were detected at concentrations exceeding the MTCA Method A cleanup level in the groundwater samples collected from monitoring wells FMW-03 and FMW-04 when analyzed without silica gel cleanup. However, DRO and ORO were reported non-detect at the laboratory practical

quantitation limit following silica gel cleanup in all groundwater samples analyzed (Figure 7; Table 7). Based on these data, the untreated wood waste is biasing DRO and ORO analytical results.

3.5.2.3 February 2024 Analytical Results

Dissolved arsenic was detected at concentrations less than the MTCA cleanup level in the groundwater samples collected from monitoring wells in February 2024 (Figure 8; Table 9).

Groundwater samples were analyzed with and without silica gel cleanup to evaluate whether DRO and ORO detections were a result of organic interference due to the presence of untreated wood waste present beneath the Property. DRO and/or ORO were detected at concentrations less than the MTCA Method A cleanup level in the groundwater samples collected from monitoring wells when analyzed without silica gel cleanup. However, DRO and ORO were reported non-detect at the laboratory practical quantitation limit following silica gel cleanup in all groundwater samples analyzed (Figure 7; Table 7).

In addition, the groundwater samples were analyzed for total organic carbon to quantify naturally occurring organics in groundwater beneath the Property. Total organic carbon was detected in monitoring wells at concentrations ranging from 10.9 to 32.6 mg/L.

The table below from the textbook *Organic Geochemistry of Natural Waters* by E.M. Thurman (1985) provides typical total organic carbon ranges for a variety of different water sources. According to this reference, the typical total organic carbon concentration for groundwater is 700 parts per million. The total organic carbon concentrations detected in groundwater beneath the Property is equivalent to the typical total organic carbon concentrations for marsh and bog water, which contain much larger quantities of organic material than are typically found in groundwater.

Water	Typical Total Organic Carbon (Range)
Bog	33 ppm (10 to 60)
Marsh	17 ppm (10 to 60)
Eutropic lake	12 ppm
Oligotrophic lake	2.2 ppm
River	7.0 ppm (1 to 10)
Precipitation	1.1 ppm
Ground Water	700 ppb
Sea Water	500 ppb

Waste Water	up to 1000 ppm
Process Waters	very wide range
Drinking Water	100 ppb to 10 ppm
Purified Water	1 ppb to 500 ppb
Ultrapure Water	0.1 ppb to 10 ppb

Notes:
ppm = parts per million
ppb = parts per billion

These results indicate that the total organic carbon concentration in groundwater beneath the Property is significantly higher than the typical total organic carbon concentrations in groundwater. As stated in *Water Quality Assessments – A Guide to the Use of Biota, Sediments and Water in Environmental Monitoring – Second Edition* (World Health Organization 1996), total organic carbon values higher than 2 mg/L in groundwater result from the presence of natural organic matter. The total organic carbon value detected in groundwater beneath the Property confirms that a significant amount of naturally occurring polar organic material (i.e., untreated wood waste) is present in groundwater beneath the Property. Therefore, the detected concentrations of total polar organics are entirely the result of organic material and not the degradation of petroleum hydrocarbons.

3.5.3 Soil Gas Analytical Results

The results from methane soil gas monitoring are shown on Figure 9 and included in Table 11. The concentrations of methane were compared with the LEL, which is 5 percent.

Methane concentrations have exceeded the LEL in seven of the nine soil gas sampling points. The highest concentration of methane was 68.2 percent in soil gas sampling point FMW-04 on the western portion of the Property. All of the detections were in soil gas sampling points located within untreated wood waste in the former landfill. Based on these data, the untreated wood waste was determined to be producing methane gas.

Methane was not detected in vapor pin VP-1 located in the Garage Building. This demonstrated that the methane has not migrated from the former landfill into the occupied buildings on the Property.

4.0 CONCEPTUAL SITE MODEL

This section provides a summary of the conceptual site model derived from the results of the remedial investigation. Included in this section is a discussion of COCs, media of concern, confirmed and suspected sources, the nature and extent of contamination, exposure pathways and receptors, and proposed cleanup standards. The conceptual site model is used as a basis for developing technically feasible cleanup action alternatives and selecting a final cleanup action in accordance with applicable MTCA regulations.

The conceptual site model will be refined throughout the cleanup action process as additional information becomes available.

4.1 MEDIA AND CONSTITUENTS OF CONCERN

The COCs are defined as the hazardous substances that have been detected at concentrations exceeding MTCA cleanup levels. Based on the results of the remedial investigation, groundwater is the only affected media of concern at the Site. COPCs were detected at concentrations less than the MTCA cleanup levels in all soil samples analyzed. Therefore, soil is not considered to be a medium of concern.

Dissolved arsenic was detected at concentrations exceeding the MTCA cleanup level in groundwater samples collected from two monitoring wells at the Site. Therefore, arsenic in groundwater is a COC for the Site. However, dissolved arsenic was detected at concentrations less than the MTCA cleanup level during the most recent groundwater monitoring event conducted in February 2024.

Polar organics have been detected in groundwater at concentrations exceeding screening levels. However, the total organic carbon values detected in groundwater beneath the property confirms that a significant amount of naturally occurring polar organic material (i.e., untreated wood waste) is present in groundwater beneath the Property. The detected concentrations of total polar organics are entirely the result of organic material and not the degradation of petroleum hydrocarbons. Therefore, DRO and ORO are not considered to be COCs for the Site.

Since methane gas is not a hazardous substance, it does not qualify as a COC for the Property. However, based on methane concentrations detected at the Property, methane mitigation is likely necessary if future development occurs on the Property.

4.2 CONFIRMED AND SUSPECTED SOURCES OF COCS

Sources of arsenic in groundwater and methane in soil gas are related to untreated wood waste in the former landfill that is present on the Property. Decomposing organic materials creates anaerobic conditions that can result in mobilization of naturally occurring arsenic and production of methane.

4.3 EXPOSURE PATHWAYS AND RECEPTORS

The exposure risks associated with the presence of COCs at the Site are identified as human health. This section presents the evaluation and conclusions pertaining to the exposure pathways at the Site.

4.3.1 Soil to Groundwater

Based on the remedial investigation results, none of the COPCs detected in soil at concentrations exceeding MTCA cleanup levels protective of groundwater were detected at concentrations exceeding MTCA cleanup levels in groundwater at the Site. The soil to groundwater pathway is considered incomplete for the Site.

Reducing conditions may be mobilizing naturally occurring arsenic, However, concentrations of dissolved arsenic were less than the MTCA cleanup level during the most recent groundwater monitoring event conducted in February 2024.

4.3.2 Groundwater Direct Contact

The human exposure pathway for soil and groundwater at the Site is the direct contact pathway, which comprises both the dermal contact and ingestion pathways.

No groundwater supply-wells that are used for potable water are present in the vicinity of the Site. Ingestion of groundwater is an incomplete exposure pathway, and does not pose a human health risk. As part of implementation of the cleanup action, arsenic-contaminated groundwater may be exposed and potentially present an exposure risk. Future receptors to potential contaminants in groundwater primarily consist of construction workers through the ingestion and dermal exposure pathways. The cleanup action alternatives selected for evaluation in the Feasibility Study will include groundwater monitoring.

4.3.3 Groundwater to Surface Water

Laboratory analytical results for groundwater samples collected down-gradient from known impacts at the Site and up-gradient from the Puyallup River confirm that the groundwater to surface water pathway is incomplete for the Site.

4.3.4 Soil Gas to Air

Arsenic is not volatile and the soil gas to indoor air pathway is not complete.

Since methane gas is not a hazardous substance, it does not qualify as a COC for the Property. However, methane can present a risk to human health. The potential for an unacceptable vapor intrusion risk from methane gas intruding into future structures is present at the Site, and for potential explosion hazard and/or short-term inhalation of methane gas by construction workers during future redevelopment activities. Based on methane concentrations detected at the Property, methane mitigation is likely necessary to mitigate the soil gas to air pathway if future development occurs on the Property.

5.0 CLEANUP STANDARDS

Cleanup standards apply to a release of a hazardous substance at a site and include 1) cleanup levels for hazardous substances present at the Site; 2) the location where these cleanup levels must be met (i.e., point of compliance); and 3) other regulatory requirements that apply to the Site because of the type of action and/or location of the Site (i.e., applicable state and federal laws). Cleanup standards are identified for each hazardous substances at a site and the specific areas or pathways where humans and the environment can become exposed to these substances. The cleanup action alternatives evaluated in the feasibility study must meet the selected cleanup standards for the Site.

In accordance with WAC 173-340-700, this section provides the proposed cleanup standards for the Site.

5.1 PROPOSED CLEANUP LEVELS

Preliminary cleanup levels were established for the remedial investigation based on the potential exposure pathways and receptors (identified in Section 4.3) to identify a conservative basis for defining the extent of contamination for each COC and medium of concern. Proposed cleanup levels for the Site have been developed in accordance with MTCA to be protective of human health and the environment.

The proposed cleanup level for arsenic is 8 µg/l, the natural background concentration for the Puget Sound lowlands.

5.2 PROPOSED POINTS OF COMPLIANCE

The points of compliance are the locations at which cleanup levels for the COCs must be attained to meet the requirements of MTCA.

In accordance with WAC 173-340-720(8), the point of compliance for groundwater is defined as the uppermost level of the saturated zone extending vertically to the lowest depth at the Site that potentially could be impacted by COCs.

5.3 APPLICABLE LOCAL, STATE, AND FEDERAL LAWS

Pursuant to WAC 173-340-710, the cleanup action will comply with applicable local, state, and federal laws. The local, state, and federal laws that are anticipated to be the applicable requirements for a cleanup action, and encompass applicable regulatory guidelines, are:

- MTCA (WAC 173-340);

- The Water Quality Standards for Groundwaters of the State of Washington (WAC 173-200);
- Washington State Solid Waste Management Laws and Regulations (RCW 70.95; WAC 173-351 and 173-304);
- Accreditation of Environmental Laboratories (WAC 173-50);
- The Occupational Safety and Health Act (Part 1910 of Title 29 of the Code of Federal Regulations [29 CFR 1910] and WAC 296-62);
- The State Environmental Policy Act (RCW 43.21; WAC 197-11 and 173-802);
- Maximum Contaminant Levels, National Primary Drinking Water Regulations (WAC 246-290-310 and 46 CFR 141);
- Safety Standards for Construction Work (WAC 296-155);
- Minimum Standards for Construction and Maintenance of Wells (WAC 173-160); and
- Applicable local permits and ordinances indicated by Tacoma-Pierce County Health Department Environmental Health Code.

6.0 PLANNED WORK

This RI Report provides sufficient data for use in evaluating potentially feasible cleanup alternatives for the Site. The evaluation and selection process for cleanup action alternatives will be provided in a forthcoming Feasibility Study and Cleanup Action Plan. The Feasibility Study will screen cleanup technologies, evaluate technically feasible cleanup alternatives, and identify a preferred cleanup alternative for the Site that meets MTCA requirements.

7.0 BIBLIOGRAPHY

ASTM International. 2016. *ASTM E2993-16 Standard Guide for Evaluating Potential Hazard as a Result of Methane in the Vadose Zone.* Revised November 29. December 27.

BBG Assessments, LLC. 2022a. Draft *Phase I Environmental Site Assessment, 7602-7702 River Road, Puyallup, Washington 98371.* Prepared for Zenith IOS, LLC. September 9.

———. 2022b. *Phase II Limited Environmental Site Assessment, 7602-7702 River Road, Puyallup, Washington 98371.* Prepared for Zenith IOS, LLC. October 17.

City of Puyallup. No Date. Critical Areas App. <https://experience.arcgis.com/experience/94f2b2acd1dd454d87e72c83ce3d0e2f/>. (June 24, 2024.)

Farallon Consulting, L.L.C. (Farallon). 2023a. Letter Regarding Summary of Subsurface Investigation, 7602 and 7702 River Drive East, Puyallup, Washington. From Michael Ysaguirre and Pete Kingston. To Jason Freise, REDCO Development LLC, 7702 River Road Parcel A Owner LLC, 7702 River Road Parcel B Owner LLC, 7702 River Road Parcel C Owner LLC, and BLKB-REDCO 7702 River Road LLC. October 18.

———. 2023b. *Phase I Environmental Site Assessment Report, 7602 and 7702 River Road East, Puyallup, Washington.* Prepared for REDCO Development LLC, 7702 River Road Parcel A Owner LLC, 7702 River Road Parcel B Owner LLC, 7702 River Road Parcel C Owner LLC, and BLKB-REDCO 7702 River Road LLC. October 18.

Pierce County Assessor-Treasurer. No Date. Property and Zoning Information for Parcel Nos. 0420202079, 0420202080, and 0420202081. <https://atip.piercecountywa.gov/app/v2/parcelSearch/search>. (April 30, 2024.)

Pierce County Council. 2024. Pierce County Code, Chapter 18A.10, Zone Classifications. <https://pierce.county.codes/PCC/18A.10>. (April 30, 2024.)

South Sound Geotechnical Consulting. 2016. *Report of Geotechnical Engineering Services, Puyallup River Road Self Storage Expansion, Puyallup, Washington.* Prepared for Eric Corliss. September 8.

Thurman, E.M. 1985. Organic Geochemistry of Natural Waters. Matinus Ninhoff/Dr W. Junk.

U.S. Environmental Protection Agency. No Date. Environmental Justice Screening and Mapping Tool Search. <https://ejscreen.epa.gov/mapper/>. (June 17, 2024.)

Washington State Department of Archaeology and Historic Preservation. No Date. Washington Information System for Architectural and Archaeological Records Data Search. <https://wisaard.dahp.wa.gov/>. (June 17, 2024.)

———. No Date. Predictive Model Map Search. <https://wisaard.dahp.wa.gov/portal/home/webmap/viewer.html?useExisting=1&layers=ee1a6001961948babddb2dafc7316250>. (June 17, 2024.)

Washington State Department of Ecology. 2017. *Sustainable Remediation: Climate Change Resiliency and Green Remediation.* Publication No. 17-09-052. Revised January 2023. November.

———. 2022. *Guidance for Evaluating Vapor Intrusion in Washington State, Investigation and Remedial Action.* Publication No. 09-09-047. March.

———. 2023. *Guidance for Silica Gel Cleanup in Washington State.* Publication No. 22-09-059. November.

———. 2024. *Implementation Memorandum No. 25: Identifying Likely Vulnerable Populations and Overburdened Communities Under the Cleanup Regulations*. January.

Washington State Department of Health. No Date. Washington Environmental Health Disparities Map Search. <https://fortress.wa.gov/doh/wtnibl/WTNIBL/>. (June 17, 2024.)

World Health Organization. 1996. *Water Quality Assessments – A Guide to the Use of Biota, Sediments and Water in Environmental Monitoring – Second Edition.*

8.0 LIMITATIONS

8.1 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 Site that is the subject of this report/assessment to document current conditions. Farallon focused on areas deemed more likely to exhibit hazardous materials conditions. Contamination may exist in other areas of the Site that were not investigated or were inaccessible. Site activities beyond Farallon's control could change at any time after the completion of this report/assessment.

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

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

8.2 LIMITATION ON RELIANCE BY THIRD PARTIES

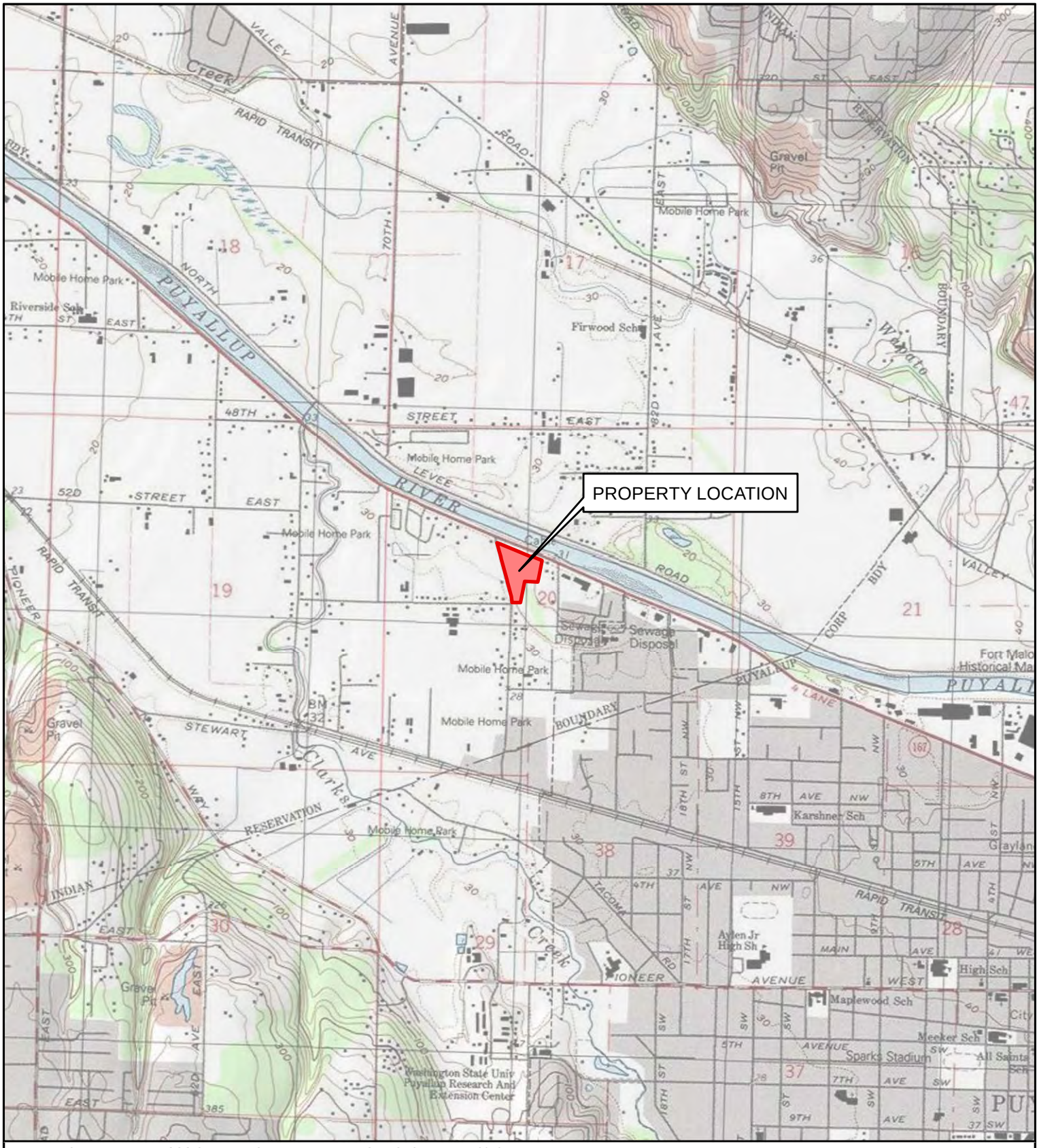
Reliance by third parties is prohibited. This report/assessment has been prepared for the exclusive use of REDCO Development LLC to address the unique needs of REDCO Development LLC at the Property at a specific point in time.

This is not a general grant of reliance. No one other than REDCO Development LLC 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 REPORT
7602 and 7702 River Road East
Puyallup, Washington

Farallon PN: 2220-008



REFERENCE: 7.5 MINUTE USGS QUADRANGLE PUYALLUP, WASHINGTON, DATED 2013

0 2,000
SCALE IN FEET

N

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

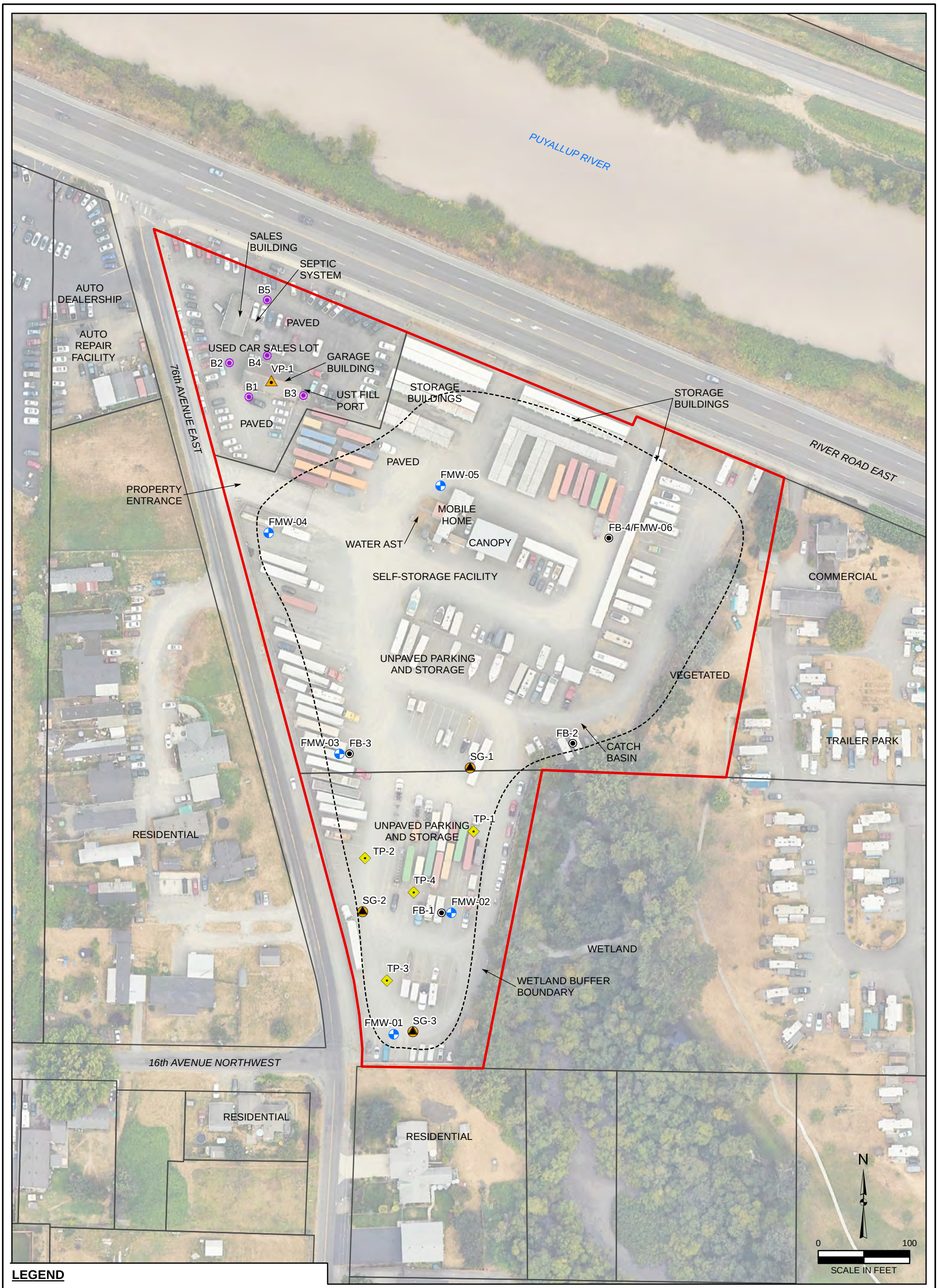
FIGURE 1

PROPERTY VICINITY MAP
7602 AND 7702 RIVER ROAD EAST
PUYALLUP, WASHINGTON

FARALLON PN: 2220-008

Drawn By: lmurock | Checked By: PK | Date: 9/26/2023 | Disc Reference:

Path: Q:\Projects\2220 REDCO\008 7602 and 7702 River Dr E\Mapfiles\006\Figure-01_VicinityMap.mxd



LEGEND

- SOIL VAPOR PROBE (FARALLON, 2024)
- SOIL GAS SAMPLE (FARALLON, 2023)
- BORING (FARALLON, 2023)
- BORING (BBG, 2022)
- MONITORING WELL (FARALLON, 2023)
- TEST PIT (GEOTECHNICAL CONSULTING, 2016)
- APPROXIMATE EXTENT OF FORMER WOOD WASTE LANDFILL
- PROPERTY BOUNDARY
- PIERCE COUNTY PARCEL BOUNDARY

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

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

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

FIGURE 2

PROPERTY PLAN
7602 AND 7702 RIVER ROAD EAST
PUYALLUP, WASHINGTON

FARALLON PN: 2220-008

Drawn By: chartman | Checked By: SH | Date: 6/25/2024 | Disc Reference:

Path: Q:\Projects\2220 REDCO\008 7602 and 7702 River Dr E\Mapfiles\010\Figure-02_PropertyPlan.mxd

PUYALLUP RIVER

RIVER ROAD EAST

76th AVENUE EAST

16th AVENUE NORTHWEST

B5
B4
B2
VP-1
B1
B3
FMW-05
FMW-04
FB-4/FMW-06
16.50
16.50
FB-3
FMW-03
FB-2
SG-1
17.00
17.00
TP-1
TP-2
TP-4
SG-2
FMW-02
FB-1
17.50
17.50
TP-3
FMW-01
SG-3

N

0 100

SCALE IN FEET

LEGEND

- SOIL VAPOR PROBE (FARALLON, 2024)
- SOIL GAS SAMPLE (FARALLON, 2023)
- BORING (FARALLON, 2023)
- BORING (BBG, 2022)
- MONITORING WELL (FARALLON, 2023)
- TEST PIT (GEOTECHNICAL CONSULTING, 2016)
- PROPERTY BOUNDARY
- PIERCE COUNTY PARCEL BOUNDARY
- (17.80) GROUNDWATER ELEVATION MEASURED IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
- 17.50 GROUNDWATER ELEVATION CONTOUR (DASHED WHEN INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

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

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

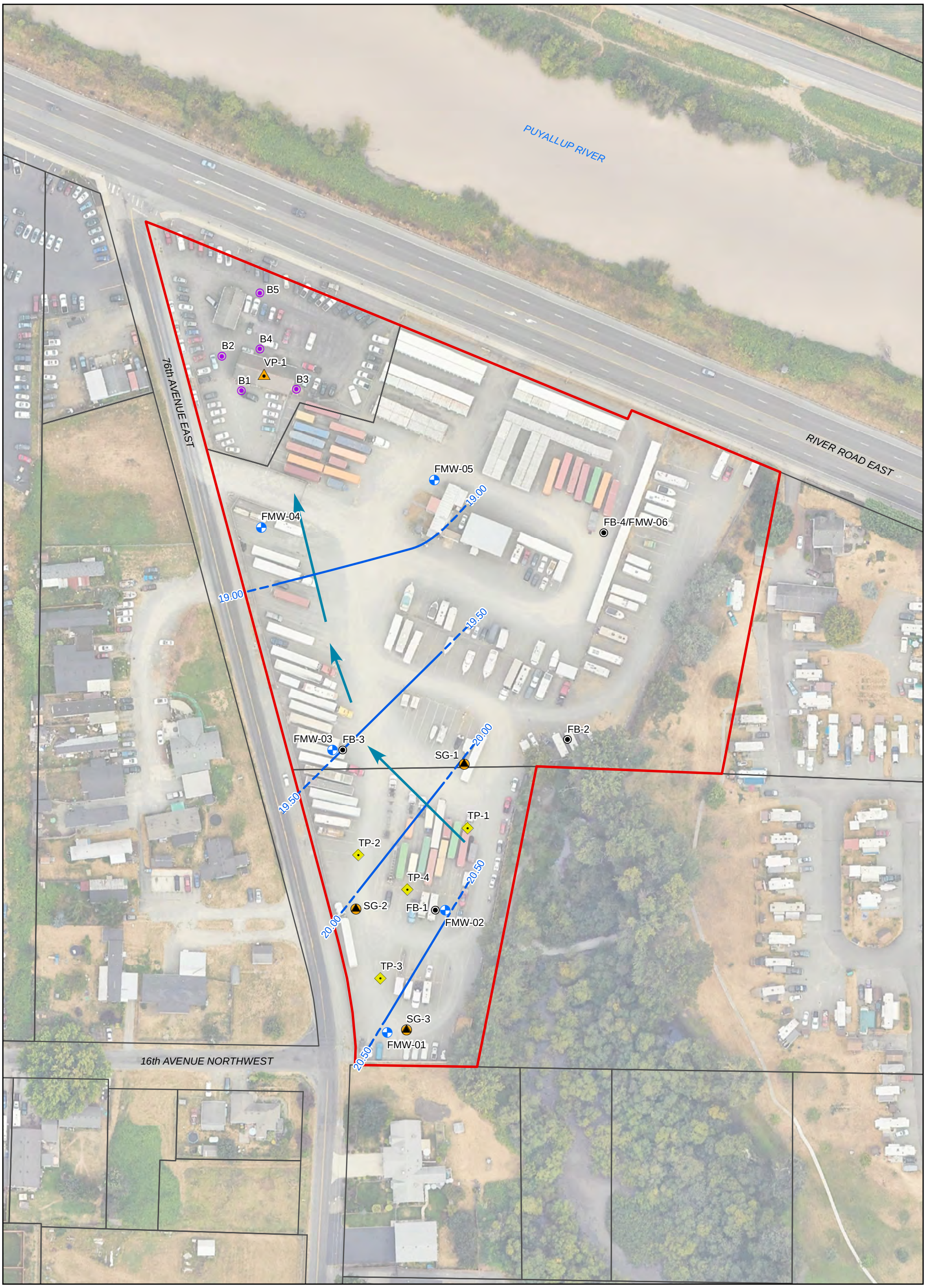
FIGURE 3

GROUNDWATER ELEVATION CONTOURS
SEPTEMBER 15, 2023
7602 AND 7702 RIVER ROAD EAST
PUYALLUP, WASHINGTON

FARALLON PN: 2220-008

Drawn By: chartman | Checked By: PK | Date: 6/25/2024 | Disc Reference:

Path: Q:\Projects\2220 REDCO\008 7602 and 7702 River Dr E\Mapfiles\010\Figure-03_GW_Contours_202309.mxd



LEGEND

- SOIL VAPOR PROBE (FARALLON, 2024)
- SOIL GAS SAMPLE (FARALLON, 2023)
- BORING (FARALLON, 2023)
- BORING (BBG, 2022)
- MONITORING WELL (FARALLON, 2023)
- TEST PIT (GEOTECHNICAL CONSULTING, 2016)
- PROPERTY BOUNDARY
- PIERCE COUNTY PARCEL BOUNDARY

N

0 100

SCALE IN FEET

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

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

FIGURE 4

GROUNDWATER ELEVATION CONTOURS
MAY 16, 2024
7602 AND 7702 RIVER ROAD EAST
PUYALLUP, WASHINGTON

FARALLON PN: 2220-008

Drawn By: chartman | Checked By: SH | Date: 6/25/2024 | Disc Reference:

Path: Q:\Projects\2220 REDCO\008 7602 and 7702 River Dr E\Mapfiles\010\Figure-04_GW_Elevation_20240516.mxd

NOTES:
SOIL DEPTH AND ANALYTICAL RESULTS AS:
DEPTH IN FEET BELOW GROUND SURFACE | DRO | ORO | GRO
SOIL ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM.
< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE LISTED REPORTING LIMIT
--- = DENOTES SAMPLE NOT ANALYZED
DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS
GRO = TPH AS GASOLINE-RANGE ORGANICS
ORO = TPH AS OIL-RANGE ORGANICS

LEGEND

- SOIL VAPOR PROBE (FARALLON, 2024)
- SOIL GAS SAMPLE (FARALLON, 2023)
- BORING (FARALLON, 2023)
- BORING (BBG, 2022)
- MONITORING WELL (FARALLON, 2023)
- TEST PIT (GEOTECHNICAL CONSULTING, 2016)
- PROPERTY BOUNDARY
- PIERCE COUNTY PARCEL BOUNDARY

N

0 100

SCALE IN FEET

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

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

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

FIGURE 5

SOIL ANALYTICAL RESULTS FOR TPH
7602 AND 7702 RIVER ROAD EAST
PUYALLUP, WASHINGTON

FARALLON PN: 2220-008

Drawn By: chartman | Checked By: SH | Date: 6/25/2024 | Disc Reference:

Path: Q:\Projects\2220 REDCO\008 7602 and 7702 River Dr E\Mapfiles\010\Figure-05_Soil_TPH.mxd

NOTES:
SOIL DEPTH AND ANALYTICAL RESULTS AS:
DEPTH IN FEET BELOW GROUND SURFACE | ARSENIC
SOIL ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM.
< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE LISTED REPORTING LIMIT

LEGEND

- SOIL VAPOR PROBE (FARALLON, 2024)
- SOIL GAS SAMPLE (FARALLON, 2023)
- BORING (FARALLON, 2023)
- BORING (BBG, 2022)
- MONITORING WELL (FARALLON, 2023)
- TEST PIT (GEOTECHNICAL CONSULTING, 2016)
- PROPERTY BOUNDARY
- PIERCE COUNTY PARCEL BOUNDARY

N

0 100

SCALE IN FEET

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

FARALLON CONSULTING

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

Your Challenges. Our Priority. | farallonconsulting.com

FIGURE 6

SOIL ANALYTICAL RESULTS FOR ARSENIC
7602 AND 7702 RIVER ROAD EAST
PUYALLUP, WASHINGTON

FARALLON PN: 2220-008

Drawn By: chartman | Checked By: SH | Date: 6/25/2024 | Disc Reference:

Path: Q:\Projects\2220 REDCO\008 7602 and 7702 River Dr E\Mapfiles\010\Figure-06_Soil_Arsenic.mxd

NOTES:
GROUNDWATER SAMPLE DATE AND ANALYTICAL RESULTS AS:
DATE SAMPLED | TOTAL PETROLEUM + POLAR ORGANICS | TOTAL PETROLEUM | POLAR ORGANICS
GROUNDWATER ANALYTICAL RESULTS IN MICROGRAMS PER LITER.
BOLD = DENOTES CONCENTRATIONS THAT EXCEED THE WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION CLEANUP LEVEL
< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE LISTED REPORTING LIMIT
--- = DENOTES SAMPLE NOT ANALYZED

LEGEND

- SOIL VAPOR PROBE (FARALLON, 2024)
- BORING (FARALLON, 2023)
- BORING (BBG, 2022)
- MONITORING WELL (FARALLON, 2023)
- TEST PIT (GEOTECHNICAL CONSULTING, 2016)
- PROPERTY BOUNDARY
- PIERCE COUNTY PARCEL BOUNDARY

N

0 100

SCALE IN FEET

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

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

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

FIGURE 7

GROUNDWATER ANALYTICAL RESULTS
FOR TOTAL PETROLEUM HYDROCARBONS
7602 AND 7702 RIVER ROAD EAST
PUYALLUP, WASHINGTON

FARALLON PN: 2220-008

Drawn By: chartman | Checked By: SH | Date: 6/25/2024 | Disc Reference:

Path: Q:\Projects\2220 REDCO\008 7602 and 7702 River Dr E\Mapfiles\010\Figure-07_GW_TPH.mxd

PUYALLUP RIVER

RIVER ROAD EAST

76th AVENUE EAST

16th AVENUE NORTHWEST

B5
B4
B2
VP-1
B1
B3

FMW-05
9/15/2023|4.64|4.54

FMW-04
9/15/2023|<1|<1

FB-4/FMW-06

FMW-03
9/15/2023|**8.36**|7.91

FB-3
8/17/2023|**10.9**|**12.3**

FB-2
8/17/2023|3.09|2.30

SG-1

FB-1
8/17/2023|16.4|10.5

TP-1
TP-2
TP-4
SG-2

FMW-02
9/15/2023|**22.5**|**22.2**

TP-3

FMW-01
9/15/2023|59.7|59.3

SG-3

NOTES:
GROUNDWATER SAMPLE DATE AND ANALYTICAL RESULTS AS:
DATE SAMPLED | TOTAL ARSENIC | DISSOLVED ARSENIC
GROUNDWATER ANALYTICAL RESULTS IN MICROGRAMS PER LITER.
BOLD = DENOTES CONCENTRATIONS THAT EXCEED THE WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION CLEANUP LEVEL
< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE LISTED REPORTING LIMIT

LEGEND

- SOIL VAPOR PROBE (FARALLON, 2024)
- SOIL GAS SAMPLE (FARALLON, 2023)
- BORING (FARALLON, 2023)
- BORING (BBG, 2022)
- MONITORING WELL (FARALLON, 2023)
- TEST PIT (GEOTECHNICAL CONSULTING, 2016)
- PROPERTY BOUNDARY
- PIERCE COUNTY PARCEL BOUNDARY

N

0 100

SCALE IN FEET

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

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

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

FIGURE 8

GROUNDWATER ANALYTICAL RESULTS
FOR ARSENIC
7602 AND 7702 RIVER ROAD EAST
PUYALLUP, WASHINGTON

FARALLON PN: 2220-008

Drawn By: chartman | Checked By: SH | Date: 6/25/2024 | Disc Reference:

Path: Q:\Projects\2220 REDCO\008 7602 and 7702 River Dr E\Mapfiles\010\Figure-08_GW_Arsenic.mxd

LEGEND

- SOIL VAPOR PROBE (FARALLON, 2024)
- SOIL GAS SAMPLE (FARALLON, 2023)
- BORING (FARALLON, 2023)
- BORING (BBG, 2022)
- MONITORING WELL (FARALLON, 2023)
- TEST PIT (GEOTECHNICAL CONSULTING, 2016)
- PROPERTY BOUNDARY
- PIERCE COUNTY PARCEL BOUNDARY

NOTES:
WOOD WASTE DEPTH IN FEET BELOW GROUND SURFACE.
SOIL VAPOR MEASUREMENT DATE AND ANALYTICAL RESULTS AS:
DATE MEASURED | METHANE CONCENTRATION
METHANE CONCENTRATIONS IN PERCENT.
> = DENOTES CONCENTRATION EXCEEDS FIELD INSTRUMENT CALIBRATION RANGE.

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

FARALLON CONSULTING

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

Your Challenges. Our Priority. | farallonconsulting.com

FIGURE 9

SOIL GAS CONCENTRATIONS FOR METHANE
7602 AND 7702 RIVER ROAD EAST
PUYALLUP, WASHINGTON

FARALLON PN: 2220-008

Drawn By: chartman | Checked By: SH | Date: 6/25/2024 | Disc Reference:

Path: Q:\Projects\2220 REDCO\008 7602 and 7702 River Dr E\Mapfiles\010\Figure-09_SV_Methane.mxd

TABLES

REMEDIAL INVESTIGATION REPORT
7602 and 7702 River Road East
Puyallup, Washington

Farallon PN: 2220-008

Table 1
Groundwater Elevations
7602 and 7702 River Road East
Puyallup, Washington
Farallon PN: 2220-008

Location	Total Well Depth (feet bgs)[1]	Screened Interval (feet bgs)[1]	Top of Casing Elevation (feet NAVD88)[2]	Monitoring Date	Depth to Water (feet)[3]	Water Level Elevation (feet NAVD88)[2]
FMW-01	25.0	15.0 - 25.0	33.57	9/15/2023	15.77	17.80
				2/6/2024	11.79	21.78
				5/16/2024	13.04	20.53
FMW-02	25.0	15.0 - 25.0	34.24	9/15/2023	16.94	17.30
				2/6/2024	12.53	21.71
				5/16/2024	13.75	20.49
FMW-03	25.0	15.0 - 25.0	33.63	9/15/2023	16.77	16.86
				2/6/2024	12.69	20.94
				5/16/2024	14.19	19.44
FMW-04	25.0	15.0 - 25.0	31.90	9/15/2023	15.43	16.47
				2/6/2024	11.12	20.78
				5/16/2024	13.05	18.85
FMW-05	20.0	10.0 - 20.0	33.75	9/15/2023	17.37	16.38
				2/6/2024	13.57	20.18
				5/16/2024	14.94	18.81

Notes:

[1] In feet below ground surface.

[2] In feet above mean sea level.

[3] In feet below top of well casing.

bgs = below ground surface

NAVD88 = North American Vertical Datum of 1988

Table 2
Soil Analytical Results for TPH and BTEX
7602 and 7702 River Road East
Puyallup, Washington
Farallon PN: 2220-008

Sample Location	Sampled By	Sample Identification	Sample Depth (feet)[1]	Sample Date	Analytical Results (milligrams per kilogram)						
					DRO[2]	ORO[2]	GRO[3]	Benzene[4]	Toluene[4]	Ethylbenzene[4]	Xylenes[4]
B1	BBG	B1-S1-8	8.0	9/28/2022	< 5.10	< 12.7	15.0	< 0.00159	< 0.00797	< 0.00399	< 0.0104
B2	BBG	B2-S1-4	4.0	9/28/2022	< 4.29	14.6	< 3.27	< 0.00131	< 0.00657	< 0.00329	< 0.00854
	BBG	B2-S2-7	7.0	9/28/2022	24.2	152	< 3.32	< 0.00134	< 0.00671	< 0.00335	< 0.00872
B3	BBG	B3-S1-16	16.0	9/28/2022	< 4.99	< 12.5	< 3.81	< 0.00153	< 0.00766	< 0.00383	< 0.00996
B4	BBG	B4-S1-16	16.0	9/28/2022	35.5	29.8	< 4.28	< 0.00186	< 0.00929	< 0.00466	< 0.0121
B5	BBG	B5-S1-8	8.0	9/28/2022	< 4.24	< 10.6	< 2.82	< 0.00112	< 0.00562	< 0.00281	< 0.00731
FB-1	Farallon	FB-1-25.0	25.0	8/17/2023	< 50	< 250	< 5	< 0.001	< 0.01	< 0.001	< 0.003
FB-2	Farallon	FB-2-25.0	25.0	8/17/2023	< 50	< 250	< 25	< 0.001	< 0.01	< 0.001	0.0023
FB-3	Farallon	FB-3-23.0	23.0	8/17/2023	< 50	< 250	< 5	0.0020	< 0.01	0.0014	0.0150
FMW-01	Farallon	FMW-01-21.5	21.5	9/11/2023	< 50	< 250	---	---	---	---	---
FMW-02	Farallon	FMW-02-17.5	17.5	9/11/2023	< 50	< 250	---	---	---	---	---
FMW-03	Farallon	FMW-03-17.0	17.0	9/12/2023	< 50	< 250	---	---	---	---	---
FMW-04	Farallon	FMW-04-21.5	21.5	9/11/2023	< 50	< 250	---	---	---	---	---
FMW-05	Farallon	FMW-05-12.5	12.5	9/12/2023	< 50	< 250	---	---	---	---	---
FMW-06	Farallon	FMW-06-17.5	17.5	9/12/2023	< 50	< 250	---	---	---	---	---
MTCA Method A Cleanup Levels for Soil[5]					**2,000**	**2,000**	**30/100[6]**	**0.03**	**7**	**6**	**9**

NOTES:

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

— denotes sample not analyzed.

[1]Depth in feet below ground surface.

[2]Analyzed by Northwest Method NWTPH-Dx.

[3]Analyzed by Northwest Method NWTPH-Gx.

[4]Analyzed by U.S. Environmental Protection Agency Method 8260D.

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

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

BBG = BBG Assessments, LLC

BTEX = benzene, toluene, ethylbenzene and xylenes

DRO = total petroleum hydrocarbons (TPH) as diesel-range organics

Farallon = Farallon Consulting, L.L.C.

GRO = TPH as gasoline-range organics

ORO = TPH as oil-range organics

Table 3
Soil Analytical Results for Halogenated VOCs
7602 and 7702 River Road East
Puyallup, Washington
Farallon PN: 2220-008

Sample Location	Sampled By	Sample Identification	Sample Depth (feet)[1]	Sample Date	Analytical Results (milligrams per kilogram)[2]				
					PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
B1	BBG	B1-S1-8	8.0	9/28/2022	< 0.00399	< 0.00159	< 0.00399	< 0.00797	< 0.00399
B2	BBG	B2-S1-4	4.0	9/28/2022	< 0.00329	< 0.00131	< 0.00329	< 0.00657	< 0.00329
	BBG	B2-S2-7	7.0	9/28/2022	< 0.00335	< 0.00134	< 0.00335	< 0.00671	< 0.00335
B3	BBG	B3-S1-16	16.0	9/28/2022	< 0.00383	< 0.00153	< 0.00383	< 0.00766	< 0.00383
B4	BBG	B4-S1-16	16.0	9/28/2022	< 0.00466	< 0.00186	< 0.00466	< 0.00929	< 0.00466
B5	BBG	B5-S1-8	8.0	9/28/2022	< 0.00281	< 0.00112	< 0.00281	< 0.00562	< 0.00281
FB-1	Farallon	FB-1-25.0	25.0	8/17/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
FB-2	Farallon	FB-2-25.0	25.0	8/17/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
FB-3	Farallon	FB-3-23.0	23.0	8/17/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
MTCA Cleanup Levels for Soil[3]					**0.05**	**0.03**	**160[4]**	**1,600[4]**	**0.67[4]**
MTCA Method B Cleanup Levels for Soil Protective of Groundwater Vadose @ 13 Degrees Celsius[4]					**0.05**	**0.025**	**0.079**	**0.52**	**0.0017**
MTCA Method B Cleanup Levels for Soil Protective of Groundwater Saturated[4]					**0.0028**	**0.0015**	**0.0052**	**0.032**	**0.00009**

NOTES:

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

[1]Depth in feet below ground surface.

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

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

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

BBG = BBG Assessments, LLC
Farallon = Farallon Consulting, L.L.C.
PCE = tetrachloroethene
TCE = trichloroethene
VOC = volatile organic compound

Table 4
Soil Analytical Results for PAHs
7602 and 7702 River Road East
Puyallup, Washington
Farallon PN: 2220-008

Sample Location	Sampled By	Sample Identification	Sample Depth (feet)[1]	Sample Date	Analytical Results (milligrams per kilogram)[2]																	
					Non-Carcinogenic PAHs												Carcinogenic PAHs					
					Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Naphthalenes[3]	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)Perylene	Fluoranthene	Fluorene	Phenanthrene	Pyrene	Benzo(a)Pyrene	Benzo(a)Anthracene	Benzo(b)Fluoranthene	Benzo(k)Fluoranthene	Chrysene	Dibenzo(a,h)Anthracene	Indeno(1,2,3-cd)Pyrene
B1	BBG	B1-S1-8	8.0	9/28/2022	< 0.0255	< 0.0255	< 0.0255	< 0.0765	< 0.00765	< 0.00765	< 0.00765	< 0.00765	< 0.00765	< 0.00765	0.0134	< 0.00765	< 0.00765	< 0.00765	< 0.00765	< 0.00765	< 0.00765	< 0.00765	< 0.00765
B2	BBG	B2-S1-4	4.0	9/28/2022	< 0.0214	< 0.0214	< 0.0214	< 0.0642	< 0.00643	< 0.00643	< 0.00643	< 0.00643	< 0.00643	< 0.00643	< 0.00643	< 0.00643	< 0.00643	< 0.00643	< 0.00643	< 0.00643	< 0.00643	< 0.00643	< 0.00643
	BBG	B2-S2-7	7.0	9/28/2022	< 0.0215	< 0.0215	< 0.0215	< 0.0645	< 0.00646	< 0.00646	< 0.00646	< 0.00646	< 0.00646	< 0.00646	< 0.00646	< 0.00646	< 0.00646	< 0.00646	< 0.00646	< 0.00646	< 0.00646	< 0.00646	< 0.00646
B3	BBG	B3-S1-16	16.0	9/28/2022	< 0.0250	< 0.0250	< 0.0250	< 0.0750	< 0.00749	< 0.00749	< 0.00749	< 0.00749	< 0.00749	< 0.00749	< 0.00749	< 0.00749	< 0.00749	< 0.00749	< 0.00749	< 0.00749	< 0.00749	< 0.00749	< 0.00749
B4	BBG	B4-S1-16	16.0	9/28/2022	0.0288	0.0558	0.0787	0.1633	< 0.00798	< 0.00798	< 0.00798	< 0.00798	0.0131	0.00804	0.0697	0.0126	< 0.00798	0.0115	< 0.00798	< 0.00798	0.0193	< 0.00798	< 0.00798
B5	BBG	B5-S1-8	8.0	9/28/2022	< 0.0212	< 0.0212	< 0.0212	< 0.0636	< 0.00637	< 0.00637	< 0.00637	< 0.00637	< 0.00637	< 0.00637	< 0.00637	< 0.00637	< 0.00637	< 0.00637	< 0.00637	< 0.00637	< 0.00637	< 0.00637	< 0.00637
FB-1	Farallon	FB-1-25.0	25.0	8/17/2023	< 0.01	< 0.01	< 0.01	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
FB-2	Farallon	FB-2-25.0	25.0	8/17/2023	< 0.05	< 0.05	< 0.05	< 0.15	< 0.05	< 0.05	< 0.05	< 0.05	0.050	< 0.05	0.076	0.087	< 0.05	< 0.05	< 0.05	< 0.05	0.079	< 0.05	< 0.05
FB-3	Farallon	FB-3-23.0	23.0	8/17/2023	0.012	0.023	0.029	0.064	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.022	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MTCA Method A Cleanup Level for Soil[6]								**5**	**4,800[7]**	**NE**	**24,000[7]**	**NE**	**3,200[7]**	**3,200[7]**	**NE**	**2,400[7]**							
MTCA Method B Levels for Soil Protective of Groundwater Vadose @ 13 Degrees Celsius[7]					**4.5**	**0.082**	**1.7**	**NE**	**49**	**NE**	**1,100**	**NE**	**630**	**51**	**NE**	**330**							
MTCA Method B Levels for Soil Protective of Groundwater Saturated[7]					**0.24**	**0.0042**	**0.088**	**NE**	**2.5**	**NE**	**57**	**NE**	**32**	**2.6**	**NE**	**16**							

NOTES:

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

[1]Depth in feet below ground surface.

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

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

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

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

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

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

BBG = BBG Assessments, LLC
cPAHs = carcinogenic polycyclic aromatic hydrocarbons
Farallon = Farallon Consulting, L.L.C.
NE = not established
PAHs = polycyclic aromatic hydrocarbons
TEC = toxic equivalent concentration

Table 4
Soil Analytical Results for PAHs
7602 and 7702 River Road East
Puyallup, Washington
Farallon PN: 2220-008

Total cPAHs TEC[4,5]
< 0.0058
< 0.0049
< 0.0049
< 0.0057
0.0069
< 0.0048
< 0.0076
0.038
< 0.0076
0.1
3.9
0.19

Table 5
Soil Analytical Results for Metals
7602 and 7702 River Road East
Puyallup, Washington
Farallon PN: 2220-008

Sample Location	Sample Identification	Sample Depth (feet) [1]	Sample Date	Analytical Results (milligrams per kilogram)[2]							
				Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
FB-1	FB-1-25.0	25.0	8/17/2023	< 1	16.4	< 1	6.32	1.11	< 1	< 1	< 1
FB-2	FB-2-25.0	25.0	8/17/2023	1.02	16.0	< 1	8.34	3.03	< 1	< 1	< 1
FB-3	FB-3-23.0	23.0	8/17/2023	1.85	24.7	< 1	5.03	1.28	< 1	< 1	< 1
FMW-01	FMW-01-21.5	21.5	9/11/2023	< 1	35.5	< 1	12.5	2.15	< 1	< 1	< 1
FMW-02	FMW-02-17.5	17.5	9/11/2023	3.87	53.5	< 1	12.7	3.14	< 1	< 1	< 1
FMW-03	FMW-03-17.0	17.0	9/12/2023	3.01	52.3	< 1	13.9	8.37	< 1	< 1	< 1
FMW-04	FMW-04-21.5	21.5	9/11/2023	3.55	70.1	< 1	14.5	3.88	< 1	< 1	< 1
FMW-05	FMW-05-12.5	12.5	9/12/2023	2.82	29.4	< 1	14.3	6.31	< 1	< 1	< 1
FMW-06	FMW-06-17.5	17.5	9/12/2023	1.71	20.3	< 1	10.0	1.05	< 1	< 1	< 1
MTCA Cleanup Levels for Soil [3]				**20**	**16,000[4]**	**2**	**2,000**	**250**	**2**	**400[4]**	**400[4]**
MTCA Method B Cleanup Levels for Soil Protective of Groundwater Vadose @ 13 Degrees Celsius[5]				**2.9**	**1,600**	**0.69**	**480,000**	**3,000**	**2.1**	**5.20**	**14**
MTCA Method B Cleanup Levels for Soil Protective of Groundwater Saturated[5]				**0.15**	**83**	**0.035**	**24,000**	**150**	**0.10**	**0.26**	**0.69**

NOTES:

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

[1]Depth in feet below ground surface.

[2]Analyzed by U.S. Environmental Protection Agency Methods 6020B.

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

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

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

Table 6
Groundwater Analytical Results for GRO and BTEX
7602 and 7702 River Road East
Puyallup, Washington
Farallon PN: 2220-008

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter)				
				NWTPH-Gx[1]	EPA Method 8260D[2]			
				GRO	Benzene	Toluene	Ethylbenzene	Xylenes
Reconnaissance Boring Groundwater Samples								
B1	BBG	9/28/2022	B1-W1	< 100	< 1.00	< 1.00	< 1.00	< 3.00
B3	BBG	9/28/2022	B3-W1	< 100	< 1.00	< 1.00	< 1.00	< 3.00
B4	BBG	9/28/2022	B4-W1	< 100	< 1.00	< 1.00	< 1.00	< 3.00
B5	BBG	9/28/2022	B5-W1	< 100	< 1.00	< 1.00	< 1.00	< 3.00
FB-1	Farallon	8/17/2023	FB-1-081723	< 100	< 0.35	< 1	< 1	< 3
FB-2	Farallon	8/17/2023	FB-2-081723	< 100	< 0.35	< 1	< 1	< 3
FB-3	Farallon	8/17/2023	FB-3-081723	< 100	< 0.35	5.0	< 1	< 3
MTCA Method A Cleanup Level for Groundwater[3]				**800/1,000[4]**	**5**	**1,000**	**700**	**1,000**

NOTES:

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

[1]Analyzed by Northwest Method NWTPH-Gx.

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

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

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

BBG = BBG Assessments, LLC
BTEX = benzene, toluene, ethylbenzene, and xylenes
Farallon = Farallon Consulting, L.L.C.
GRO = total petroleum hydrocarbons (TPH) as gasoline-range organics

Table 7
Groundwater Analytical Results for DRO and ORO with and without Silica Gel Cleanup
7602 and 7702 River Road East
Puyallup, Washington
Farallon PN: 2220-008

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter)						
				NWTPH-Dx[1]			NWTPH-Dx with Silica Gel[1]			
				DRO	ORO	Total Petroleum + Polar Organics	DRO	ORO	Total Petroleum	Total Polar Organics[2]
Reconnaissance Boring Groundwater Samples										
B1	BBG	9/28/2022	B1-W1	---	---	---	< 200	< 250	< 225	---
B3	BBG	9/28/2022	B3-W1	---	---	---	< 200	< 250	< 225	---
B4	BBG	9/28/2022	B4-W1	---	---	---	< 200	< 250	< 225	---
B5	BBG	9/28/2022	B5-W1	---	---	---	< 200	< 250	< 225	---
FB-1	Farallon	8/17/2023	FB-1-081723	79 x	< 380	269	---	---	---	---
FB-2	Farallon	8/17/2023	FB-2-081723	120	< 300	270	---	---	---	---
FB-3	Farallon	8/17/2023	FB-3-081723	**2,200** x	**7,400**	**9,600**	**700** x	**2,900**	**3,600**	**6,000**
Monitoring Well Groundwater Samples										
Background Monitoring Well										
FMW-01	Farallon	9/15/2023	FMW-01-091523	360 x	450 x	**810**	< 50	< 250	< 150	**810**
	Farallon	2/6/2024	FMW-1-020624	---	---	**710** x	---	---	< 250	**710**
Existing Monitoring Wells										
FMW-02	Farallon	9/15/2023	FMW-02-091523	210 x	330 x	**540**	< 50	< 250	< 150	**540**
	Farallon	2/6/2024	FMW-2-020624	---	---	260 x	---	---	< 250	260
FMW-03	Farallon	9/15/2023	FMW-03-091523	**750** x	**2,200** x	**2,950**	< 50	< 250	< 150	**2,950**
	Farallon	2/6/2024	FMW-3-020624	**---**	**---**	**1,900** x	---	---	< 250	**1,900**
FMW-04	Farallon	9/15/2023	FMW-04-091523	260 x	**660** x	**920**	< 50	< 250	< 150	**920**
	Farallon	2/6/2024	FMW-4-020624	---	---	< 250	---	---	< 250	< 250
FMW-05	Farallon	9/15/2023	FMW-05-091523	180 x	370 x	**550**	< 50	< 250	< 150	**550**
	Farallon	2/6/2024	FMW-5-020624	**---**	**---**	**1,400** x	---	---	< 250	**1,400**
MTCA Method A Cleanup Level for Groundwater[4]				**500**	**500**	**500**	**500**	**500**	**500**	**500**
Screening Level for Sites with No Detectable Petroleum Hydrocarbons[5]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**

NOTES:

Results in **bold** denote concentrations exceeding screening levels prior to background adjustments.

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

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

— denotes sample not analyzed or not applicable.

[1]Analyzed by Northwest Method NWTPH-Dx or NWTPH-Dx treated with a silica gel cleanup procedure prior to analysis. Total petroleum values for 2023 samples are the sum of DRO and ORO, using half of the reporting limit in the summation for non-detect results. Total petroleum values for 2024 samples were quantified by the laboratory as a hydrocarbon range of C10 to C36 (diesel and oil ranges).

[2]Total Polar Organics is calculated by subtracting "Total Petroleum" from "Total Petroleum + Polar Organics". Background Polar Organics represents values from selected background well.

[3]Polar Organics (polar metabolites) concentration is calculated by subtracting "Total Petroleum" from "Total Petroleum + Polar Organics", and then subtracting "Background Polar Organics".

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

[5]Washington State Department of Ecology, *Guidance for Silica Gel Cleanup in Washington State* , Publication No. 22-09-059, revised November 2023.

BBG = BBG Assessments, LLC

DRO = total petroleum hydrocarbons (TPH

Farallon = Farallon Consulting, L.L.C.

NA = not applicable

NE = not established

ORO = TPH as oil-range organics

x = the sample chromatographic pattern does not resemble the fuel standard used for

Table 8
Groundwater Analytical Results for Halogenated VOCs
7602 and 7702 River Road East
Puyallup, Washington
Farallon PN: 2220-008

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter)[1]				
				PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
Reconnaissance Boring Groundwater Samples								
B1	BBG	9/28/2022	B1-W1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
B3	BBG	9/28/2022	B3-W1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
B4	BBG	9/28/2022	B4-W1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
B5	BBG	9/28/2022	B5-W1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
FB-1	Farallon	8/17/2023	FB-1-081723	< 1	< 0.5	< 1	< 1	< 0.02
FB-2	Farallon	8/17/2023	FB-2-081723	< 1	< 0.5	< 1	< 1	< 0.02
FB-3	Farallon	8/17/2023	FB-3-081723	< 1	< 0.5	< 1	< 1	< 0.02
MTCA Cleanup Levels for Groundwater[2]				**5**	**5**	**16[3]**	**160[3]**	**0.2**

NOTES:

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

[1]Analyzed by U.S. Environmental Protection Agency Method 8260D.

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

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

BBG = BBG Assessments, LLC

Farallon = Farallon Consulting, L.L.C.

PCE = tetrachloroethene

TCE = trichloroethene

VOC = volatile organic compound

Table 9
Groundwater Analytical Results for PAHs
7602 and 7702 River Road East
Puyallup, Washington
Farallon PN: 2220-008

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter)[1]																		
				Non-Carcinogenic PAHs												Carcinogenic PAHs							
				Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Naphthalenes[2]	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)Perylene	Fluoranthene	Fluorene	Phenanthrene	Pyrene	Benzo(a)Pyrene	Benzo(a)Anthracene	Benzo(b)Fluoranthene	Benzo(j,k)Fluoranthene	Chrysene	Dibenzo(a,h)Anthracene	Indeno(1,2,3-cd)Pyrene	Total cPAHs TEC[3,4]
Reconnaissance Boring Groundwater Samples																						
B1	BBG	9/28/2022	B1-W1	< 0.250	< 0.250	< 0.250	< 0.750	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.100	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.038
B3	BBG	9/28/2022	B3-W1	< 0.250	< 0.250	< 0.250	< 0.750	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.100	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.038
B4	BBG	9/28/2022	B4-W1	< 0.250	< 0.250	< 0.250	< 0.750	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.100	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.038
B5	BBG	9/28/2022	B5-W1	< 0.250	< 0.250	< 0.250	< 0.750	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.100	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.038
MTCA Method A Cleanup Level for Groundwater[5]							**160**	**960[6]**	**NE**	**4,800[6]**	**NE**	**640[6]**	**640[6]**	**NE**	**480[6]**								**0.1**

NOTES:

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

[1]Analyzed by U.S. Environmental Protection Agency Method 8270E/SIM.

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

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

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

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

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

BBG = BBG Assessments, LLC

cPAHs = carcinogenic polycyclic aromatic hydrocarbons

NE = not established

PAHs = polycyclic aromatic hydrocarbons

TEC = toxic equivalent concentration

Table 10
Water Quality Parameters
7602 and 7702 River Road East
Puyallup, Washington
Farallon PN: 2220-008

			Water Quality Parameters					Electron Receptors	Available Organic Carbon
Monitoring Well	Date	Sample Identification	Temperature[1] (degrees Celsius)	Specific Conductivity[1] (mS/cm)	pH[1] (Standard Units)	Turbidity[1] (NTU)	Oxidation-Reduction Potential[1] (millivolts)	Dissolved Oxygen[1] (mg/L)	Total Organic Carbon[2] (mg/L)
FMW-01	2/6/2024	FMW-1-020624	12.8	0.454	6.75	61.49	-80.4	0.23	19.4
FMW-02	2/6/2024	FMW-2-020624	12.5	0.262	6.48	10.73	-11.7	0.25	11.5
FMW-03	2/6/2024	FMW-3-020624	12.7	0.300	6.18	5.79	29.6	0.28	32.6
FMW-04	2/6/2024	FMW-4-020624	12.1	0.436	6.55	26.48	-20.2	0.21	10.9
FMW-05	2/6/2024	FMW-5-020624	11.8	0.339	6.31	21.48	21.8	0.31	25.4

NOTE:
[1]Field collected parameter using multimeter.
[2]Analyzed by standard method 5310C.

mS/cm = milliSiemens per centimeter
mg/L = milligrams per liter
NTU = nephelometric turbidity units

Table 11
Soil Vapor Analytical Results
7602 and 7702 River Road East
Puyallup, Washington
Farallon PN: 2220-008

Sample Location	Sample Depth (feet)[1]	Sample Date	Depth to Groundwater (feet bgs)	Surface Water Elevation at Puyallup River (feet)	Barometric Pressure (in Hg)	Analytical Results			
						Field Measurements (percent)[2]			
						Methane	Oxygen	Carbon Dioxide	Nitrogen[3]
FMW-01	15.0 - 25.0	9/15/2023	15.74	---	---	12.6	0.0	22.5	64.8
FMW-02	15.0 - 25.0	9/15/2023	16.90	---	---	20.0	0.0	21.9	58.1
FMW-03	15.0 - 25.0	9/15/2023	16.75	---	---	64.1	0.0	41.0	0.0
FMW-04	15.0 - 25.0	9/15/2023	15.34	---	---	68.2	0.0	32.4	0.0
FMW-05	10.0 - 20.0	9/15/2023	17.32	---	---	66.7	0.0	38.0	0.0
	10.0 - 20.0	2/7/2024	13.65	---	---	> 63 E	0.0	38.7	0.0
	10.0 - 20.0	5/16/2024	14.94	---	29.81	> 65.3 E	0.2	35.1	0.0
SG-1	3.0 - 8.0	8/17/2023	---	---	29.83	27.7	0.0	26.0	46.2
SG-2	3.0 - 8.0	8/17/2023	---	---	29.83	27.0	0.0	23.1	49.9
SG-3	3.0 - 8.0	8/17/2023	---	---	29.81	1.6	12.9	4.9	80.5
VP-1	---	2/7/2024	---	---	---	0.1	8.2	7.8	83.9
	---	5/16/2024	---	---	29.81	0.0	3.4	11.9	84.6

NOTES:

[1]Depth in feet below ground surface.

[2]Field methane results obtained using Landtec GEM2000 field instrument.

[3]The nitrogen results were reported as "Balance" on the Landtec GEM2000 field instrument.

--- = not analyzed/not reported/not applicable

bgs = below ground surface

E = beyond calibration range of field instrument

in Hg = inches of mercury

APPENDIX A
BORING LOGS

REMEDIAL INVESTIGATION REPORT
7602 and 7702 River Road East
Puyallup, Washington

Farallon PN: 2220-008

FARALLON CONSULTING

Log of Boring: FB-1

Client:	REDCO Development, LLC.
Project:	7602 and 7702 River Rd E
Location:	Puyallup, WA
Farallon PN:	2220-008
Logged By:	B. Lukkari
Reviewed By:	Y. Pehlivan

Date/Time Started:	8/17/23 1516	**Depth to Water ATD (ft bgs):**	17.52
Date/Time Completed:	8/17/23 1535	**Boring Diameter (in):**	3.0
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	25.0
Drilling Method:	Direct Push		
Drilling Equipment:	7822Dt		
Drilling Operator:	Blake Phillips		
Sampler Type:	5' Macrocore		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0 - 1.5': FILL, gravel fill, assorted debris and organics.	FILL			30			
		1.5 - 5.0': No Recovery.							
5		5.0 - 6.5': Wood, wood debris and organics with some medium sands.	WD			30			
		6.5 - 10.0': No Recovery.							
10		10.0 - 10.5': Wood, wood debris and organics with some gravel.	WD			5			
		10.5 - 15.0': No Recovery.							
15		15.0 - 15.5': Wood, wood debris and organics with some sand.	WD			5			
		15.5 - 20.0': No Recovery.							
20		20.0 - 23.0': Well graded SAND with gravel, dark brown, wet, no odor.	SW			60			
		23.0 - 25.0': No Recovery.							
								FB-1-081723	X
25							0.6	FB-1-25.0	X

Completion Information

Temporary Well Casing Diameter (in):	NA	**Surface Seal:**	NA
Temporary Well Screened Interval (ft bgs):	NA	**Ground Surface Elevation (ft):**	NA
Boring Abandonment:	Bentonite	**Surveyed Location:** **X:** NA	**Y:** NA

Log of Boring: FB-2

Client:	REDCO Development, LLC.
Project:	7602 and 7702 River Rd E
Location:	Puyallup, WA
Farallon PN:	2220-008
Logged By:	B. Lukkari
Reviewed By:	Y. Pehlivan

Date/Time Started:	8/17/23 1313	**Depth to Water ATD (ft bgs):**	19.71
Date/Time Completed:	8/17/23 1337	**Boring Diameter (in):**	3.0
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	25.0
Drilling Method:	Direct Push		
Drilling Equipment:	7822Dt		
Drilling Operator:	Blake Phillips		
Sampler Type:	5' Macrocore		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0 - 5.0': No Recovery.							
5		5.0 - 6.0': Wood, some gravel.	WD			20			
		6.0 - 10.0': No Recovery.							
10		10.0 - 14.5': Organic material, organic debris with some gravel, wet.	OL			90			
15		14.5 - 15.0': No Recovery.							
		15.0 - 15.5': Organic material, organic debris, some gravel.	OL			10			
		15.5 - 20.0': No Recovery.							
20		20.0 - 21.0': Well graded SAND, fine to medium sand, dark brown, wet, no odor.	SW			20			
		21.0 - 25.0': No Recovery.							
								FB-2-081723	X
25							2.9	FB-2-25.0	X

Completion Information

Temporary Well Casing Diameter (in):	NA	**Surface Seal:**	NA
Temporary Well Screened Interval (ft bgs):	NA	**Ground Surface Elevation (ft):**	NA
Boring Abandonment:	Bentonite	**Surveyed Location:** **X:** NA	**Y:** NA

FARALLON CONSULTING

Log of Boring: FB-3

Client: REDCO Development, LLC.
Project: 7602 and 7702 River Rd E
Location: Puyallup, WA
Farallon PN: 2220-008
Logged By: B. Lukkari
Reviewed By: Y. Pehlivan

Date/Time Started: 8/17/23 1605
Date/Time Completed: 8/17/23 1720
Drilling Company: AEC
Drilling Method: Direct Push
Drilling Equipment: 7822Dt
Drilling Operator: Blake Phillips
Sampler Type: 5' Macrocore

Depth to Water ATD (ft bgs): 15.20
Boring Diameter (in): 3.0
Total Boring Depth (ft bgs): 25.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0 - 1.0': Wood, wood debris and organics.	WD			20			
		1.0 - 5.0': No Recovery.							
5		5.0 - 7.0': Wood, wood debris and organics with some silt.	WD			40			
		7.0 - 10.0': No Recovery.							
10		10.0 - 11.5': Wood, wood debris with some gravel.	WD			30	5.9	FB-3-10.0	
		11.5 - 15.0': No Recovery.							
15		15.0 - 16.0': SILT with wood and organics, dark gray, wet.	ML		▼	20			
		16.0 - 20.0': No Recovery.							
20		20.0 - 24.5': Well graded SAND, fine to medium sand, dark brown, wet.	SW			90	2.0	FB-3-20.0	
							1.5	FB-3-23.0	X
								FB-3-081723	X
25		24.5 - 25.0': No Recovery.							

Completion Information

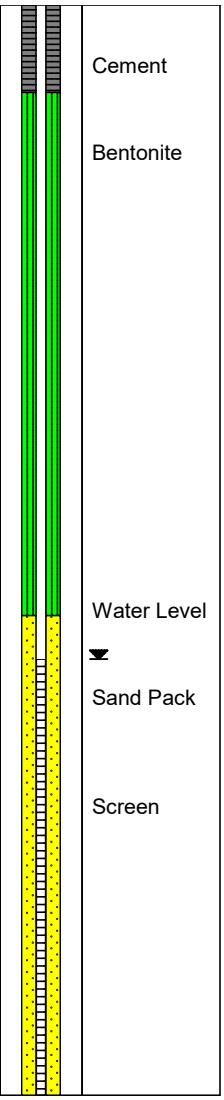
Temporary Well Casing Diameter (in): NA
Temporary Well Screened Interval (ft bgs): NA
Boring Abandonment: Bentonite
Surface Seal: NA
Ground Surface Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA

Log of Boring: FMW-01

Client: REDCO Development, LLC.
Project: 7602 and 7702 River Rd E
Location: Puyallup, WA
Farallon PN: 2220-008
Logged By: M. Ysaguirre
Reviewed By: Y. Pehlivan

Date/Time Started:	9/11/23 0850	**Depth to Water ATD (ft bgs):**	15.0
Date/Time Completed:	9/11/23 1015	**Boring Diameter (in):**	3.0
Drilling Company:	Holt Services	**Total Boring Depth (ft bgs):**	25.0
Drilling Method:	Direct Push	**Constructed Well Depth (ft bgs):**	25.0
Drilling Equipment:	7822Dt		
Drilling Operator:	Grady Green		
Sampler Type:	5' Macrocore		

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0	0.0 - 0.2': Loose surface gravel. Air knifed to 5.0' to clear for utilities.	FILL				
5	5.0': Fill material (100% fill). Slight organic odor, loose smaller rocks, wood debris.	FILL				
	5.0 - 6.0': Rock (80% rock, 10% sand, 10% silt), fine sand, moist, smaller rocks, wood debris, slight organic odor.	RK	20	0.4		
	6.0 - 10.0': No Recovery.					
10	10.0 - 11.0': Wood (100% wood), black, moist, some organic material, organic odor, rocks present.	WD	20	0.3		
	11.0 - 15.0': No Recovery.					
15	15.0 - 15.1': Wood (100% wood), black, wet, some organic material, organic odor, rocks present.	WD	5	0.2		
	15.1 - 20.0': No Recovery.					
20	20.0 - 23.0': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, dark gray, wet, no odor, no sheen. Wood debris between 20.0 - 20.1'.	SP-SM	60	0.2	FMW-01-21.5	X
	23.0 - 25.0': No Recovery.					
25						



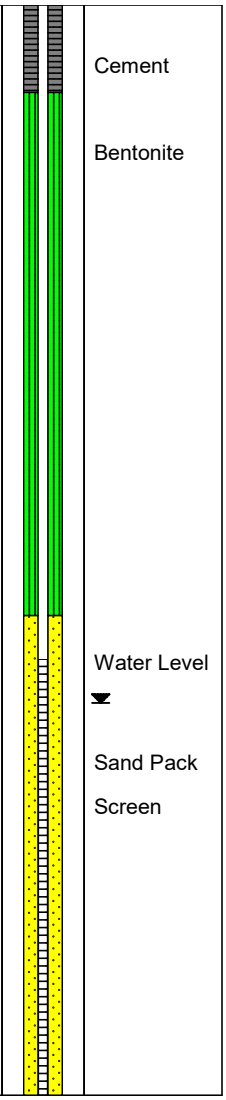
Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (in):	2.0	**Surface Seal:**	Cement	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location: X:** NA	**Y:** NA
Screened Interval (ft bgs):	15.0 - 25.0	**Boring Abandonment:**	NA	**Unique Well ID:** BP-803	

Log of Boring: FMW-02

Client:	REDCO Development, LLC.	**Date/Time Started:**	9/11/23 1030	**Depth to Water ATD (ft bgs):**	16.0
Project:	7602 and 7702 River Rd E	**Date/Time Completed:**	9/11/23 1208	**Boring Diameter (in):**	3.0
Location:	Puyallup, WA	**Drilling Company:**	Holt Services	**Total Boring Depth (ft bgs):**	25.0
Farallon PN:	2220-008	**Drilling Method:**	Direct Push	**Constructed Well Depth (ft bgs):**	25.0
Logged By:	M. Ysaguirre	**Drilling Equipment:**	7822Dt		
Reviewed By:	Y. Pehlivan	**Drilling Operator:**	Grady Green		
		Sampler Type:	5' Macrocore		

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0	0.0 - 0.1': Loose surface gravel. Air knifed to 5.0' to clear for utilities.	FILL				
5	5.0 - 6.0': Wood (100% wood), black, moist, some organic material, organic odor.	WD	20	0.4		
	6.0 - 10.0': No Recovery.					
10	10.0 - 11.0': Wood (100% wood), black, moist, some organic material, organic odor.	WD	20	0.6		
	11.0 - 15.0': No Recovery.					
15	15.0 - 16.0': Wood (100% wood), black, moist, some organic material, organic odor.	WD	50	1.1		
	16.0 - 17.5': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, dark gray, wet, no odor.	SP-SM				
	17.5 - 20.0': No Recovery.			0.4	FMW-02-17.5	X
20	20.0 - 20.5': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, dark gray, wet, no odor.	SP-SM	50	0.2		
	20.5 - 22.5': Poorly graded SAND (95% sand, 5% gravel), coarse sand, fine gravel, dark gray, wet, no odor.					
	22.5 - 25.0': No Recovery.			0.3	FMW-02-22.5	
25						



Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (in):	2.0	**Surface Seal:**	Cement	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location: X:** NA	**Y:** NA
Screened Interval (ft bgs):	15.0 - 25.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BP-804

Log of Boring: FMW-03

Client:	REDCO Development, LLC.
Project:	7602 and 7702 River Rd E
Location:	Puyallup, WA
Farallon PN:	2220-008
Logged By:	M. Ysaguirre
Reviewed By:	Y. Pehlivan

Date/Time Started:	9/11/23 1323	**Depth to Water ATD (ft bgs):**	16.0
Date/Time Completed:	9/12/23 1146	**Boring Diameter (in):**	3.0
Drilling Company:	Holt Services	**Total Boring Depth (ft bgs):**	25.0
Drilling Method:	Direct Push	**Constructed Well Depth (ft bgs):**	25.0
Drilling Equipment:	7822Dt		
Drilling Operator:	Grady Green		
Sampler Type:	5' Macrocore		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0 - 0.1': Loose surface gravel. Air knifed to 5.0' to clear for utilities.	FILL						Cement
5		5.0 - 7.0': Wood (100% wood), black, moist, some organic material, organic odor.	WD		40	3.5			Bentonite
		7.0 - 10.0': No Recovery.							
10		10.0 - 12.0': Wood (100% wood), black, moist, some organic material, organic odor.	WD		40	1.8			
		12.0 - 15.0': No Recovery.							
15									

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (in):	2.0	**Surface Seal:**	Cement	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location: X:** NA	**Y:** NA
Screened Interval (ft bgs):	15.0 - 25.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BP-805

FARALLON CONSULTING

Log of Boring: FMW-03

Client: REDCO Development, LLC.
Project: 7602 and 7702 River Rd E
Location: Puyallup, WA
Farallon PN: 2220-008
Logged By: M. Ysaguirre
Reviewed By: Y. Pehlivan

Date/Time Started:	9/11/23 1323	**Depth to Water ATD (ft bgs):**	16.0
Date/Time Completed:	9/12/23 1146	**Boring Diameter (in):**	3.0
Drilling Company:	Holt Services	**Total Boring Depth (ft bgs):**	25.0
Drilling Method:	Direct Push	**Constructed Well Depth (ft bgs):**	25.0
Drilling Equipment:	7822Dt		
Drilling Operator:	Grady Green		
Sampler Type:	5' Macrocore		

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
	15.0 - 16.0': Wood (100% wood), black, moist, some organic material, organic odor.	WD	40	2.3		
	16.0 - 17.0': Silty SAND (80% sand, 20% silt), fine sand, gray, wet, no odor.	SM				
	17.0 - 20.0': No Recovery.			0.2	FMW-03-17.0	X
20	20.0 - 20.5': Silty SAND (80% sand, 20% silt), fine sand, gray, wet, no odor.	SM	50	0.2		
	20.5 - 22.0': Poorly graded SAND (90% sand, 10% gravel), coarse sand, fine gravel, dark gray/ black, wet, no odor.	SP				
	22.0 - 22.5': Poorly graded SAND with gravel (60% sand, 40% gravel), coarse sand, fine and coarse gravel, dark gray/ black, wet, no odor.	SP		0.0	FMW-03-22.0	
25	22.5 - 25.0': No Recovery.					
30						

Boring/Well Construction Details: Water Level; Sand Pack; Screen

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (in):	2.0	**Surface Seal:**	Cement	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location: X:** NA	**Y:** NA
Screened Interval (ft bgs):	15.0 - 25.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BP-805

Log of Boring: FMW-04

Client:	REDCO Development, LLC.	**Date/Time Started:**	9/11/23 1400	**Depth to Water ATD (ft bgs):**	5.0
Project:	7602 and 7702 River Rd E	**Date/Time Completed:**	9/11/23 1520	**Boring Diameter (in):**	3.0
Location:	Puyallup, WA	**Drilling Company:**	Holt Services	**Total Boring Depth (ft bgs):**	25.0
Farallon PN:	2220-008	**Drilling Method:**	Direct Push	**Constructed Well Depth (ft bgs):**	25.0
Logged By:	M. Ysaguirre	**Drilling Equipment:**	7822Dt		
Reviewed By:	Y. Pehlivan	**Drilling Operator:**	Grady Green		
		Sampler Type:	5' Macrocore		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0 - 0.1': Loose surface gravel. Air knifed to 5.0' to clear for utilities.	FILL						Cement
5		5.0 - 7.0': Wood (100% wood), dark brown, wet between 5.0 to 5.5', moist between 5.5 to 7.0', slight organic odor. Trace gravel present.	WD		40	4.5			Bentonite Water Level
		7.0 - 10.0': No Recovery.							
10		10.0 - 11.5': Wood (100% wood), dark brown, wet, slight organic odor.	WD		30	2.3			
		11.5 - 15.0': No Recovery.							
15		15.0 - 20.0': No Recovery.			0				Sand Pack Screen
20		20.0 - 22.0': Silty SAND (80% sand, 20% silt), fine sand, dark gray, wet, no odor. Wood debris between 20.0 - 20.1'.	SM		70				
		22.0 - 23.5': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, dark gray, wet, no odor. Lense of coarse sand and fine gravel at 22.5'.	SP-SM			0.3	FMW-04-21.5	X	
		23.5 - 25.0': No Recovery.							
25									

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (in):	2.0	**Surface Seal:**	Cement	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location: X:** NA	**Y:** NA
Screened Interval (ft bgs):	15.0 - 25.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BP-806

FARALLON CONSULTING

Log of Boring: FMW-05

Client:	REDCO Development, LLC.	**Date/Time Started:**	9/12/23 0730	**Depth to Water ATD (ft bgs):**	10.0
Project:	7602 and 7702 River Rd E	**Date/Time Completed:**	9/12/23 0900	**Boring Diameter (in):**	3.0
Location:	Puyallup, WA	**Drilling Company:**	Holt Services	**Total Boring Depth (ft bgs):**	25.0
Farallon PN:	2220-008	**Drilling Method:**	Direct Push	**Constructed Well Depth (ft bgs):**	20.0
Logged By:	M. Ysaguirre	**Drilling Equipment:**	7822Dt		
Reviewed By:	Y. Pehlivan	**Drilling Operator:**	Grady Green		
		Sampler Type:	5' Macrocore		

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0 - 0.1': Loose surface gravel. Air knifed to 5.0' to clear for utilities.	FILL					Cement
							Bentonite
5	5.0 - 8.0': Wood (100% wood), black, moist, slight organic odor, some organic material, small rocks, trash debris.	WD	60	0.5			
	8.0 - 10.0': No Recovery.			1.6			
10	10.0 - 11.0': Wood (100% wood), black, moist, slight organic odor, some organic material, small rocks, trash debris.	WD	50	0.2			Water Level
	11.0 - 12.5': Silty SAND (75% sand, 25% silt), fine sand, dark gray, wet, no odor.	SM					
	12.5 - 15.0': No Recovery.			0.1	FMW-05-12.5	X	
15	15.0 - 17.5': Silty SAND (75% sand, 25% silt), fine sand, dark gray, wet, no odor.	SM	60	0.1			
	17.5 - 18.0': Poorly graded SAND (90% sand, 10% gravel), coarse sand, fine gravel, dark gray, wet, no odor.	SP		0.1	FMW-05-17.5		Sand Pack
	18.0 - 20.0': No Recovery.						Screen
20	20.0 - 23.5': Poorly graded SAND (90% sand, 10% gravel), coarse sand, fine gravel, dark gray, wet, no odor.	SM	70	0.0			Bentonite Plug
				0.0	FMW-05-22.5		
	23.5 - 25.0': No Recovery.						
25							

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (in):	2.0	**Surface Seal:**	Cement	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location: X:** NA	**Y:** NA
Screened Interval (ft bgs):	10.0 - 20.0	**Boring Abandonment:**	NA	**Unique Well ID:** BP-807	

FARALLON CONSULTING

Log of Boring: FMW-06 / FB-4

Client: REDCO Development, LLC.
Project: 7602 and 7702 River Rd E
Location: Puyallup, WA
Farallon PN: 2220-008
Logged By: M. Ysaguirre
Reviewed By: Y. Pehlivan

Date/Time Started: 9/12/23 0910
Date/Time Completed: 9/12/23 1010
Drilling Company: Holt Services
Drilling Method: Direct Push
Drilling Equipment: 7822Dt
Drilling Operator: Grady Green
Sampler Type: 5' Macrocore

Depth to Water ATD (ft bgs): 11.0
Boring Diameter (in): 3.0
Total Boring Depth (ft bgs): 25.0

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0	0.0 - 0.1': Loose surface gravel. Air knifed to 5.0' to clear for utilities.	FILL				
5	5.0 - 7.5': Wood (100% wood), black, moist, some organic material, slight organic odor.	WD	50	7.5		
	7.5 - 10.0': No Recovery.			1.7		
10	10.0 - 11.0': Wood (100% wood), black, moist, slight organic odor, some organic material.	WD	80	1.8		
	11.0 - 14.0': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, gray, wet, no odor.	SP-SM		0.7	FMW-06-12.5	
	14.0 - 15.0': No Recovery.					
15	15.0 - 16.0': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, gray, wet, no odor.	SP-SM	70	1.3		
	16.0 - 18.5': Poorly graded SAND (100% sand), coarse sand, gray, wet, no odor.	SP		1.0	FMW-06-17.5	X
	18.5 - 20.0': No Recovery.					
20	20.0 - 22.0': Poorly graded SAND (90% sand, 10% gravel), coarse sand, fine gravel, dark gray/ black, wet, no odor.	SP	80	0.1		
	22.0 - 24.0': Silty SAND (65% sand, 35% silt), fine sand, dark gray, wet, no odor. Wood debris between 22.5 to 23.5'.	SM				
25	24.0 - 25.0': No Recovery.			0.1	FMW-06-24.0	

Completion Information

Temporary Well Casing Diameter (in): NA
Temporary Well Screened Interval (ft bgs): NA
Boring Abandonment: Bentonite
Surface Seal: NA
Ground Surface Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA

point source solutions	Client: BBG	BORING LOG
	Project: 7602 River Road East	Boring No. B1
	Address: 7602 River Road East, Puyallup, WA	Page: 1 of 1

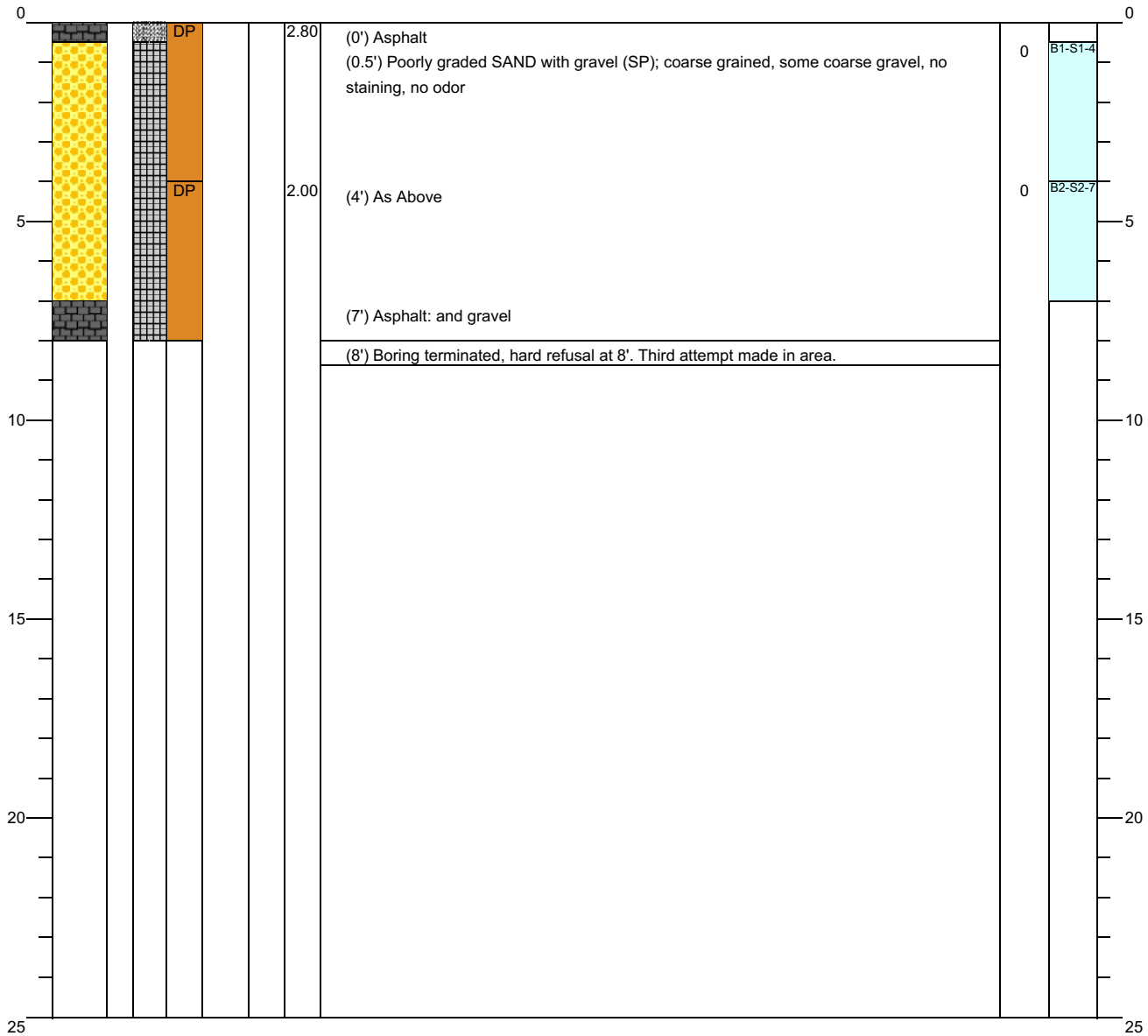
Drilling Start Date:	**9/28/22**	Boring Depth (ft):	**24**
Drilling End Date:	**9/28/22**	Boring Diameter (in):	**2.25**
Drilling Company:	**Point Source Solutions**	Sampling Method(s):	**Direct Push**
Drilling Method:	**Direct Push**	DTW During Drilling (ft):	**20**
Drilling Equipment:	**Geoprobe DT22**	DTW After Drilling (ft):	**16.91**
Driller:	**JR**	Ground Surface Elev. (ft):	**N/A**
Logged By:	**KF**	Location (Lat, Long):	**47.20819, -122.32919**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	BORING COMPLETION	COLLECT: Sample Type	COLLECT: Time	COLLECT: Blow Counts	COLLECT: Recovery (ft)	SOIL/ROCK VISUAL DESCRIPTION	MEASURE: PID (ppm)	MEASURE: Lab Sample	DEPTH (ft)
0				DP			0.40	(0') Poorly graded SAND with gravel (SP); coarse grained, some coarse gravel, no staining, no odor	0		0
				DP			0.40	(4') As Above	0		
5											5
				DP			0.60	(8') As Above	0	B1-S1-8	
10											10
				DP			0.60	(12') As Above	0		
15											15
		▼		DP			0.40	(16') SILT (ML); dark grayish brown, no staining, organic odor	0		
20		▽		DP			2.80	(20') Poorly graded SAND (SP); dark gray, no staining, organic odor	0		20
								(24') Boring terminated			
25											25

NOTES: Hole precleared on 9/27/22 by GPRS. Water sample B1-W1 collected at 16.91-17.0 ft bgs.

point source solutions	Client: BBG	BORING LOG
	Project: 7602 River Road East	Boring No. B2
	Address: 7602 River Road East, Puyallup, WA	Page: 1 of 1

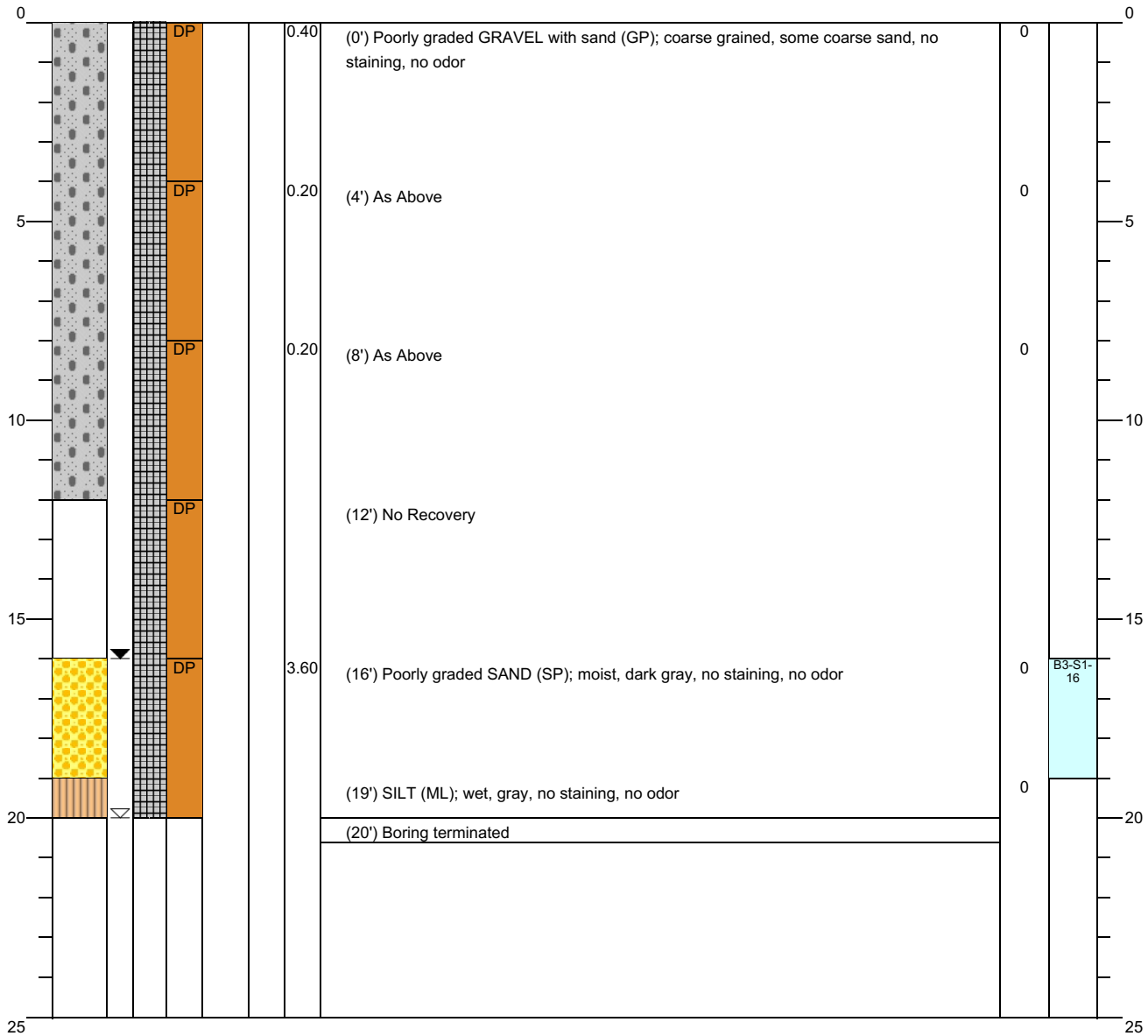
Drilling Start Date:	**9/28/22**	Boring Depth (ft):	**8**
Drilling End Date:	**9/28/22**	Boring Diameter (in):	**2.25**
Drilling Company:	**Point Source Solutions**	Sampling Method(s):	**Direct Push**
Drilling Method:	**Direct Push**	DTW During Drilling (ft):	**N/A**
Drilling Equipment:	**Geoprobe DT22**	DTW After Drilling (ft):	**N/A**
Driller:	**JR**	Ground Surface Elev. (ft):	**N/A**
Logged By:	**KF**	Location (Lat, Long):	**47.20829, -122.32931**



NOTES: Hole precleared on 9/27/22 by GPRS.

point source solutions	Client: BBG	BORING LOG
	Project: 7602 River Road East	Boring No. B3
	Address: 7602 River Road East, Puyallup, WA	Page: 1 of 1

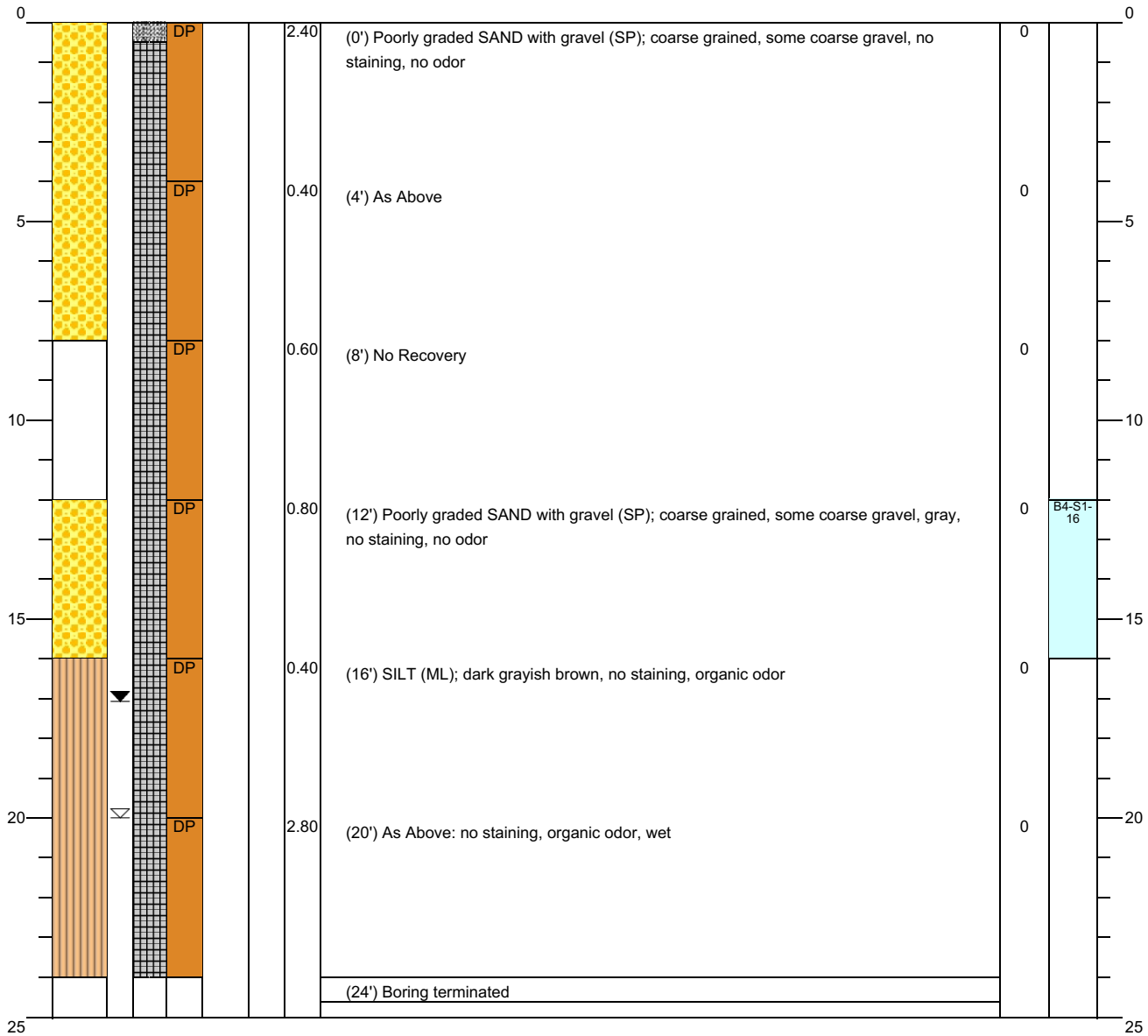
Drilling Start Date:	**9/28/22**	Boring Depth (ft):	**20**
Drilling End Date:	**9/28/22**	Boring Diameter (in):	**2.25**
Drilling Company:	**Point Source Solutions**	Sampling Method(s):	**Direct Push**
Drilling Method:	**Direct Push**	DTW During Drilling (ft):	**20.00**
Drilling Equipment:	**Geoprobe DT22**	DTW After Drilling (ft):	**16.00**
Driller:	**JR**	Ground Surface Elev. (ft):	**N/A**
Logged By:	**KF**	Location (Lat, Long):	**47.20820, -122.32897**



NOTES: Hole precleared on 9/27/22 by GPRS. Water sample B3-W1 collected at 16.0-16.5 ft bgs.

point source solutions	**Client:** BBG **Project:** 7602 River Road East **Address:** 7602 River Road East, Puyallup, WA	**BORING LOG** **Boring No.** B4 **Page:** 1 of 1

Drilling Start Date:	**9/28/22**	Boring Depth (ft):	**24**
Drilling End Date:	**9/28/22**	Boring Diameter (in):	**2.25**
Drilling Company:	**Point Source Solutions**	Sampling Method(s):	**Direct Push**
Drilling Method:	**Direct Push**	DTW During Drilling (ft):	**20**
Drilling Equipment:	**Geoprobe DT22**	DTW After Drilling (ft):	**17.06**
Driller:	**JR**	Ground Surface Elev. (ft):	**N/A**
Logged By:	**KF**	Location (Lat, Long):	**47.20831, -122.32913**



NOTES: Hole precleared on 9/27/22 by GPRS. Water sample B4-W1 collected at 17.06-17.5 ft bgs.

point source solutions	**Client:** BBG **Project:** 7602 River Road East **Address:** 7602 River Road East, Puyallup, WA	**BORING LOG** **Boring No.** B5 **Page:** 1 of 1

Drilling Start Date:	**9/28/22**	Boring Depth (ft):	**24**
Drilling End Date:	**9/28/22**	Boring Diameter (in):	**2.25**
Drilling Company:	**Point Source Solutions**	Sampling Method(s):	**Direct Push**
Drilling Method:	**Direct Push**	DTW During Drilling (ft):	**17**
Drilling Equipment:	**Geoprobe DT22**	DTW After Drilling (ft):	**17.90**
Driller:	**JR**	Ground Surface Elev. (ft):	**N/A**
Logged By:	**KF**	Location (Lat, Long):	**47.20848, -122.32916**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	BORING COMPLETION	COLLECT: Sample Type	COLLECT: Time	COLLECT: Blow Counts	COLLECT: Recovery (ft)	SOIL/ROCK VISUAL DESCRIPTION	MEASURE: PID (ppm)	MEASURE: Lab Sample	DEPTH (ft)
0				DP			1.20	(0') Asphalt (0.5') Poorly graded SAND with gravel (SP); coarse grained, some coarse gravel	0		0
5				DP			1.20	(4') As Above	0		5
10				DP			0.20	(8') As Above	0	B5-S1-8	10
15				DP				(12') No Recovery	0		15
20				DP				(16') No Recovery (20') No Recovery: wet liner	0		20
25								(24') Boring terminated			25

NOTES: Hole precleared on 9/27/22 by GPRS. Water sample B5-W1 collected at 17.9-18.0 ft bgs.

Log of Boring: SG-1

Client:	REDCO Development, LLC.	**Date/Time Started:**	8/17/23 0911	**Depth to Water ATD (ft bgs):**	NA
Project:	7602 and 7702 River Rd E	**Date/Time Completed:**	8/17/23 0940	**Boring Diameter (in):**	3.0
Location:	Puyallup, WA	**Drilling Company:**	AEC	**Total Boring Depth (ft bgs):**	8
Farallon PN:	2220-008	**Drilling Method:**	Direct Push		
Logged By:	B. Lukkari	**Drilling Equipment:**	7822Dt		
Reviewed By:	Y. Pehlivan	**Drilling Operator:**	Blake Phillips		
		Sampler Type:	5' Macrocore		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0 - 5.0': Fill, gravel, wood, metal, rubber debris.	FILL			0			
5		5.0 - 7.5': Fill, gravel.	FILL			50		SG-1	X
		7.5 - 8.0': No Recovery.							

Completion Information

Temporary Well Casing Diameter (in):	NA	**Surface Seal:**	NA
Temporary Well Screened Interval (ft bgs):	NA	**Ground Surface Elevation (ft):**	NA
Boring Abandonment:	Bentonite	**Surveyed Location:** **X:** NA	**Y:** NA

FARALLON CONSULTING

Log of Boring: SG-2

Client:	REDCO Development, LLC.
Project:	7602 and 7702 River Rd E
Location:	Puyallup, WA
Farallon PN:	2220-008
Logged By:	B. Lukkari
Reviewed By:	Y. Pehlivan

Date/Time Started:	8/17/23 0955	**Depth to Water ATD (ft bgs):**	NA
Date/Time Completed:	8/17/23 1022	**Boring Diameter (in):**	3.0
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	8
Drilling Method:	Direct Push		
Drilling Equipment:	7822Dt		
Drilling Operator:	Blake Phillips		
Sampler Type:	5' Macrocore		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0 - 5.0': Fill, gravel, wood, metal, rubber debris.	FILL			0			
5		5.0 - 7.5': Fill, gravel.	FILL			50		SG-2	X
		7.5 - 8.0': No Recovery.							

Completion Information

Temporary Well Casing Diameter (in):	NA	**Surface Seal:**	NA
Temporary Well Screened Interval (ft bgs):	NA	**Ground Surface Elevation (ft):**	NA
Boring Abandonment:	Bentonite	**Surveyed Location:** **X:** NA	**Y:** NA

FARALLON CONSULTING

Log of Boring: SG-3

Client: REDCO Development, LLC.
Project: 7602 and 7702 River Rd E
Location: Puyallup, WA
Farallon PN: 2220-008
Logged By: B. Lukkari
Reviewed By: Y. Pehlivan

Date/Time Started: 8/17/23 1141
Date/Time Completed: 8/17/23 1155
Drilling Company: AEC
Drilling Method: Direct Push
Drilling Equipment: 7822Dt
Drilling Operator: Blake Phillips
Sampler Type: 5' Macrocore

Depth to Water ATD (ft bgs): NA
Boring Diameter (in): 3.0
Total Boring Depth (ft bgs): 8

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0 - 5.0': Fill, gravel, wood, metal, rubber debris.	FILL			0			
5		5.0 - 6.0': Fill, gravel.	FILL			20		SG-3	X
		6.0 - 8.0': No Recovery.							

Completion Information

Temporary Well Casing Diameter (in): NA
Temporary Well Screened Interval (ft bgs): NA
Boring Abandonment: Bentonite
Surface Seal: NA
Ground Surface Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA

APPENDIX B
ECOLOGY TEE FORM

REMEDIAL INVESTIGATION REPORT
7602 and 7702 River Road East
Puyallup, Washington

Farallon PN: 2220-008

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 Name:	
Facility/Site Address:	
Facility/Site No:	VCP Project No.:

Step 2: IDENTIFY EVALUATOR			
Please identify below the person who conducted the evaluation and their contact information.			
Name:		Title:	
Organization:			
Mailing address:			
City:		State:	Zip code:
Phone:	Fax:	E-mail:	

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.

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.

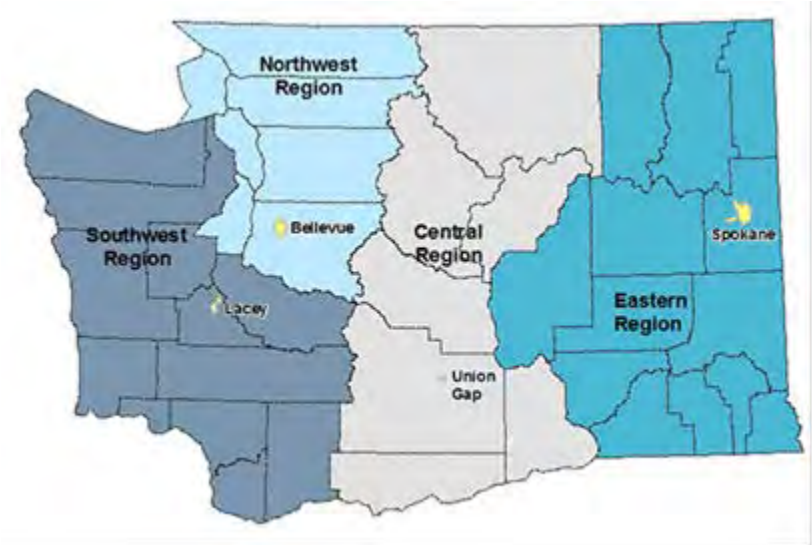
5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps?

☐ 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.



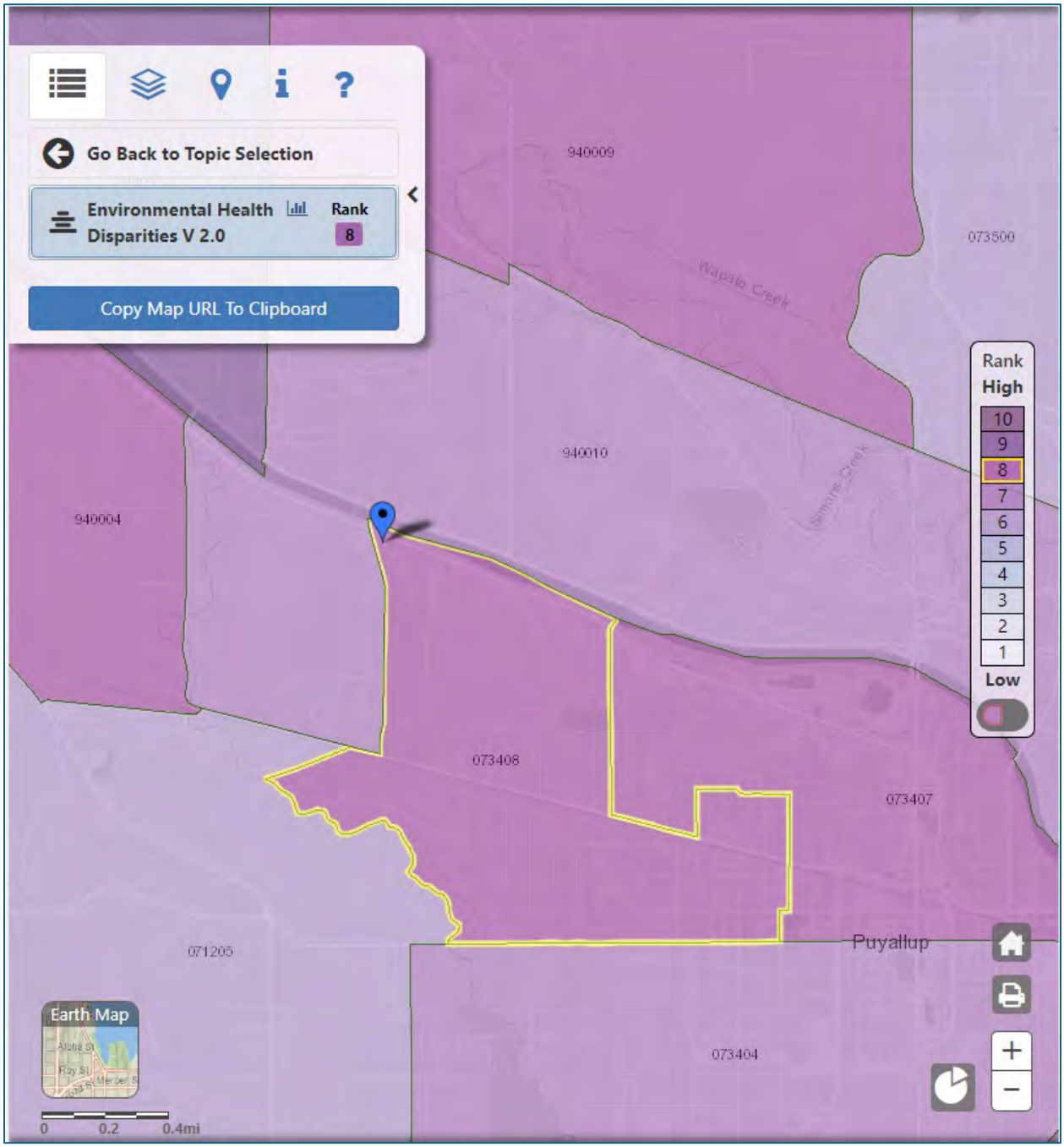
Northwest Region: Attn: VCP Coordinator 3190 160th Ave. SE Bellevue, WA 98008-5452	**Central Region:** Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	**Eastern Region:** Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

APPENDIX C
VULNERABLE POPULATION AND OVERBURDENED COMMUNITY EVALUATION

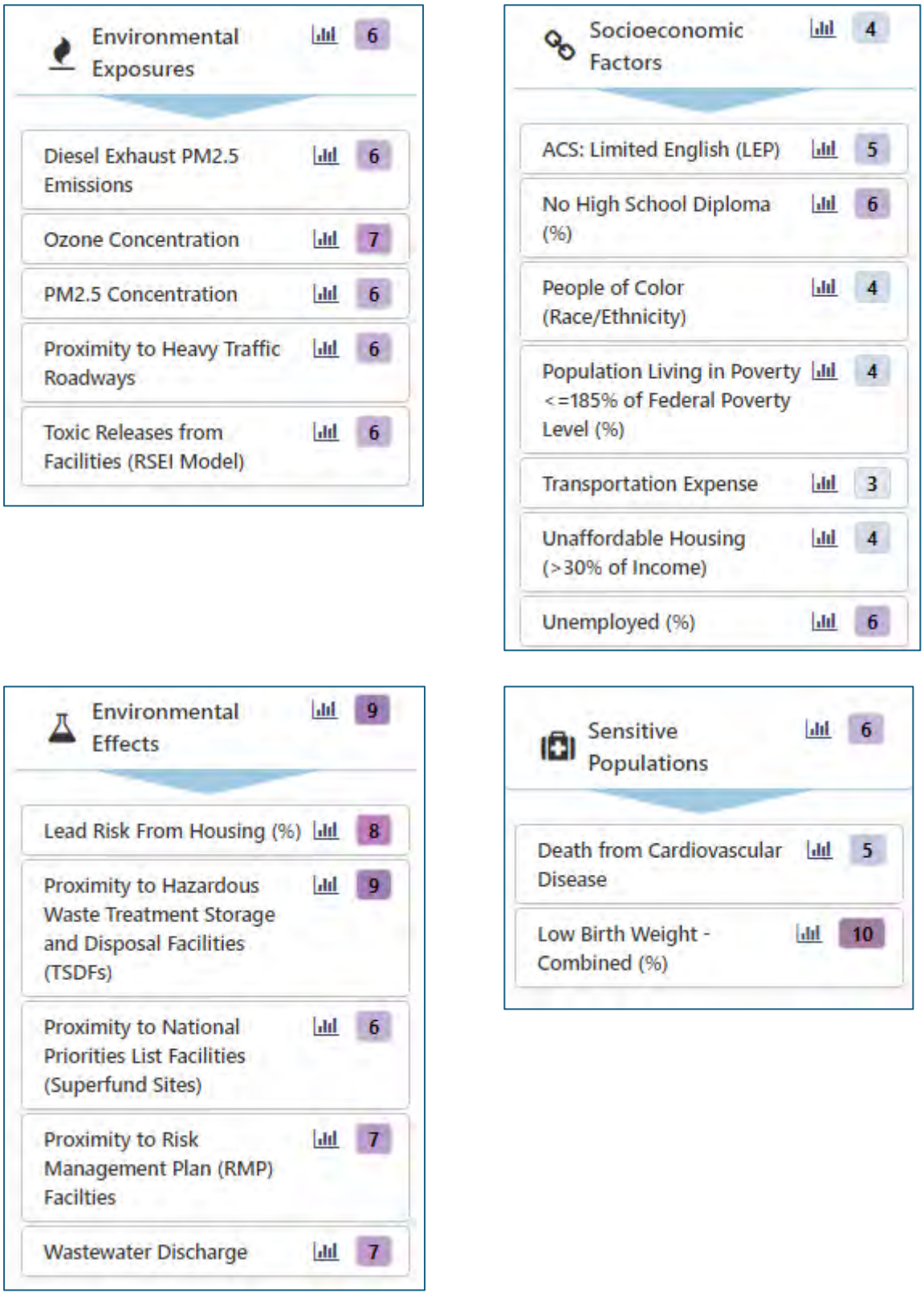
REMEDIAL INVESTIGATION REPORT
7602 and 7702 River Road East
Puyallup, Washington

Farallon PN: 2220-008

Washington State Department of Health's Environmental Health Disparities Map Results
Census Tract 53053073408



Washington State Department of Health's Environmental Health Disparities Map Results
Census Tract 53053073408



EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Puyallup, WA

Tract: 53053073408
Population: 4,268
Area in square miles: 1.09

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	89%
Spanish	8%
Other Indo-European	1%
Tagalog (including Filipino)	1%
Other Asian and Pacific Island	1%
Total Non-English	11%

COMMUNITY INFORMATION

- Low income: 18 percent
- People of color: 21 percent
- Less than high school education: 8 percent
- Limited English households: 2 percent
- Unemployment: 4 percent
- Persons with disabilities: 12 percent
- Male: 49 percent
- Female: 51 percent
- 78 years — Average life expectancy
- $39,914 — Per capita income
- Number of households: 1,717
- Owner occupied: 69 percent

BREAKDOWN BY RACE

- White: 79%
- Black: 1%
- American Indian: 0%
- Asian: 2%
- Hawaiian/Pacific Islander: 0%
- Other race: 0%
- Two or more races: 6%
- Hispanic: 11%

BREAKDOWN BY AGE

From Ages 1 to 4	7%
From Ages 1 to 18	22%
From Ages 18 and up	78%
From Ages 65 and up	17%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	48%
Speak Other Indo-European Languages	52%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

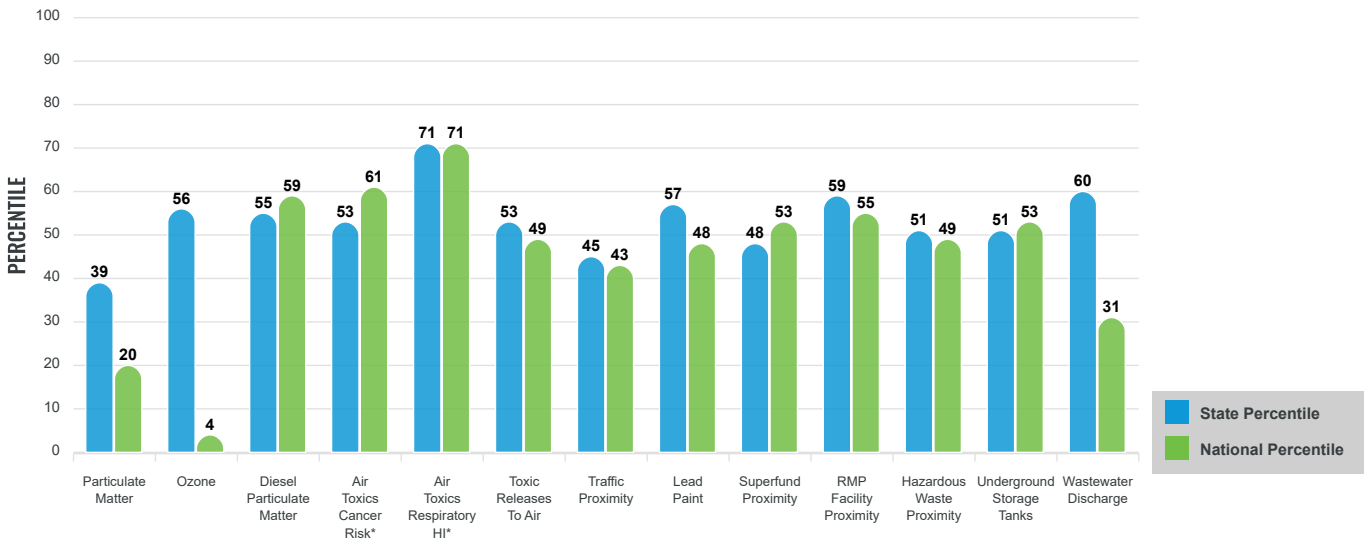
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

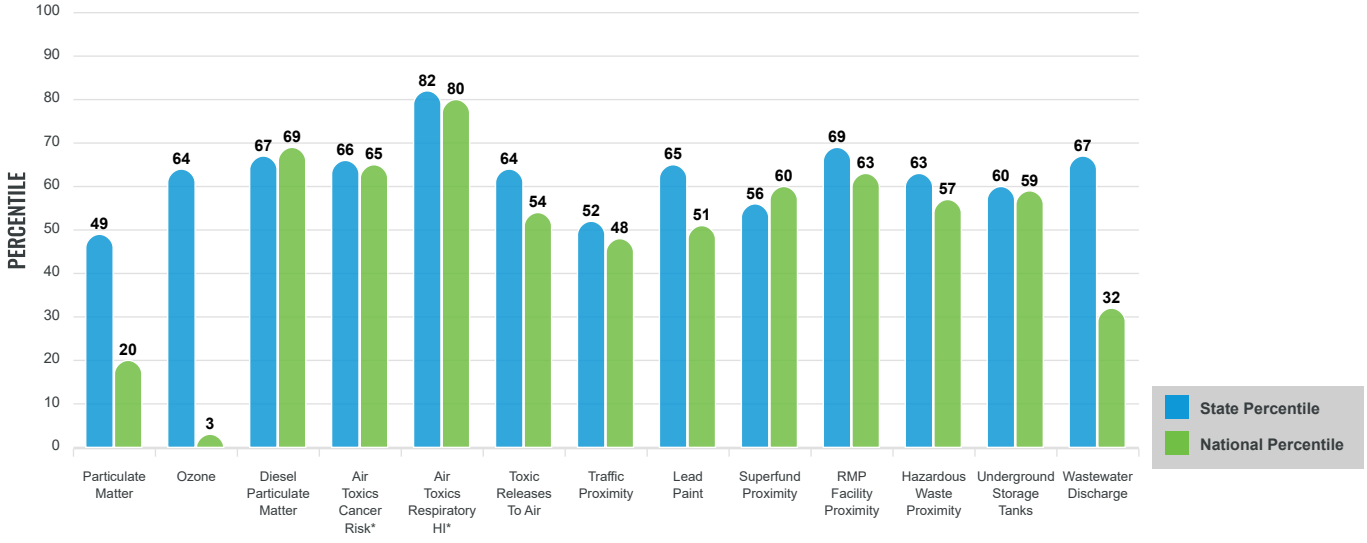
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for Tract: 53053073408

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	6.93	7.02	44	8.08	19
Ozone (ppb)	51.9	49.8	68	61.6	3
Diesel Particulate Matter (µg/m^3)	0.411	0.355	66	0.261	84
Air Toxics Cancer Risk* (lifetime risk per million)	30	27	37	25	52
Air Toxics Respiratory HI*	0.5	0.39	74	0.31	92
Toxic Releases to Air	990	1,800	58	4,600	59
Traffic Proximity (daily traffic count/distance to road)	77	190	49	210	50
Lead Paint (% Pre-1960 Housing)	0.39	0.23	76	0.3	65
Superfund Proximity (site count/km distance)	0.094	0.18	50	0.13	65
RMP Facility Proximity (facility count/km distance)	0.47	0.4	76	0.43	75
Hazardous Waste Proximity (facility count/km distance)	1.2	1.6	63	1.9	64
Underground Storage Tanks (count/km^2)	7.1	6.3	75	3.9	84
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.00013	0.024	71	22	32
SOCIOECONOMIC INDICATORS					
Demographic Index	19%	28%	33	35%	31
Supplemental Demographic Index	10%	12%	48	14%	35
People of Color	21%	32%	36	39%	39
Low Income	18%	24%	44	31%	33
Unemployment Rate	4%	5%	47	6%	47
Limited English Speaking Households	2%	4%	57	5%	62
Less Than High School Education	8%	8%	65	12%	52
Under Age 5	7%	6%	68	6%	69
Over Age 64	17%	16%	58	17%	55
Low Life Expectancy	19%	18%	67	20%	51

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund 0
Hazardous Waste, Treatment, Storage, and Disposal Facilities 0
Water Dischargers 5
Air Pollution 0
Brownfields 0
Toxic Release Inventory 0

Other community features within defined area:

Schools 1
Hospitals 0
Places of Worship 0

Other environmental data:

Air Non-attainment ..... Yes
Impaired Waters ..... Yes

Selected location contains American Indian Reservation Lands* ..... Yes
Selected location contains a "Justice40 (CEJST)" disadvantaged community ..... No
Selected location contains an EPA IRA disadvantaged community ..... Yes

Report for Tract: 53053073408

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	19%	18%	67	20%	51
Heart Disease	5.3	5.3	51	6.1	35
Asthma	10.3	10.5	39	10	64
Cancer	6.7	6.3	62	6.1	62
Persons with Disabilities	10.8%	13.1%	38	13.4%	38

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	41%	11%	94	12%	94
Wildfire Risk	0%	12%	0	14%	0

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	9%	9%	63	14%	43
Lack of Health Insurance	4%	6%	33	9%	27
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for Tract: 53053073408

APPENDIX D
CLIMATE CHANGE EVALUATION

REMEDIAL INVESTIGATION REPORT
7602 and 7702 River Road East
Puyallup, Washington

Farallon PN: 2220-008

National Flood Hazard Layer FIRMette

FEMA

122°20'1"W 47°12'40"N

122°19'23"W 47°12'16"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/24/2024 at 7:52 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Pierce County PublicGIS Map

Disclaimer: The map features are approximate and have not been surveyed. Additional features not yet mapped may be present.
Pierce County assumes no liability for variations ascertained by formal survey.

Date: 6/24/2024 05:07 PM

Environmental

FIRM Panels

Floodways

Regulated Floodplain 2017

- 1% Annual Chance Flood
- X BEHIND LEVEE
- 0.2 PCT
- X (SHADED)
- Coastal High Hazard Areas
- See King County FIRM

Wetlands

County Wetlands Inventory

Wetlands Delineation

- Delineated
- Verified
- Unverified

Wetlands

- Unconfirmed
- Yes
- No

Potential Wetland Review

Parcel

Tax Parcels

APPENDIX E
LABORATORY ANALYTICAL RESULTS

REMEDIAL INVESTIGATION REPORT
7602 and 7702 River Road East
Puyallup, Washington

Farallon PN: 2220-008

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 21, 2023

Pete Kingston, Project Manager
Farallon Consulting, LLC
975 5th Avenue Northwest
Issaquah, WA 98027

Dear Mr Kingston:

Included are the results from the testing of material submitted on September 15, 2023 from the 2220-008, F&BI 309213 project. There are 28 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Farallon Data
FLN0921R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 15, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 2220-008, F&BI 309213 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Farallon Consulting, LLC
309213 -01	FMW-01-091523
309213 -02	FMW-02-091523
309213 -03	FMW-03-091523
309213 -04	FMW-04-091523
309213 -05	FMW-05-091523

All quality control requirements were acceptable.

Date of Report: 09/21/23
Date Received: 09/15/23
Project: 2220-008, F&BI 309213
Date Extracted: 09/15/23
Date Analyzed: 09/18/23

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 41-152)
FMW-01-091523 309213-01	<50	<250	111
FMW-02-091523 309213-02	<50	<250	124
FMW-03-091523 309213-03	<50	<250	111
FMW-04-091523 309213-04	<50	<250	113
FMW-05-091523 309213-05	<50	<250	116
Method Blank 03-2205 MB	<50	<250	135

Date of Report: 09/21/23
Date Received: 09/15/23
Project: 2220-008, F&BI 309213
Date Extracted: 09/15/23
Date Analyzed: 09/18/23

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
FMW-01-091523 309213-01	360 x	450 x	128
FMW-02-091523 309213-02	210 x	330 x	124
FMW-03-091523 309213-03	750 x	2,200 x	114
FMW-04-091523 309213-04	260 x	660 x	119
FMW-05-091523 309213-05	180 x	370 x	123
Method Blank 03-2205 MB	<50	<250	138

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-01-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-01
Date Analyzed:	09/16/23	Data File:	309213-01.234
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	59.7
Barium	592
Cadmium	<1
Lead	1.05
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-01-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-01 x20
Date Analyzed:	09/20/23	Data File:	309213-01 x20.088
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	<20

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-02-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-02
Date Analyzed:	09/16/23	Data File:	309213-02.235
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	22.5
Barium	394
Cadmium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-02-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-02 x20
Date Analyzed:	09/20/23	Data File:	309213-02 x20.089
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	<20

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-03-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-03
Date Analyzed:	09/16/23	Data File:	309213-03.236
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	8.36
Barium	54.1
Cadmium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-03-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-03 x10
Date Analyzed:	09/20/23	Data File:	309213-03 x10.141
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	<10

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-04-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-04
Date Analyzed:	09/16/23	Data File:	309213-04.237
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	58.3
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-05-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-05
Date Analyzed:	09/16/23	Data File:	309213-05.238
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	4.64
Barium	98.3
Cadmium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-05-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-05 x10
Date Analyzed:	09/19/23	Data File:	309213-05 x10.057
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	<10

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	NA	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	I3-716 mb
Date Analyzed:	09/15/23	Data File:	I3-716 mb.153
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-01-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-01
Date Analyzed:	09/16/23	Data File:	309213-01.221
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	59.3
Barium	576
Cadmium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-01-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-01 x20
Date Analyzed:	09/20/23	Data File:	309213-01 x20.084
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	<20

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-02-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-02
Date Analyzed:	09/16/23	Data File:	309213-02.224
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	22.2
Barium	383
Cadmium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-02-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-02 x20
Date Analyzed:	09/20/23	Data File:	309213-02 x20.087
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	<20

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-03-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-03
Date Analyzed:	09/16/23	Data File:	309213-03.225
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	7.91
Barium	50.7
Cadmium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-03-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-03 x10
Date Analyzed:	09/19/23	Data File:	309213-03 x10.048
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	<10

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-04-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-04
Date Analyzed:	09/16/23	Data File:	309213-04.226
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	58.1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-05-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-05
Date Analyzed:	09/16/23	Data File:	309213-05.227
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	4.54
Barium	95.8
Cadmium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-05-091523	Client:	Farallon Consulting, LLC
Date Received:	09/15/23	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	309213-05 x10
Date Analyzed:	09/19/23	Data File:	309213-05 x10.127
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	<10

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	NA	Project:	2220-008, F&BI 309213
Date Extracted:	09/15/23	Lab ID:	I3-716 mb
Date Analyzed:	09/15/23	Data File:	I3-716 mb.153
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Date of Report: 09/21/23
Date Received: 09/15/23
Project: 2220-008, F&BI 309213

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 309173-05 (Matrix Spike) Silica Gel

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	<50	116	112	50-150	4

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	ug/L (ppb)	2,500	104	65-151

Date of Report: 09/21/23
Date Received: 09/15/23
Project: 2220-008, F&BI 309213

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 309173-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	<50	120	116	50-150	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	ug/L (ppb)	2,500	104	65-151

Date of Report: 09/21/23
Date Received: 09/15/23
Project: 2220-008, F&BI 309213

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 309213-01 x20 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	50.6	95 b	95 b	75-125	0 b
Barium	ug/L (ppb)	50	609	139 b	161 b	75-125	15 b
Cadmium	ug/L (ppb)	5	<20	90	89	75-125	1
Chromium	ug/L (ppb)	20	<20	92	96	75-125	4
Lead	ug/L (ppb)	10	<20	53 vo	53 vo	75-125	0
Mercury	ug/L (ppb)	5	<20	82	88	75-125	7
Selenium	ug/L (ppb)	5	<20	101	69 vo	75-125	38 vo
Silver	ug/L (ppb)	5	<20	59 vo	61 vo	75-125	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	96	80-120
Barium	ug/L (ppb)	50	95	80-120
Cadmium	ug/L (ppb)	5	96	80-120
Chromium	ug/L (ppb)	20	93	80-120
Lead	ug/L (ppb)	10	95	80-120
Mercury	ug/L (ppb)	5	98	80-120
Selenium	ug/L (ppb)	5	101	80-120
Silver	ug/L (ppb)	5	89	80-120

Date of Report: 09/21/23
Date Received: 09/15/23
Project: 2220-008, F&BI 309213

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 6020B

Laboratory Code: 309213-01 x20 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	50.6	95 b	95 b	75-125	0 b
Barium	ug/L (ppb)	50	609	139 b	161 b	75-125	15 b
Cadmium	ug/L (ppb)	5	<20	90	89	75-125	1
Chromium	ug/L (ppb)	20	<20	92	96	75-125	4
Lead	ug/L (ppb)	10	<20	53 vo	53 vo	75-125	0
Mercury	ug/L (ppb)	5	<20	82	88	75-125	7
Selenium	ug/L (ppb)	5	<20	101	69 vo	75-125	38 vo
Silver	ug/L (ppb)	5	<20	59 vo	61 vo	75-125	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	96	80-120
Barium	ug/L (ppb)	50	95	80-120
Cadmium	ug/L (ppb)	5	96	80-120
Chromium	ug/L (ppb)	20	93	80-120
Lead	ug/L (ppb)	10	95	80-120
Mercury	ug/L (ppb)	5	98	80-120
Selenium	ug/L (ppb)	5	101	80-120
Silver	ug/L (ppb)	5	89	80-120

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 standard reporting limit. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

309213

SAMPLE CHAIN OF CUSTODY

ME 09-15-23

L3

Page # 1 of 1 I3

Report To Peter Kingston

Company Farallon Consulting

Address 975 5th Ave NW

City, State, ZIP Issaquah, WA 98027

Phone _____ Email pkingston@farallonconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: 7602 & 7702 River Road East

PO # 2220-008

REMARKS

Project specific RLs? - Yes / No

INVOICE TO: The project

TURNAROUND TIME
- ☐ Standard turnaround
- ☒ RUSH 24 hr TAT

Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other _____

Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: w/ and w/out Silica gel NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	RCRA Total & Dissolved Metals				Notes
FMW-01-091523	01 A-C	9/15/23	0910	H_2O	3	X							X				NWTPH-Dx analysis with and without silica gel cleanup
FMW-02-091523	02	"	1010	"	"	X							X				
FMW-03-091523	03	"	1050	"	"	X							X				
FMW-04-091523	04	"	1135	"	"	X							X				
FMW-05-091523	05	"	1220	"	"	X							X				

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Michael Ysaguirre	FCN	9/15/23	1337
Received by:	Nhan Phan	FEBI	9/15/23	1337
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

February 16, 2024

Pete Kingston, Project Manager
Farallon Consulting, LLC
975 5th Avenue Northwest
Issaquah, WA 98027

Dear Mr Kingston:

Included are the results from the testing of material submitted on February 8, 2024 from the 2220-008, F&BI 402106 project. There are 20 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Farallon Data, Sara Haynes
FLN0216R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 8, 2024 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 2220-008, F&BI 402106 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Farallon Consulting, LLC
402106 -01	FMW-1-020624
402106 -02	FMW-2-020624
402106 -03	FMW-3-020624
402106 -04	FMW-4-020624
402106 -05	FMW-5-020624

The samples were sent to Fremont Analytical for total organic carbon analysis. The report is enclosed.

All quality control requirements were acceptable.

Date of Report: 02/16/24
Date Received: 02/08/24
Project: 2220-008, F&BI 402106
Date Extracted: 02/09/24
Date Analyzed: 02/09/24

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx
Extended to Include Motor Oil Range Compounds
Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Extended (C_{10}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
FMW-1-020624 402106-01	710 x	112
FMW-2-020624 402106-02	260 x	104
FMW-3-020624 402106-03	1,900 x	99
FMW-4-020624 402106-04	<250	98
FMW-5-020624 402106-05	1,400 x	104
Method Blank 04-336 MB2	<250	108

Date of Report: 02/16/24
Date Received: 02/08/24
Project: 2220-008, F&BI 402106
Date Extracted: 02/12/24
Date Analyzed: 02/12/24

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx
Extended to Include Motor Oil Range Compounds
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Extended (C_{10}-C_{36})	Surrogate (% Recovery) (Limit 41-152)
FMW-1-020624 402106-01	<250	113
FMW-2-020624 402106-02	<250	114
FMW-3-020624 402106-03	<250	104
FMW-4-020624 402106-04	<250	105
FMW-5-020624 402106-05	<250	107
Method Blank 04-336 MB2	<250	114

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-1-020624	Client:	Farallon Consulting, LLC
Date Received:	02/08/24	Project:	2220-008, F&BI 402106
Date Extracted:	02/14/24	Lab ID:	402106-01
Date Analyzed:	02/14/24	Data File:	402106-01.088
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.7

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-2-020624	Client:	Farallon Consulting, LLC
Date Received:	02/08/24	Project:	2220-008, F&BI 402106
Date Extracted:	02/14/24	Lab ID:	402106-02
Date Analyzed:	02/14/24	Data File:	402106-02.089
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.5

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-3-020624	Client:	Farallon Consulting, LLC
Date Received:	02/08/24	Project:	2220-008, F&BI 402106
Date Extracted:	02/14/24	Lab ID:	402106-03
Date Analyzed:	02/14/24	Data File:	402106-03.090
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	6.3

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-4-020624	Client:	Farallon Consulting, LLC
Date Received:	02/08/24	Project:	2220-008, F&BI 402106
Date Extracted:	02/14/24	Lab ID:	402106-04
Date Analyzed:	02/14/24	Data File:	402106-04.091
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.4

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FMW-5-020624	Client:	Farallon Consulting, LLC
Date Received:	02/08/24	Project:	2220-008, F&BI 402106
Date Extracted:	02/14/24	Lab ID:	402106-05
Date Analyzed:	02/14/24	Data File:	402106-05.096
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.6

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	NA	Project:	2220-008, F&BI 402106
Date Extracted:	02/14/24	Lab ID:	I4-116 mb
Date Analyzed:	02/14/24	Data File:	I4-116 mb.086
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-1-020624	Client:	Farallon Consulting, LLC
Date Received:	02/08/24	Project:	2220-008, F&BI 402106
Date Extracted:	02/08/24	Lab ID:	402106-01
Date Analyzed:	02/08/24	Data File:	402106-01.184
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	25

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-2-020624	Client:	Farallon Consulting, LLC
Date Received:	02/08/24	Project:	2220-008, F&BI 402106
Date Extracted:	02/08/24	Lab ID:	402106-02
Date Analyzed:	02/08/24	Data File:	402106-02.185
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-3-020624	Client:	Farallon Consulting, LLC
Date Received:	02/08/24	Project:	2220-008, F&BI 402106
Date Extracted:	02/08/24	Lab ID:	402106-03
Date Analyzed:	02/08/24	Data File:	402106-03.186
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	8.4

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-4-020624	Client:	Farallon Consulting, LLC
Date Received:	02/08/24	Project:	2220-008, F&BI 402106
Date Extracted:	02/08/24	Lab ID:	402106-04
Date Analyzed:	02/08/24	Data File:	402106-04.187
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	11

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-5-020624	Client:	Farallon Consulting, LLC
Date Received:	02/08/24	Project:	2220-008, F&BI 402106
Date Extracted:	02/08/24	Lab ID:	402106-05
Date Analyzed:	02/08/24	Data File:	402106-05.188
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	8.9

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	NA	Project:	2220-008, F&BI 402106
Date Extracted:	02/08/24	Lab ID:	I4-99 mb
Date Analyzed:	02/08/24	Data File:	I4-99 mb.049
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Date of Report: 02/16/24
Date Received: 02/08/24
Project: 2220-008, F&BI 402106

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	80	92	65-151	14

Date of Report: 02/16/24
Date Received: 02/08/24
Project: 2220-008, F&BI 402106

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	84	92	65-151	9

Date of Report: 02/16/24
Date Received: 02/08/24
Project: 2220-008, F&BI 402106

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 6020B

Laboratory Code: 402106-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	2.6	74 b	70 b	75-125	6 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	89	80-120

Date of Report: 02/16/24
Date Received: 02/08/24
Project: 2220-008, F&BI 402106

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 402092-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	13	95 b	97 b	75-125	2 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	95	80-120

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 standard reporting limit. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

402106

SAMPLE CHAIN OF CUSTODY

02/08/24

F2/K4

Page # 1 of 1

Report To Pete Kingston, Sara Haynes

Company Farallon

Address

City, State, ZIP

Phone Email PKingston, SHaynes@Farallonconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: 2220-008

PO #: 2220-008

REMARKS * EPA 200.8 + 6020B
** Standard method 5310C
Project specific RLs? - Yes / No

INVOICE TO: AP

TURNAROUND TIME
☑ Standard turnaround
☐ RUSH
Rush charges authorized by:

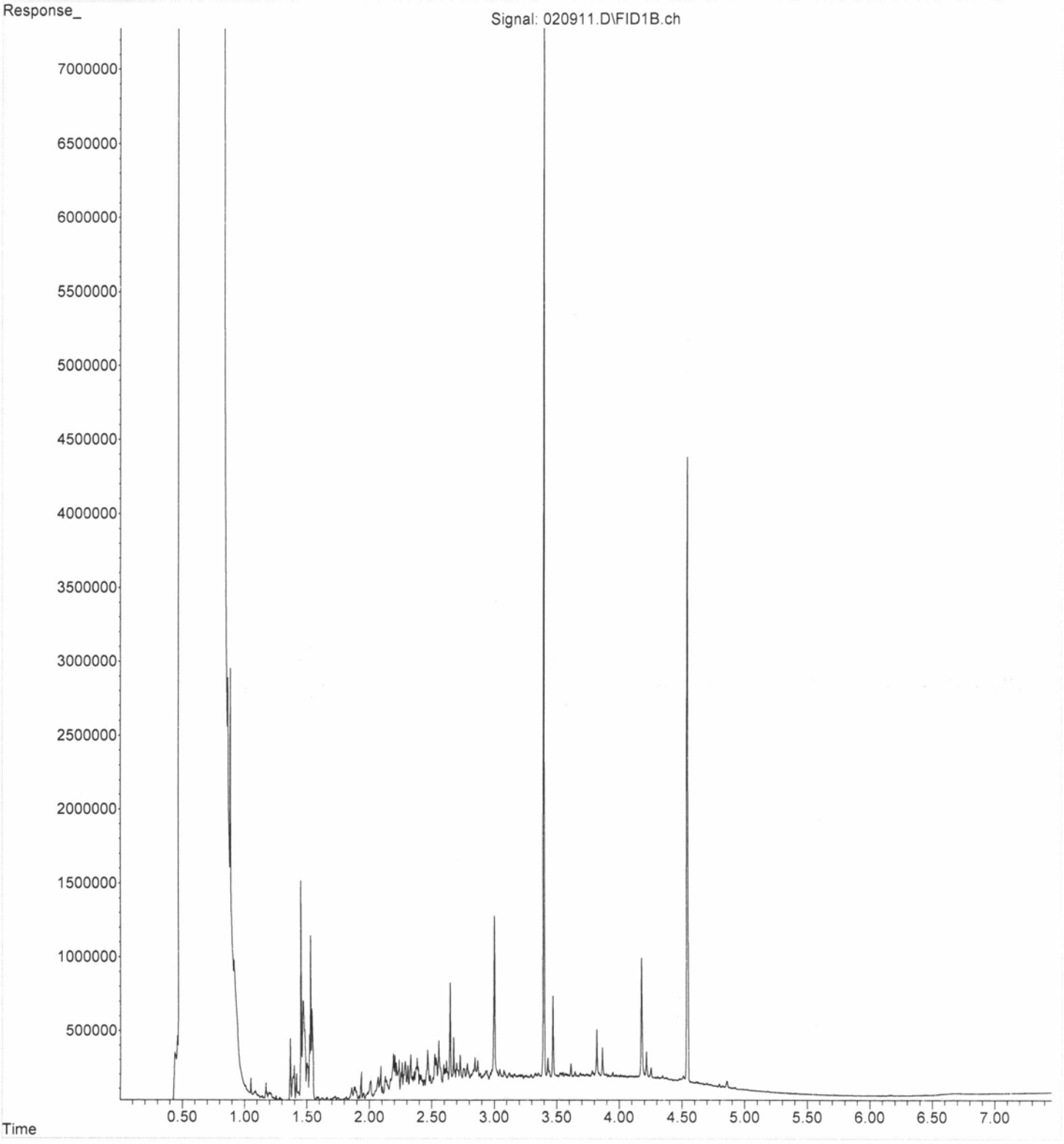
SAMPLE DISPOSAL
☐ Archive samples
☐ Other
Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	total + dissolved As*	Total organic carbon**			Notes
						ANALYSES REQUESTED											
FMW-1-020624	01A-E	2/6/24	1325	H_2O	5	X							X	X			w/w/o SG per
FMW-2-020624	02		1413	H_2O	5	X							X	X			PK 2/9/24 MB
FMW-3-020624	03		1459	H_2O	5	X							X	X			Report as dissol
FMW-4-020624	04		1558	H_2O	5	X							X	X			extended.
FMW-5-020624	05		1642	H_2O	5	X							X	X			
									Samples received at 4 °C								

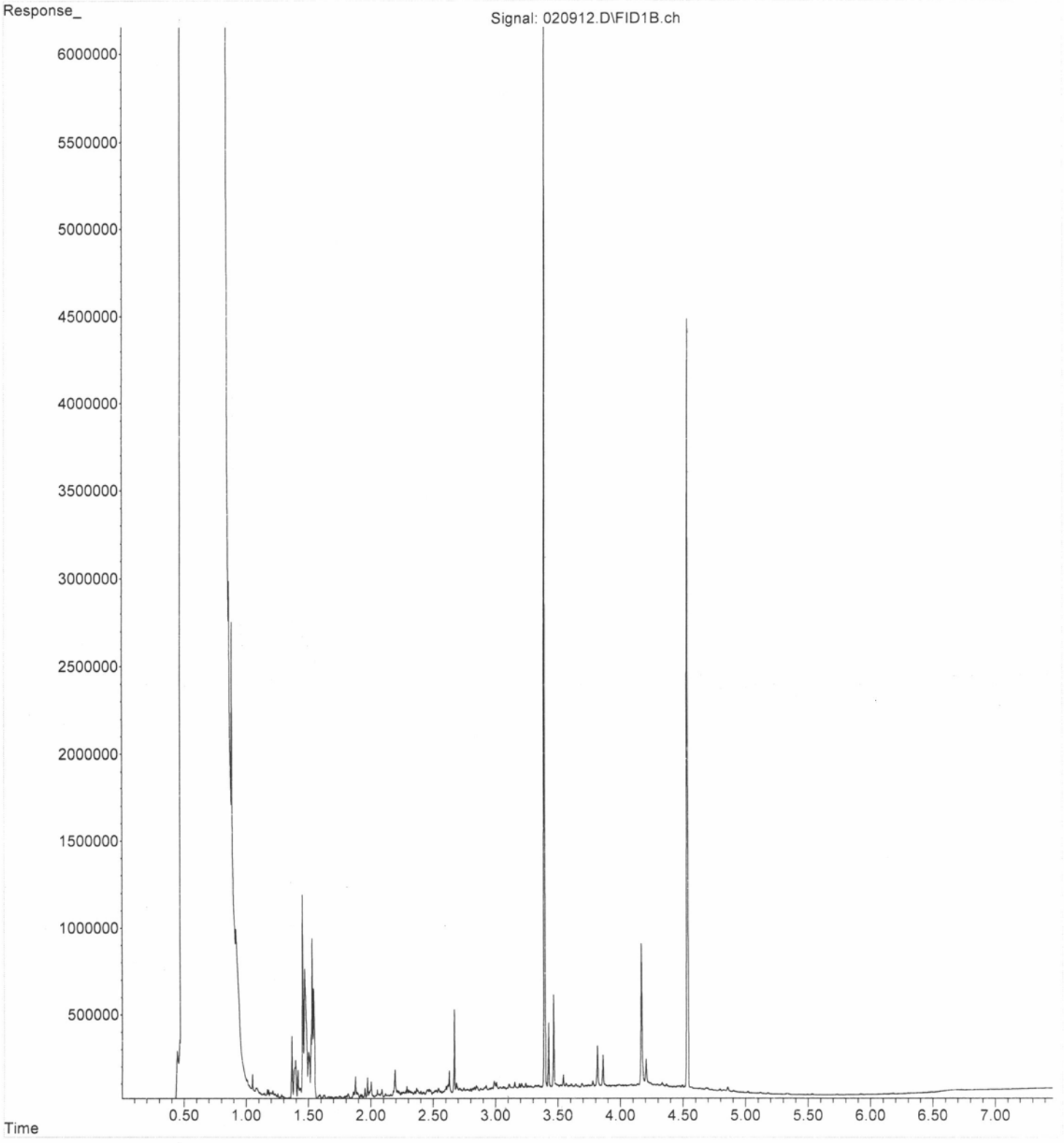
SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Brandon Willcox	Farallon	2/8/24	1002
Received by:	Michael Erdahl	FFBio	2/8/24	1002
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
Ph. (206) 285-8282

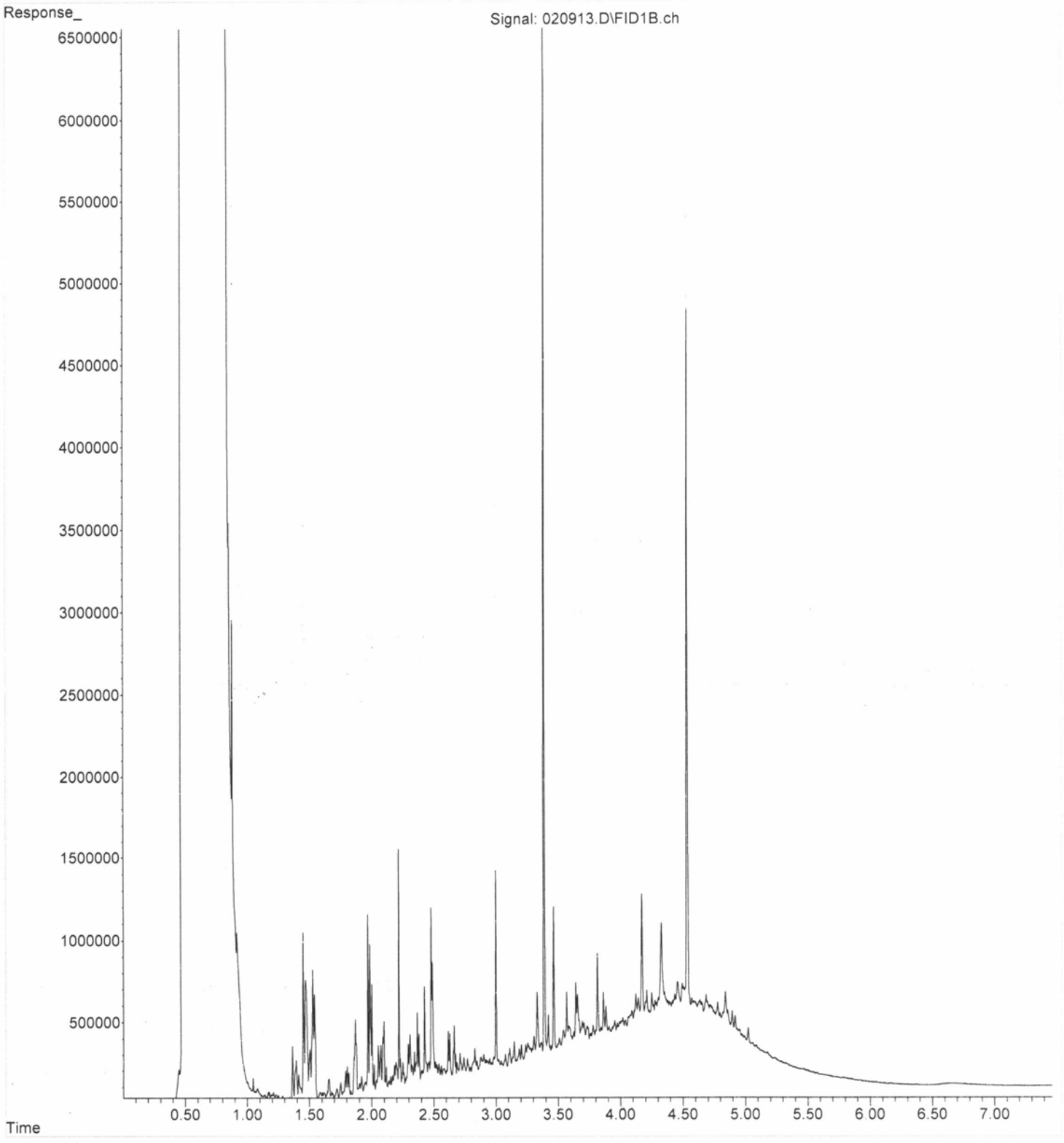
File :P:\Proc_GC14\02-09-24\020911.D
Operator : TL
Acquired : 09 Feb 2024 10:28 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 402106-01
Misc Info : ERR
Vial Number: 11



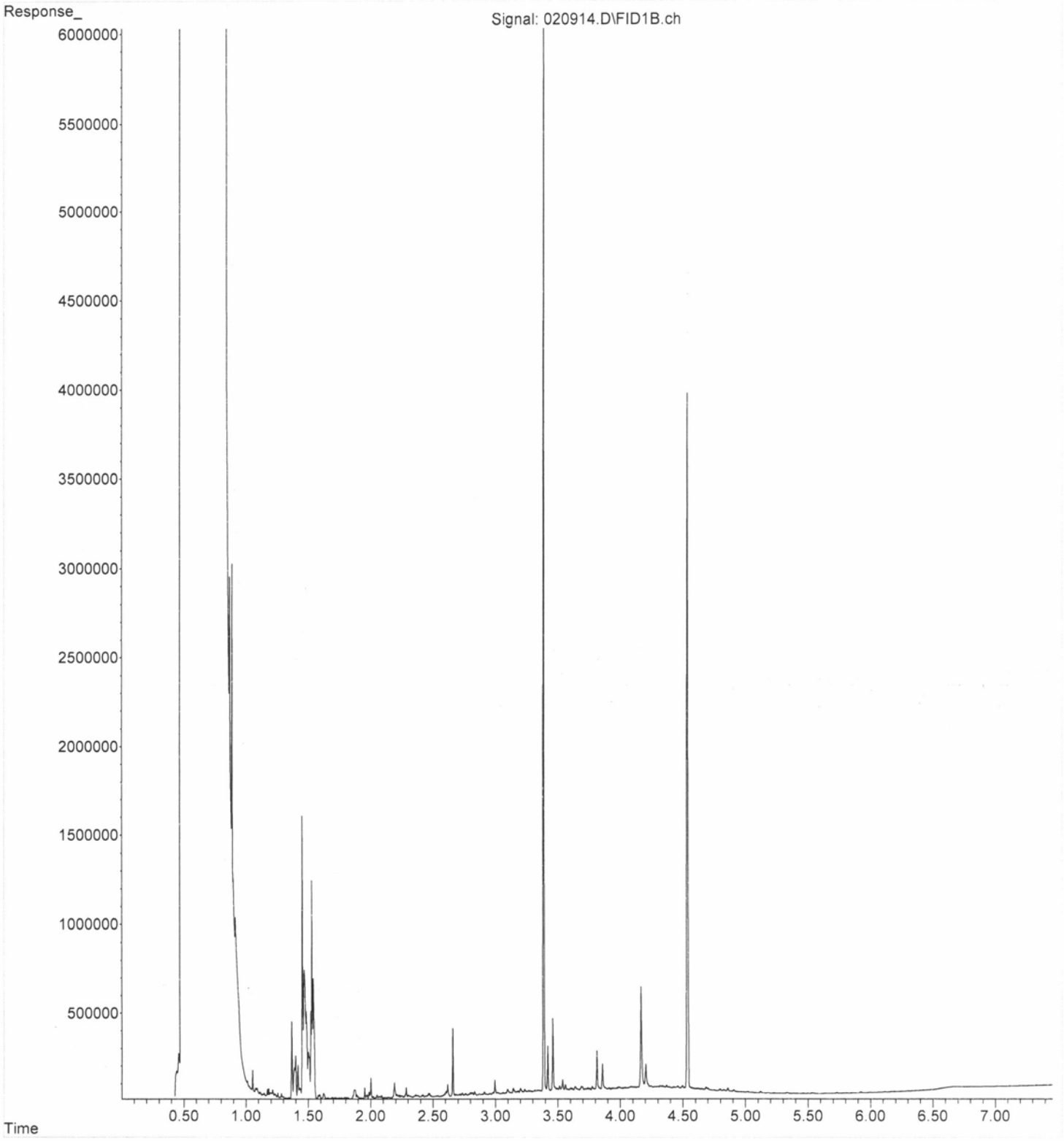
File :P:\Proc_GC14\02-09-24\020912.D
Operator : TL
Acquired : 09 Feb 2024 10:40 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 402106-02
Misc Info : ERR
Vial Number: 12



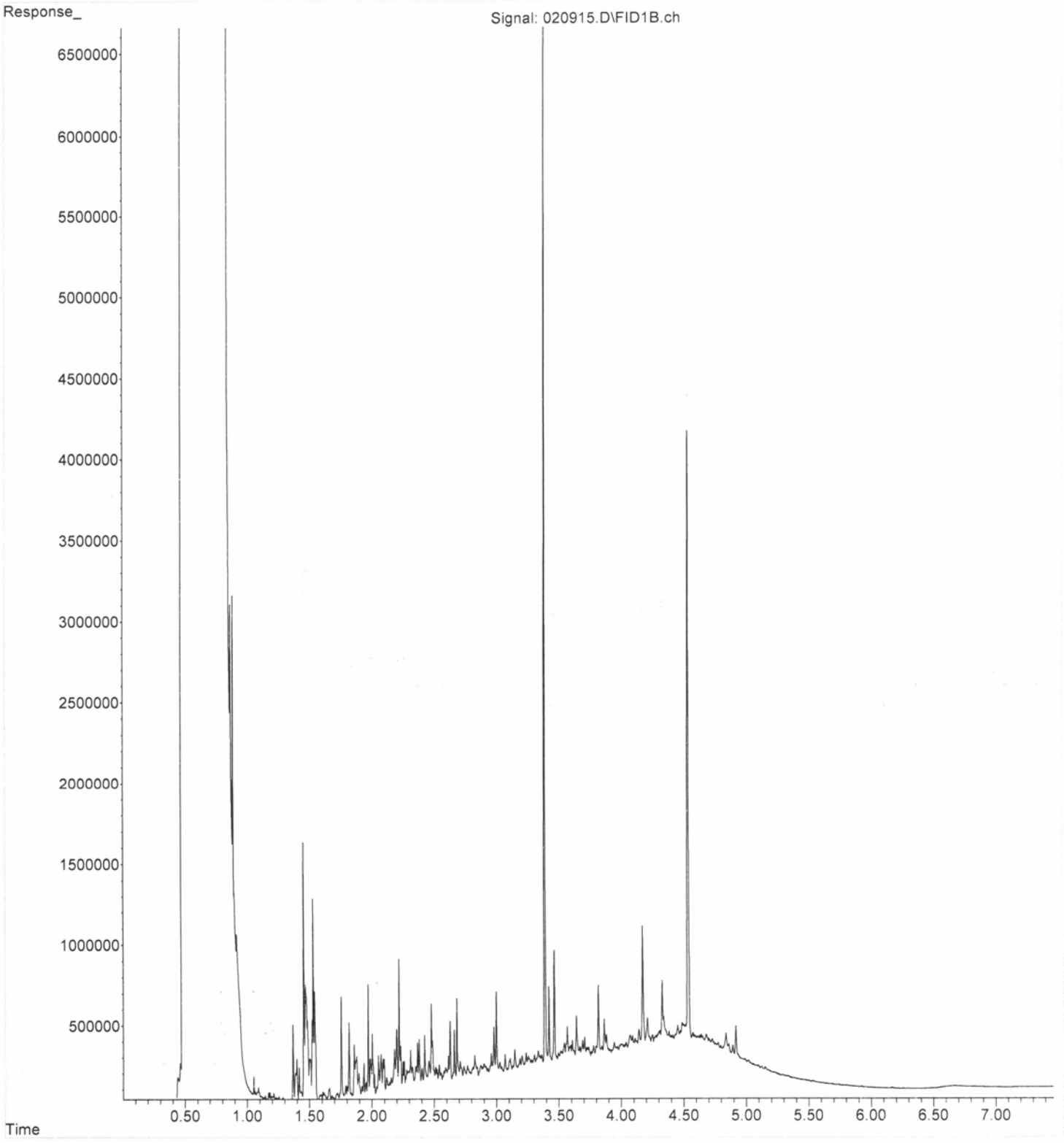
File :P:\Proc_GC14\02-09-24\020913.D
Operator : TL
Acquired : 09 Feb 2024 10:52 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 402106-03
Misc Info : ERR
Vial Number: 13



File :P:\Proc_GC14\02-09-24\020914.D
Operator : TL
Acquired : 09 Feb 2024 11:03 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 402106-04
Misc Info : ERR
Vial Number: 14



File :P:\Proc_GC14\02-09-24\020915.D
Operator : TL
Acquired : 09 Feb 2024 11:15 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 402106-05
Misc Info : ERR
Vial Number: 15



3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Friedman & Bruya
Michael Erdahl
5500 4th Ave S
Seattle, WA 98108

RE: 402106
Work Order Number: 2402136

February 15, 2024

Attention Michael Erdahl:

Fremont Analytical, Inc. received 5 sample(s) on 2/8/2024 for the analyses presented in the following report.

Total Organic Carbon by SM 5310C

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Date: *02/15/2024*

CLIENT: Friedman & Bruya
Project: 402106
Work Order: 2402136

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2402136-001	FMW-1-020624	02/06/2024 1:25 PM	02/08/2024 12:59 PM
2402136-002	FMW-2-020624	02/06/2024 2:13 PM	02/08/2024 12:59 PM
2402136-003	FMW-3-020624	02/06/2024 2:59 PM	02/08/2024 12:59 PM
2402136-004	FMW-4-020624	02/06/2024 3:58 PM	02/08/2024 12:59 PM
2402136-005	FMW-5-020624	02/06/2024 4:42 PM	02/08/2024 12:59 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2402136**
Date: **2/15/2024**

CLIENT: Friedman & Bruya
Project: 402106

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

CLIENT: Friedman & Bruya
Project: 402106

Lab ID: 2402136-001 **Collection Date:** 2/6/2024 1:25:00 PM
Client Sample ID: **FMW-1-020624** **Matrix:** Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Organic Carbon by SM 5310C				Batch ID: R89580		Analyst: FG
Total Organic Carbon	19.4	0.700		mg/L	1	2/13/2024 3:05:00 PM

Lab ID: 2402136-002 **Collection Date:** 2/6/2024 2:13:00 PM
Client Sample ID: **FMW-2-020624** **Matrix:** Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Organic Carbon by SM 5310C				Batch ID: R89580		Analyst: FG
Total Organic Carbon	11.5	0.700		mg/L	1	2/13/2024 4:38:00 PM

Lab ID: 2402136-003 **Collection Date:** 2/6/2024 2:59:00 PM
Client Sample ID: **FMW-3-020624** **Matrix:** Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Organic Carbon by SM 5310C				Batch ID: R89580		Analyst: FG
Total Organic Carbon	32.6	0.700		mg/L	1	2/13/2024 5:01:00 PM

Lab ID: 2402136-004 **Collection Date:** 2/6/2024 3:58:00 PM
Client Sample ID: **FMW-4-020624** **Matrix:** Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Organic Carbon by SM 5310C				Batch ID: R89580		Analyst: FG
Total Organic Carbon	10.9	0.700		mg/L	1	2/13/2024 5:24:00 PM

Analytical Report

Work Order: **2402136**
Date Reported: **2/15/2024**

CLIENT: Friedman & Bruya
Project: 402106

Lab ID: 2402136-005
Client Sample ID: **FMW-5-020624**
Collection Date: 2/6/2024 4:42:00 PM
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Organic Carbon by SM 5310C				Batch ID: R89580		Analyst: FG
Total Organic Carbon	25.4	0.700		mg/L	1	2/13/2024 5:47:00 PM

Work Order: 2402136
CLIENT: Friedman & Bruya
Project: 402106

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **MB-R89580**	SampType: **MBLK**			Units: **mg/L**		Prep Date: **2/13/2024**		RunNo: **89580**		
Client ID: **MBLKW**	Batch ID: **R89580**					Analysis Date: **2/13/2024**		SeqNo: **1870684**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	ND	0.700									

Sample ID: **2402136-001ADUP**	SampType: **DUP**			Units: **mg/L**		Prep Date: **2/13/2024**		RunNo: **89580**		
Client ID: **FMW-1-020624**	Batch ID: **R89580**					Analysis Date: **2/13/2024**		SeqNo: **1870687**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	19.7	0.700						19.36	1.89	20	

Sample ID: **2402136-001AMS**	SampType: **MS**			Units: **mg/L**		Prep Date: **2/13/2024**		RunNo: **89580**		
Client ID: **FMW-1-020624**	Batch ID: **R89580**					Analysis Date: **2/13/2024**		SeqNo: **1870688**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	24.3	0.700	5.000	19.36	98.9	41.1	150				

Sample ID: **2402136-001AMSD**	SampType: **MSD**			Units: **mg/L**		Prep Date: **2/13/2024**		RunNo: **89580**		
Client ID: **FMW-1-020624**	Batch ID: **R89580**					Analysis Date: **2/13/2024**		SeqNo: **1870689**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	24.2	0.700	5.000	19.36	96.2	41.1	150	24.30	0.557	30	

Sample ID: **LCS-R89580**	SampType: **LCS**			Units: **mg/L**		Prep Date: **2/13/2024**		RunNo: **89580**		
Client ID: **LCSW**	Batch ID: **R89580**					Analysis Date: **2/13/2024**		SeqNo: **1870696**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.18	0.700	5.000	0	104	90	116				

Fremont Analytical
An Alliance Technical Group Company

Sample Log-In Check List

Client Name:	FB	Work Order Number:	2402136
Logged by:	Morgan Wilson	Date Received:	2/8/2024 12:59:00 PM

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☑	No ☐	Not Present ☐
4.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5.	Were all items received at a temperature of >2°C to 6°C *	Yes ☑	No ☐	NA ☐
6.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
7.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8.	Are samples properly preserved?	Yes ☑	No ☐	
9.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
11.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
12.	Does paperwork match bottle labels?	Yes ☑	No ☐	
13.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14.	Is it clear what analyses were requested?	Yes ☑	No ☐	
15.	Were all hold times (except field parameters, pH e.g.) able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified:		Date:	
By Whom:		Via:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

Item Information

Item #	Temp ºC
Sample	4.1

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2402136

Page # _____ of _____

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTER
Fremont

PROJECT NAME/NO.	PO #
402106	D-669mg

REMARKS

EQuIS

TURNAROUND TIME
☒ Standard
RUSH _____
Rush charges authorized by: _____

SAMPLE DISPOSAL
Dispose after 30 days
Return samples
Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: TOC	2045,7,9									Notes
FMW-1-020624		2/6/2024	1325	water	1	x										
FMW-2-020624		2/6/2024	1413	water	1	x										
FMW-3-020624		2/6/2024	1459	water	1	x										
FMW-4-020624		2/6/2024	1558	water	1	x										
FMW-5-020624		2/6/2024	1642	water	1	x										

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Mac Goldman	Friedman and Bruya	2/8	11:00
Received by:		Alli Miller	FAL	2/10	1259
Relinquished by:					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 29, 2023

Pete Kingston, Project Manager
Farallon Consulting, LLC
975 5th Avenue Northwest
Issaquah, WA 98027

Dear Mr Kingston:

Included are the additional results from the testing of material submitted on August 18, 2023 from the 7602 - 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301 project. There are 4 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: Farallon Data, Sara Haynes
FLN0829R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 18, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 7602 - 7702 River DR E Puyallup, WA 2220-008, F&BI 308301 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Farallon Consulting, LLC
308301 -01	FB-2-25.0
308301 -02	FB-1-25.0
308301 -03	FB-3-10.0
308301 -04	FB-3-20.0
308301 -05	FB-3-23.0
308301 -06	FB-2-081723
308301 -07	FB-1-081723
308301 -08	FB-3-081723

All quality control requirements were acceptable.

Date of Report: 08/29/23
Date Received: 08/18/23
Project: 7602 - 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301
Date Extracted: 08/21/23
Date Analyzed: 08/25/23

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 41-152)
FB-3-081723 308301-08	700 x	2,900	112
Method Blank 03-2000 MB	<50	<250	114

Date of Report: 08/29/23
Date Received: 08/18/23
Project: 7602 - 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	108	100	65-151	8

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 standard reporting limit. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

308301

SAMPLE CHAIN OF CUSTODY

ME 08/18/23 F2/VM2/K2/N2

Page # 1 of 1

Report To Pete Kingston, Sara Haynes

Company Farallon

Address 975 5th Ave NW

City, State, ZIP Issaquah, WA 98027

Phone 541-224-1925 Email PKingston, SHaynes@farallonconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: 7602 & 7702 River Dr E, Puyallup, WA

PO # 2220-008

REMARKS: ~~On hold pending PM input~~

Project specific RLs? - Yes / No

INVOICE TO: AP

TURNAROUND TIME
- ☐ Standard turnaround
- ☑ RUSH 2-day
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	RCRA 8 METALS	TOTAL METALS	DISSOLVED METALS	NWTPH-Dx SG	Notes
FB-2-25.0	01 A.E	8/17/26	1416	Soil	4	X	X			X	X		X				A-PK 08/23/23 ME
FB-1-25.0	02		1546	Soil	4	X	X			X	X		X				
FB-3-10.0	03		1627	Soil	4												
FB-3-20.0	04		1636	Soil	4												
FB-3-23.0	05		1647	Soil	4	X	X			X	X		X				
FB-2-081723	06		1445	H20	5	X	X			X				X	X		RCRA 8
FB-1-081723	07		1609	H20	5	X	X			X				X	X		↓
FB-3-081723	08	↓	1700	H20	5	X	X			X				X	X	A	↓

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Braeden Lukkari	Farallon	8/17/23	~~1705~~ 1215
Received by:	VINT	FBI	~~8-17-23~~ 8/18/23 (NP)	1215
Relinquished by:				
Received by:		Samples received at 4 °C		

Friedman & Bruya, Inc.
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 23, 2023

Pete Kingston, Project Manager
Farallon Consulting, LLC
975 5th Avenue Northwest
Issaquah, WA 98027

Dear Mr Kingston:

Included are the results from the testing of material submitted on August 18, 2023 from the 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301 project. There are 46 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Farallon Data, Sara Haynes
FLN0823R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 18, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 7602 and 7702 River DR E Puyallup, WA 2220-008, F&BI 308301 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Farallon Consulting, LLC
308301 -01	FB-2-25.0
308301 -02	FB-1-25.0
308301 -03	FB-3-10.0
308301 -04	FB-3-20.0
308301 -05	FB-3-23.0
308301 -06	FB-2-081723
308301 -07	FB-1-081723
308301 -08	FB-3-081723

The dissolved metals were filtered at Friedman and Bruya. The data were flagged accordingly.

Silver in the 6020B matrix spike failed the acceptance criteria. The laboratory control sample passed the acceptance criteria, therefore the results were due to matrix effect.

The 8260D laboratory control sample and laboratory control sample duplicate failed the relative percent difference for several compounds. The analytes were not detected therefore the data were acceptable.

The 8260D calibration standard failed the acceptance criteria for acetone and 2-butanone for several samples. The data were flagged accordingly.

The 8260D surrogate toluene-d8 did not meet the laboratory acceptance criteria in one of the water method blanks. The affected compounds were flagged accordingly.

All other quality control requirements were acceptable.

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301
Date Extracted: 08/18/23
Date Analyzed: 08/21/23

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
FB-2-25.0 308301-01 1/5	<25	112
FB-1-25.0 308301-02	<5	116
FB-3-23.0 308301-05	<5	116
Method Blank 03-1645 MB	<5	100

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301
Date Extracted: 08/21/23
Date Analyzed: 08/21/23

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
FB-2-081723 308301-06	<100	115
FB-1-081723 308301-07	<100	111
FB-3-081723 308301-08	<100	117
Method Blank 03-1646 MB	<100	114

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301
Date Extracted: 08/18/23
Date Analyzed: 08/18/23

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
FB-2-25.0 308301-01	<50	<250	90
FB-1-25.0 308301-02	<50	<250	87
FB-3-23.0 308301-05	<50	<250	84
Method Blank 03-1997 MB	<50	<250	84

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301
Date Extracted: 08/21/23
Date Analyzed: 08/21/23

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
FB-2-081723 308301-06 1/1.2	120 x	<300	109
FB-1-081723 308301-07 1/1.5	79 x	<380	101
FB-3-081723 308301-08	2,200 x	7,400	100
Method Blank 03-2000 MB	<50	<250	108

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FB-2-081723 f	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/17/23	Lab ID:	308301-06
Date Analyzed:	08/19/23	Data File:	308301-06.327
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.30
Barium	73.4
Cadmium	<1
Chromium	4.48
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FB-1-081723 f	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/17/23	Lab ID:	308301-07
Date Analyzed:	08/19/23	Data File:	308301-07.328
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	10.5
Barium	118
Cadmium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FB-1-081723 f	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/18/23	Lab ID:	308301-07 x10
Date Analyzed:	08/21/23	Data File:	308301-07 x10.164
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	<10

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	FB-3-081723 f	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/17/23	Lab ID:	308301-08
Date Analyzed:	08/19/23	Data File:	308301-08.331
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	12.3
Barium	196
Cadmium	<1
Chromium	1.66
Lead	1.20
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank f	Client:	Farallon Consulting, LLC
Date Received:	NA	Project:	2220-008, F&BI 308301
Date Extracted:	08/18/23	Lab ID:	I3-652 mb
Date Analyzed:	08/18/23	Data File:	I3-652 mb.224
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FB-2-081723	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/17/23	Lab ID:	308301-06
Date Analyzed:	08/19/23	Data File:	308301-06.337
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	3.09
Barium	71.7
Cadmium	<1
Chromium	1.54
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FB-1-081723	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/17/23	Lab ID:	308301-07
Date Analyzed:	08/19/23	Data File:	308301-07.338
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	16.4
Barium	171
Cadmium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FB-1-081723	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/18/23	Lab ID:	308301-07 x5
Date Analyzed:	08/21/23	Data File:	308301-07 x5.088
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	<5

Analysis For Total Metals By EPA Method 6020B

Client ID:	FB-3-081723	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/17/23	Lab ID:	308301-08
Date Analyzed:	08/19/23	Data File:	308301-08.339
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	10.9
Barium	177
Cadmium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FB-3-081723	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/18/23	Lab ID:	308301-08 x5
Date Analyzed:	08/21/23	Data File:	308301-08 x5.089
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	<5

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	NA	Project:	2220-008, F&BI 308301
Date Extracted:	08/18/23	Lab ID:	I3-648 mb
Date Analyzed:	08/18/23	Data File:	I3-648 mb.222
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FB-2-25.0	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/18/23	Lab ID:	308301-01
Date Analyzed:	08/19/23	Data File:	308301-01.324
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.02
Barium	16.0
Cadmium	<1
Chromium	8.34
Lead	3.03
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FB-1-25.0	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/18/23	Lab ID:	308301-02
Date Analyzed:	08/19/23	Data File:	308301-02.325
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	16.4
Cadmium	<1
Chromium	6.32
Lead	1.11
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FB-3-23.0	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/18/23	Lab ID:	308301-05
Date Analyzed:	08/19/23	Data File:	308301-05.326
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.85
Barium	24.7
Cadmium	<1
Chromium	5.03
Lead	1.28
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	NA	Project:	2220-008, F&BI 308301
Date Extracted:	08/18/23	Lab ID:	I3-650 mb
Date Analyzed:	08/18/23	Data File:	I3-650 mb.220
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	FB-2-25.0	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/21/23	Lab ID:	308301-01 1/0.5
Date Analyzed:	08/22/23	Data File:	082212.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	104	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.0023
Hexane	<0.25	o-Xylene	<0.001
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.002	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.001	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.01	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	FB-1-25.0	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/21/23	Lab ID:	308301-02 1/0.5
Date Analyzed:	08/21/23	Data File:	082118.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	79	128
Toluene-d8	104	84	121
4-Bromofluorobenzene	97	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.002
Hexane	<0.25	o-Xylene	<0.001
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.002	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.001	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.01	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	FB-3-23.0	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/21/23	Lab ID:	308301-05 1/0.5
Date Analyzed:	08/21/23	Data File:	082119.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	79	128
Toluene-d8	99	84	121
4-Bromofluorobenzene	94	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.0014
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.0094
Hexane	<0.25	o-Xylene	0.0056
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.002	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	0.0020	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.01	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	0.013
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	2220-008, F&BI 308301
Date Extracted:	08/21/23	Lab ID:	03-1946 mb 1/0.5
Date Analyzed:	08/21/23	Data File:	082116.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	79	128
Toluene-d8	100	84	121
4-Bromofluorobenzene	98	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.002
Hexane	<0.25	o-Xylene	<0.001
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.002	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.001	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.01	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	FB-2-081723	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/21/23	Lab ID:	308301-06
Date Analyzed:	08/21/23	Data File:	082136.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	78	126
Toluene-d8	102	84	115
4-Bromofluorobenzene	95	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50 ca	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20 ca	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	FB-1-081723	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/21/23	Lab ID:	308301-07
Date Analyzed:	08/21/23	Data File:	082137.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	78	126
Toluene-d8	100	84	115
4-Bromofluorobenzene	94	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50 ca	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20 ca	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	FB-3-081723	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/22/23	Lab ID:	308301-08
Date Analyzed:	08/22/23	Data File:	082213.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	91	71	132
Toluene-d8	91	68	139
4-Bromofluorobenzene	104	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	1.2
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	3.5
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	5.0	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	2220-008, F&BI 308301
Date Extracted:	08/21/23	Lab ID:	03-1947 mb
Date Analyzed:	08/21/23	Data File:	082115.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	78	126
Toluene-d8	68 vo	84	115
4-Bromofluorobenzene	98	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1 js
Chloromethane	<10	Tetrachloroethene	<1 is
Vinyl chloride	<0.02	Dibromochloromethane	<0.5 is
Bromomethane	<5	1,2-Dibromoethane (EDB)	0.011 js lc
Chloroethane	<1	Chlorobenzene	<1 js
Trichlorofluoromethane	<1	Ethylbenzene	<1 js
Acetone	<50 ca	1,1,1,2-Tetrachloroethane	<1 js
1,1-Dichloroethene	<1	m,p-Xylene	<2 js
Hexane	<5	o-Xylene	<1 js
Methylene chloride	<5	Styrene	<1 js
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1 js
trans-1,2-Dichloroethene	<1	Bromoform	<5 js
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20 ca	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1 js	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10 js	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4 js	1,2,4-Trichlorobenzene	<1
Toluene	<1 js	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4 js	Naphthalene	<1
1,1,2-Trichloroethane	<0.5 js	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10 js		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	2220-008, F&BI 308301
Date Extracted:	08/21/23	Lab ID:	03-1949 mb
Date Analyzed:	08/22/23	Data File:	082207.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	71	132
Toluene-d8	96	68	139
4-Bromofluorobenzene	103	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	0.011
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	FB-2-25.0	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/18/23	Lab ID:	308301-01 1/25
Date Analyzed:	08/21/23	Data File:	082118.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	73 d	10	198
2-Fluorobiphenyl	80 d	45	117
2,4,6-Tribromophenol	69 d	11	158
Terphenyl-d14	113 d	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.05
2-Methylnaphthalene	<0.05
1-Methylnaphthalene	<0.05
Acenaphthylene	<0.05
Acenaphthene	<0.05
Fluorene	<0.05
Phenanthrene	0.076
Anthracene	<0.05
Fluoranthene	0.050
Pyrene	0.087
Benz(a)anthracene	<0.05
Chrysene	0.079
Benzo(a)pyrene	<0.05
Benzo(b)fluoranthene	<0.05
Benzo(k)fluoranthene	<0.05
Indeno(1,2,3-cd)pyrene	<0.05
Dibenz(a,h)anthracene	<0.05
Benzo(g,h,i)perylene	<0.05

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	FB-1-25.0	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/18/23	Lab ID:	308301-02 1/5
Date Analyzed:	08/21/23	Data File:	082116.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	92	10	198
2-Fluorobiphenyl	85	45	117
2,4,6-Tribromophenol	72	11	158
Terphenyl-d14	107	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Acenaphthylene	<0.01
Acenaphthene	<0.01
Fluorene	<0.01
Phenanthrene	<0.01
Anthracene	<0.01
Fluoranthene	<0.01
Pyrene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01
Benzo(g,h,i)perylene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	FB-3-23.0	Client:	Farallon Consulting, LLC
Date Received:	08/18/23	Project:	2220-008, F&BI 308301
Date Extracted:	08/18/23	Lab ID:	308301-05 1/5
Date Analyzed:	08/21/23	Data File:	082113.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	86	10	198
2-Fluorobiphenyl	81	45	117
2,4,6-Tribromophenol	74	11	158
Terphenyl-d14	97	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.012
2-Methylnaphthalene	0.029
1-Methylnaphthalene	0.023
Acenaphthylene	<0.01
Acenaphthene	<0.01
Fluorene	<0.01
Phenanthrene	0.022
Anthracene	<0.01
Fluoranthene	<0.01
Pyrene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01
Benzo(g,h,i)perylene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	2220-008, F&BI 308301
Date Extracted:	08/18/23	Lab ID:	03-1993 mb 1/5
Date Analyzed:	08/18/23	Data File:	081812.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	79	10	198
2-Fluorobiphenyl	84	45	117
2,4,6-Tribromophenol	78	11	158
Terphenyl-d14	100	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Acenaphthylene	<0.01
Acenaphthene	<0.01
Fluorene	<0.01
Phenanthrene	<0.01
Anthracene	<0.01
Fluoranthene	<0.01
Pyrene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01
Benzo(g,h,i)perylene	<0.01

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 308271-14 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	40	110	70-130

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 308289-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	99	70-130

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 308301-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	130	103	103	64-136	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	110	78-121

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	100	100	65-151	0

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 6020B

Laboratory Code: 308301-07 x10 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	12.6	104 b	85 b	75-125	20 b
Barium	ug/L (ppb)	50	105	108 b	96 b	75-125	12 b
Cadmium	ug/L (ppb)	5	<10	100	97	75-125	3
Chromium	ug/L (ppb)	20	<10	94	96	75-125	2
Lead	ug/L (ppb)	10	<10	99	98	75-125	1
Mercury	ug/L (ppb)	5	<10	99	98	75-125	1
Selenium	ug/L (ppb)	5	<10	87	87	75-125	0
Silver	ug/L (ppb)	5	<10	71 vo	76	75-125	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	100	80-120
Barium	ug/L (ppb)	50	95	80-120
Cadmium	ug/L (ppb)	5	96	80-120
Chromium	ug/L (ppb)	20	96	80-120
Lead	ug/L (ppb)	10	95	80-120
Mercury	ug/L (ppb)	5	92	80-120
Selenium	ug/L (ppb)	5	106	80-120
Silver	ug/L (ppb)	5	95	80-120

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 308252-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<1	113	111	75-125	2
Barium	ug/L (ppb)	50	3.17	95	95	75-125	0
Cadmium	ug/L (ppb)	5	<1	96	96	75-125	0
Chromium	ug/L (ppb)	20	<1	94	94	75-125	0
Lead	ug/L (ppb)	10	<1	94	94	75-125	0
Mercury	ug/L (ppb)	5	<1	92	93	75-125	1
Selenium	ug/L (ppb)	5	<1	106	107	75-125	1
Silver	ug/L (ppb)	5	<1	92	92	75-125	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	102	80-120
Barium	ug/L (ppb)	50	95	80-120
Cadmium	ug/L (ppb)	5	95	80-120
Chromium	ug/L (ppb)	20	94	80-120
Lead	ug/L (ppb)	10	94	80-120
Mercury	ug/L (ppb)	5	93	80-120
Selenium	ug/L (ppb)	5	107	80-120
Silver	ug/L (ppb)	5	94	80-120

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 308271-01 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<5	99	100	75-125	1
Barium	mg/kg (ppm)	50	37.4	91 b	84 b	75-125	8 b
Cadmium	mg/kg (ppm)	10	<5	98	95	75-125	3
Chromium	mg/kg (ppm)	50	23.4	98 b	97 b	75-125	1 b
Lead	mg/kg (ppm)	50	30.7	82 b	80 b	75-125	2 b
Mercury	mg/kg (ppm	5	<5	99	94	75-125	5
Selenium	mg/kg (ppm)	5	<5	105	101	75-125	4
Silver	mg/kg (ppm)	10	<5	84	83	75-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	100	80-120
Barium	mg/kg (ppm)	50	90	80-120
Cadmium	mg/kg (ppm)	10	92	80-120
Chromium	mg/kg (ppm)	50	99	80-120
Lead	mg/kg (ppm)	50	97	80-120
Mercury	mg/kg (ppm)	5	93	80-120
Selenium	mg/kg (ppm)	5	91	80-120
Silver	mg/kg (ppm)	10	94	80-120

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 308301-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2	<0.5	39	35	10-142	11
Chloromethane	mg/kg (ppm)	2	<0.5	61	61	10-126	0
Vinyl chloride	mg/kg (ppm)	2	<0.05	62	62	10-138	0
Bromomethane	mg/kg (ppm)	2	<0.5	69	68	10-163	1
Chloroethane	mg/kg (ppm)	2	<0.5	68	66	10-176	3
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	69	69	10-176	0
Acetone	mg/kg (ppm)	10	<5	73	77	10-163	5
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	66	66	10-160	0
Hexane	mg/kg (ppm)	2	<0.25	72	67	10-137	7
Methylene chloride	mg/kg (ppm)	2	<0.5	74	75	10-156	1
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	81	79	21-145	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	74	73	14-137	1
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	82	83	19-140	1
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	78	80	10-158	3
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	79	78	25-135	1
Chloroform	mg/kg (ppm)	2	<0.05	83	84	21-145	1
2-Butanone (MEK)	mg/kg (ppm)	10	<1	76	78	19-147	3
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	92	91	12-160	1
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	77	77	10-156	0
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	84	84	17-140	0
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	75	75	9-164	0
Benzene	mg/kg (ppm)	2	<0.03	84	83	29-129	1
Trichloroethene	mg/kg (ppm)	2	<0.02	74	73	21-139	1
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	82	82	30-135	0
Bromodichloromethane	mg/kg (ppm)	2	<0.05	79	76	23-155	4
Dibromomethane	mg/kg (ppm)	2	<0.05	87	85	23-145	2
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	74	73	24-155	1
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	80	80	28-144	0
Toluene	mg/kg (ppm)	2	<0.05	83	82	35-130	1
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	82	80	26-149	2
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	89	84	10-205	6
2-Hexanone	mg/kg (ppm)	10	<0.5	75	73	15-166	3
1,3-Dichloropropane	mg/kg (ppm)	2	<0.05	88	87	31-137	1
Tetrachloroethene	mg/kg (ppm)	2	<0.025	86	84	20-133	2
Dibromochloromethane	mg/kg (ppm)	2	<0.05	75	74	28-150	1
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	80	80	28-142	0
Chlorobenzene	mg/kg (ppm)	2	<0.05	83	83	32-129	0
Ethylbenzene	mg/kg (ppm)	2	<0.05	83	81	32-137	2
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	75	76	31-143	1
m,p-Xylene	mg/kg (ppm)	4	<0.1	81	81	34-136	0
o-Xylene	mg/kg (ppm)	2	<0.05	80	81	33-134	1
Styrene	mg/kg (ppm)	2	<0.05	80	82	35-137	2
Isopropylbenzene	mg/kg (ppm)	2	<0.05	83	81	31-142	2
Bromoform	mg/kg (ppm)	2	<0.05	65	65	21-156	0
n-Propylbenzene	mg/kg (ppm)	2	<0.05	95	88	23-146	8
Bromobenzene	mg/kg (ppm)	2	<0.05	89	83	34-130	7
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	89	83	18-149	7
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	97	90	28-140	7
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	95	89	25-144	7
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	89	83	31-134	7
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	89	83	31-136	7
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	88	83	30-137	6
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	85	81	10-182	5
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	88	81	23-145	8
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	89	81	21-149	9
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	87	82	30-131	6
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	84	81	29-129	4
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	91	83	31-132	9
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	86	78	11-161	10
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	92	84	22-142	9
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	99	90	10-142	10
Naphthalene	mg/kg (ppm)	2	<0.05	88	82	14-157	7
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	94	86	20-144	9

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2	69	10-146
Chloromethane	mg/kg (ppm)	2	77	27-133
Vinyl chloride	mg/kg (ppm)	2	82	22-139
Bromomethane	mg/kg (ppm)	2	87	10-201
Chloroethane	mg/kg (ppm)	2	82	10-163
Trichlorofluoromethane	mg/kg (ppm)	2	88	10-196
Acetone	mg/kg (ppm)	10	95	52-141
1,1-Dichloroethene	mg/kg (ppm)	2	83	47-128
Hexane	mg/kg (ppm)	2	93	43-142
Methylene chloride	mg/kg (ppm)	2	93	10-184
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	94	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2	90	64-132
1,1-Dichloroethane	mg/kg (ppm)	2	97	64-135
2,2-Dichloropropane	mg/kg (ppm)	2	93	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2	95	64-135
Chloroform	mg/kg (ppm)	2	97	61-139
2-Butanone (MEK)	mg/kg (ppm)	10	94	30-197
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	108	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	93	62-131
1,1-Dichloropropene	mg/kg (ppm)	2	97	64-136
Carbon tetrachloride	mg/kg (ppm)	2	92	60-139
Benzene	mg/kg (ppm)	2	100	65-136
Trichloroethene	mg/kg (ppm)	2	85	63-139
1,2-Dichloropropane	mg/kg (ppm)	2	96	61-145
Bromodichloromethane	mg/kg (ppm)	2	94	57-126
Dibromomethane	mg/kg (ppm)	2	101	62-123
4-Methyl-2-pentanone	mg/kg (ppm)	10	89	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2	97	65-143
Toluene	mg/kg (ppm)	2	101	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2	98	65-131
1,1,2-Trichloroethane	mg/kg (ppm)	2	101	62-131
2-Hexanone	mg/kg (ppm)	10	92	33-152
1,3-Dichloropropane	mg/kg (ppm)	2	109	67-128
Tetrachloroethene	mg/kg (ppm)	2	100	68-128
Dibromochloromethane	mg/kg (ppm)	2	93	55-121
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	96	66-129
Chlorobenzene	mg/kg (ppm)	2	97	67-128
Ethylbenzene	mg/kg (ppm)	2	97	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	91	64-121
m,p-Xylene	mg/kg (ppm)	4	98	68-128
o-Xylene	mg/kg (ppm)	2	95	67-129
Styrene	mg/kg (ppm)	2	97	67-129
Isopropylbenzene	mg/kg (ppm)	2	95	68-128
Bromoform	mg/kg (ppm)	2	80	56-132
n-Propylbenzene	mg/kg (ppm)	2	106	68-129
Bromobenzene	mg/kg (ppm)	2	103	69-128
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	99	69-129
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	114	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2	112	61-137
2-Chlorotoluene	mg/kg (ppm)	2	101	69-128
4-Chlorotoluene	mg/kg (ppm)	2	100	67-127
tert-Butylbenzene	mg/kg (ppm)	2	100	69-129
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	98	69-128
sec-Butylbenzene	mg/kg (ppm)	2	98	69-130
p-Isopropyltoluene	mg/kg (ppm)	2	98	69-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	98	69-127
1,4-Dichlorobenzene	mg/kg (ppm)	2	97	68-126
1,2-Dichlorobenzene	mg/kg (ppm)	2	101	69-127
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	103	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	104	64-135
Hexachlorobutadiene	mg/kg (ppm)	2	107	50-153
Naphthalene	mg/kg (ppm)	2	102	62-128
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	104	61-126

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	10	86	84	46-206	2
Chloromethane	ug/L (ppb)	10	81	83	59-132	2
Vinyl chloride	ug/L (ppb)	10	97	90	64-142	7
Bromomethane	ug/L (ppb)	10	115	105	50-197	9
Chloroethane	ug/L (ppb)	10	106	99	70-130	7
Trichlorofluoromethane	ug/L (ppb)	10	94	93	51-159	1
Acetone	ug/L (ppb)	50	53	36	10-140	38 vo
1,1-Dichloroethene	ug/L (ppb)	10	94	83	64-140	12
Hexane	ug/L (ppb)	10	103	102	54-136	1
Methylene chloride	ug/L (ppb)	10	100	101	43-134	1
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	99	97	70-130	2
trans-1,2-Dichloroethene	ug/L (ppb)	10	108	107	70-130	1
1,1-Dichloroethane	ug/L (ppb)	10	99	100	70-130	1
2,2-Dichloropropane	ug/L (ppb)	10	99	125	64-148	23 vo
cis-1,2-Dichloroethene	ug/L (ppb)	10	78	100	70-130	25 vo
Chloroform	ug/L (ppb)	10	81	94	70-130	15
2-Butanone (MEK)	ug/L (ppb)	50	52	71	47-112	31 vo
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	102	105	70-130	3
1,1,1-Trichloroethane	ug/L (ppb)	10	92	100	70-130	8
1,1-Dichloropropene	ug/L (ppb)	10	89	94	70-130	5
Carbon tetrachloride	ug/L (ppb)	10	95	98	70-130	3
Benzene	ug/L (ppb)	10	101	105	70-130	4
Trichloroethene	ug/L (ppb)	10	98	100	70-130	2
1,2-Dichloropropane	ug/L (ppb)	10	93	95	70-130	2
Bromodichloromethane	ug/L (ppb)	10	95	103	70-130	8
Dibromomethane	ug/L (ppb)	10	96	98	70-130	2
4-Methyl-2-pentanone	ug/L (ppb)	50	97	97	68-130	0
cis-1,3-Dichloropropene	ug/L (ppb)	10	96	99	69-131	3
Toluene	ug/L (ppb)	10	100	105	70-130	5
trans-1,3-Dichloropropene	ug/L (ppb)	10	96	98	70-130	2
1,1,2-Trichloroethane	ug/L (ppb)	10	91	94	70-130	3
2-Hexanone	ug/L (ppb)	50	88	87	45-138	1
1,3-Dichloropropane	ug/L (ppb)	10	91	94	70-130	3
Tetrachloroethene	ug/L (ppb)	10	103	107	70-130	4
Dibromochloromethane	ug/L (ppb)	10	96	100	60-148	4
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	101	105	70-130	4
Chlorobenzene	ug/L (ppb)	10	97	99	70-130	2
Ethylbenzene	ug/L (ppb)	10	103	108	70-130	5
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	96	99	70-130	3
m,p-Xylene	ug/L (ppb)	20	102	106	70-130	4
o-Xylene	ug/L (ppb)	10	101	105	70-130	4
Styrene	ug/L (ppb)	10	97	100	70-130	3
Isopropylbenzene	ug/L (ppb)	10	96	101	70-130	5
Bromoform	ug/L (ppb)	10	97	98	69-138	1
n-Propylbenzene	ug/L (ppb)	10	94	97	70-130	3
Bromobenzene	ug/L (ppb)	10	93	98	70-130	5
1,3,5-Trimethylbenzene	ug/L (ppb)	10	89	94	70-130	5
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	94	97	70-130	3
1,2,3-Trichloropropane	ug/L (ppb)	10	92	94	70-130	2
2-Chlorotoluene	ug/L (ppb)	10	91	96	70-130	5
4-Chlorotoluene	ug/L (ppb)	10	95	96	70-130	1
tert-Butylbenzene	ug/L (ppb)	10	94	96	70-130	2
1,2,4-Trimethylbenzene	ug/L (ppb)	10	85	86	70-130	1
sec-Butylbenzene	ug/L (ppb)	10	93	97	70-130	4
p-Isopropyltoluene	ug/L (ppb)	10	93	98	70-130	5
1,3-Dichlorobenzene	ug/L (ppb)	10	91	96	70-130	5
1,4-Dichlorobenzene	ug/L (ppb)	10	93	97	70-130	4
1,2-Dichlorobenzene	ug/L (ppb)	10	95	97	70-130	2
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	95	95	70-130	0
1,2,4-Trichlorobenzene	ug/L (ppb)	10	97	98	70-130	1
Hexachlorobutadiene	ug/L (ppb)	10	103	100	70-130	3
Naphthalene	ug/L (ppb)	10	94	92	70-130	2
1,2,3-Trichlorobenzene	ug/L (ppb)	10	98	94	70-130	4

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	10	97	105	49-149	8
Chloromethane	ug/L (ppb)	10	84	90	34-143	7
Vinyl chloride	ug/L (ppb)	10	91	99	43-149	8
Bromomethane	ug/L (ppb)	10	102	107	28-182	5
Chloroethane	ug/L (ppb)	10	108	122	59-157	12
Trichlorofluoromethane	ug/L (ppb)	10	91	108	59-141	17
Acetone	ug/L (ppb)	50	66	70	20-139	6
1,1-Dichloroethene	ug/L (ppb)	10	97	104	67-138	7
Hexane	ug/L (ppb)	10	98	110	50-161	12
Methylene chloride	ug/L (ppb)	10	94	100	29-192	6
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	96	104	70-130	8
trans-1,2-Dichloroethene	ug/L (ppb)	10	92	103	70-130	11
1,1-Dichloroethane	ug/L (ppb)	10	94	105	70-130	11
2,2-Dichloropropane	ug/L (ppb)	10	107	117	71-148	9
cis-1,2-Dichloroethene	ug/L (ppb)	10	97	108	70-130	11
Chloroform	ug/L (ppb)	10	91	103	70-130	12
2-Butanone (MEK)	ug/L (ppb)	50	77	94	50-157	20
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	98	108	70-130	10
1,1,1-Trichloroethane	ug/L (ppb)	10	95	104	70-130	9
1,1-Dichloropropene	ug/L (ppb)	10	93	103	70-130	10
Carbon tetrachloride	ug/L (ppb)	10	92	99	70-130	7
Benzene	ug/L (ppb)	10	103	113	70-130	9
Trichloroethene	ug/L (ppb)	10	101	110	70-130	9
1,2-Dichloropropane	ug/L (ppb)	10	89	99	70-130	11
Bromodichloromethane	ug/L (ppb)	10	89	100	70-130	12
Dibromomethane	ug/L (ppb)	10	93	104	70-130	11
4-Methyl-2-pentanone	ug/L (ppb)	50	94	101	70-130	7
cis-1,3-Dichloropropene	ug/L (ppb)	10	92	103	70-130	11
Toluene	ug/L (ppb)	10	103	103	70-130	0
trans-1,3-Dichloropropene	ug/L (ppb)	10	100	101	70-130	1
1,1,2-Trichloroethane	ug/L (ppb)	10	104	104	70-130	0
2-Hexanone	ug/L (ppb)	50	89	89	66-132	0
1,3-Dichloropropane	ug/L (ppb)	10	99	97	70-130	2
Tetrachloroethene	ug/L (ppb)	10	107	108	70-130	1
Dibromochloromethane	ug/L (ppb)	10	94	94	63-142	0
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	100	101	70-130	1
Chlorobenzene	ug/L (ppb)	10	101	101	70-130	0
Ethylbenzene	ug/L (ppb)	10	104	105	70-130	1
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	99	100	70-130	1
m,p-Xylene	ug/L (ppb)	20	104	105	70-130	1
o-Xylene	ug/L (ppb)	10	103	104	70-130	1
Styrene	ug/L (ppb)	10	99	99	70-130	0
Isopropylbenzene	ug/L (ppb)	10	101	104	70-130	3
Bromoform	ug/L (ppb)	10	97	97	50-157	0
n-Propylbenzene	ug/L (ppb)	10	106	104	70-130	2
Bromobenzene	ug/L (ppb)	10	97	98	70-130	1
1,3,5-Trimethylbenzene	ug/L (ppb)	10	102	101	52-150	1
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	106	106	75-140	0
1,2,3-Trichloropropane	ug/L (ppb)	10	102	102	40-153	0
2-Chlorotoluene	ug/L (ppb)	10	104	103	70-130	1
4-Chlorotoluene	ug/L (ppb)	10	103	103	70-130	0
tert-Butylbenzene	ug/L (ppb)	10	103	102	70-130	1
1,2,4-Trimethylbenzene	ug/L (ppb)	10	101	100	70-130	1
sec-Butylbenzene	ug/L (ppb)	10	104	104	70-130	0
p-Isopropyltoluene	ug/L (ppb)	10	103	103	70-130	0
1,3-Dichlorobenzene	ug/L (ppb)	10	101	101	70-130	0
1,4-Dichlorobenzene	ug/L (ppb)	10	101	101	70-130	0
1,2-Dichlorobenzene	ug/L (ppb)	10	103	102	70-130	1
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	97	95	70-130	2
1,2,4-Trichlorobenzene	ug/L (ppb)	10	99	96	70-130	3
Hexachlorobutadiene	ug/L (ppb)	10	101	101	70-130	0
Naphthalene	ug/L (ppb)	10	98	96	61-133	2
1,2,3-Trichlorobenzene	ug/L (ppb)	10	98	96	69-143	2

Date of Report: 08/23/23
Date Received: 08/18/23
Project: 7602 and 7702 River Dr E Puyallup, WA 2220-008, F&BI 308301

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: 308287-06 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.83	<0.01	68	70	28-125	3
2-Methylnaphthalene	mg/kg (ppm)	0.83	<0.01	81	82	10-192	1
1-Methylnaphthalene	mg/kg (ppm)	0.83	<0.01	87	88	10-163	1
Acenaphthylene	mg/kg (ppm)	0.83	<0.01	78	79	45-128	1
Acenaphthene	mg/kg (ppm)	0.83	<0.01	75	75	36-125	0
Fluorene	mg/kg (ppm)	0.83	<0.01	82	82	48-121	0
Phenanthrene	mg/kg (ppm)	0.83	<0.01	82	79	46-122	4
Anthracene	mg/kg (ppm)	0.83	<0.01	81	79	30-144	2
Fluoranthene	mg/kg (ppm)	0.83	<0.01	84	80	50-150	5
Pyrene	mg/kg (ppm)	0.83	<0.01	85	77	40-134	10
Benz(a)anthracene	mg/kg (ppm)	0.83	<0.01	84	81	50-150	4
Chrysene	mg/kg (ppm)	0.83	<0.01	93	90	50-150	3
Benzo(a)pyrene	mg/kg (ppm)	0.83	<0.01	83	78	50-150	6
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	<0.01	76	71	50-150	7
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	<0.01	81	77	50-150	5
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	<0.01	78	75	40-140	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.01	83	78	41-136	6
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	<0.01	77	72	29-139	7

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.83	85	57-107
2-Methylnaphthalene	mg/kg (ppm)	0.83	99	63-112
1-Methylnaphthalene	mg/kg (ppm)	0.83	105	63-113
Acenaphthylene	mg/kg (ppm)	0.83	93	70-130
Acenaphthene	mg/kg (ppm)	0.83	89	66-112
Fluorene	mg/kg (ppm)	0.83	95	67-117
Phenanthrene	mg/kg (ppm)	0.83	90	70-130
Anthracene	mg/kg (ppm)	0.83	92	70-130
Fluoranthene	mg/kg (ppm)	0.83	92	70-130
Pyrene	mg/kg (ppm)	0.83	93	70-130
Benz(a)anthracene	mg/kg (ppm)	0.83	96	70-130
Chrysene	mg/kg (ppm)	0.83	105	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.83	93	68-120
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	87	67-128
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	89	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	84	67-129
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	86	67-128
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	79	65-130

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 standard reporting limit. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

308301

SAMPLE CHAIN OF CUSTODY

ME 08/18/23 F2/VM2/K2/N2

Page # 1 of 1

Report To Pete Kingston, Sara Haynes

Company Farallon

Address 975 5th Ave NW

City, State, ZIP Issaquah, WA 98027

Phone 541-224-1925 Email PKingston, SHaynes@farallonconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: 7602 & 7702 River Dr E, Puyallup, WA

PO # 2220-008

REMARKS: ~~On hold pending PM input~~

Project specific RLs? - Yes / No

INVOICE TO: AP

TURNAROUND TIME
- ☐ Standard turnaround
- ☑ RUSH 2-day
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	RCRA 8 METALS	TOTAL METALS	DISSOLVED METALS		Notes
						ANALYSES REQUESTED											
FB-2-25.0	01 A.E	8/17/26	1416	Soil	4	X	X			X	X		X				
FB-1-25.0	02		1546	Soil	4	X	X			X	X		X				
FB-3-10.0	03		1627	Soil	4												
FB-3-20.0	04		1636	Soil	4												
FB-3-23.0	05		1647	Soil	4	X	X			X	X		X				
FB-2-081723	06		1445	H20	5	X	X			X				X	X		RCRA 8
FB-1-081723	07		1609	H20	5	X	X			X				X	X		↓
FB-3-081723	08	↓	1700	H20	5	X	X			X				X	X		

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Braeden Lukkari	Farallon	8/17/23	~~1705~~ 1215
Received by:	VINT	FBI	~~8-17-23~~ 8/18/23 (NP)	1215
Relinquished by:				
Received by:		Samples received at 4 °C		

Friedman & Bruya, Inc.
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 14, 2023

Pete Kingston, Project Manager
Farallon Consulting, LLC
975 5th Avenue Northwest
Issaquah, WA 98027

Dear Mr Kingston:

Included are the results from the testing of material submitted on September 12, 2023 from the 7602 and 7702 River Road East 2220-008, F&BI 309145 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Farallon Data
FLN0914R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 12, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 7602 and 7702 River Road East 2220-008, F&BI 309145 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Farallon Consulting, LLC
309145 -01	FMW-01-21.5
309145 -02	FMW-02-17.5
309145 -03	FMW-02-22.5
309145 -04	FMW-04-21.5
309145 -05	FMW-05-12.5
309145 -06	FMW-05-17.5
309145 -07	FMW-05-22.5
309145 -08	FMW-06-12.5
309145 -09	FMW-06-17.5
309145 -10	FMW-06-24.0
309145 -11	FMW-03-17.0
309145 -12	FMW-03-22.0

All quality control requirements were acceptable.

Date of Report: 09/14/23
Date Received: 09/12/23
Project: 7602 and 7702 River Road East 2220-008, F&BI 309145
Date Extracted: 09/13/23
Date Analyzed: 09/13/23

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
FMW-01-21.5 309145-01	<50	<250	88
FMW-02-17.5 309145-02	<50	<250	90
FMW-04-21.5 309145-04	<50	<250	88
FMW-05-12.5 309145-05	<50	<250	86
FMW-06-17.5 309145-09	<50	<250	87
FMW-03-17.0 309145-11	<50	<250	91
Method Blank 03-2191 MB	<50	<250	99

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-01-21.5	Client:	Farallon Consulting, LLC
Date Received:	09/12/23	Project:	7602 and 7702 River Road East
Date Extracted:	09/13/23	Lab ID:	309145-01
Date Analyzed:	09/13/23	Data File:	309145-01.043
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	35.5
Cadmium	<1
Chromium	12.5
Lead	2.15
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-02-17.5	Client:	Farallon Consulting, LLC
Date Received:	09/12/23	Project:	7602 and 7702 River Road East
Date Extracted:	09/13/23	Lab ID:	309145-02
Date Analyzed:	09/13/23	Data File:	309145-02.044
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.87
Barium	53.5
Cadmium	<1
Chromium	12.7
Lead	3.14
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-04-21.5	Client:	Farallon Consulting, LLC
Date Received:	09/12/23	Project:	7602 and 7702 River Road East
Date Extracted:	09/13/23	Lab ID:	309145-04
Date Analyzed:	09/13/23	Data File:	309145-04.045
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.55
Barium	70.1
Cadmium	<1
Chromium	14.5
Lead	3.88
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-05-12.5	Client:	Farallon Consulting, LLC
Date Received:	09/12/23	Project:	7602 and 7702 River Road East
Date Extracted:	09/13/23	Lab ID:	309145-05
Date Analyzed:	09/13/23	Data File:	309145-05.046
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.82
Barium	29.4
Cadmium	<1
Chromium	14.3
Lead	6.31
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-06-17.5	Client:	Farallon Consulting, LLC
Date Received:	09/12/23	Project:	7602 and 7702 River Road East
Date Extracted:	09/13/23	Lab ID:	309145-09
Date Analyzed:	09/13/23	Data File:	309145-09.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.71
Barium	20.3
Cadmium	<1
Chromium	10.0
Lead	1.05
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-03-17.0	Client:	Farallon Consulting, LLC
Date Received:	09/12/23	Project:	7602 and 7702 River Road East
Date Extracted:	09/13/23	Lab ID:	309145-11
Date Analyzed:	09/13/23	Data File:	309145-11.048
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.01
Barium	52.3
Cadmium	<1
Chromium	13.9
Lead	8.37
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	NA	Project:	7602 and 7702 River Road East
Date Extracted:	09/13/23	Lab ID:	I3-703 mb2
Date Analyzed:	09/13/23	Data File:	I3-703 mb2.042
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Date of Report: 09/14/23
Date Received: 09/12/23
Project: 7602 and 7702 River Road East 2220-008, F&BI 309145

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 309145-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	104	106	63-146	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	100	77-123

Date of Report: 09/14/23
Date Received: 09/12/23
Project: 7602 and 7702 River Road East 2220-008, F&BI 309145

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 309127-02 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	11.2	91 b	190 b	75-125	70 b
Barium	mg/kg (ppm)	50	159	106 b	184 b	75-125	54 b
Cadmium	mg/kg (ppm)	10	<5	99	114	75-125	14
Chromium	mg/kg (ppm)	50	104	76 b	119 b	75-125	44 b
Lead	mg/kg (ppm)	50	104	68 b	131 b	75-125	63 b
Mercury	mg/kg (ppm	5	<5	91	108	75-125	17
Selenium	mg/kg (ppm)	5	<5	76	89	75-125	16
Silver	mg/kg (ppm)	10	<5	93	109	75-125	16

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	97	80-120
Barium	mg/kg (ppm)	50	102	80-120
Cadmium	mg/kg (ppm)	10	100	80-120
Chromium	mg/kg (ppm)	50	113	80-120
Lead	mg/kg (ppm)	50	102	80-120
Mercury	mg/kg (ppm)	5	102	80-120
Selenium	mg/kg (ppm)	5	99	80-120
Silver	mg/kg (ppm)	10	100	80-120

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 standard reporting limit. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

SAMPLE CHAIN OF CUSTODY

~~309146~~ (AP) 309145

09/12/23

N2/VS-A2

Page # 1 of 2

Report To Peter Kingston

Company Farallon Consulting

Address 975 5th Ave NW

City, State, ZIP Issaquah, WA 98027

Phone _____ Email pkingston@farallonconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: 7602 and 7702 River Road East

PO #: 2220-008

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- ☐ Standard turnaround
- ☒ RUSH 24 TAT
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	RCRA 8 Metals				Notes
FMW-01-21.5	01 A-E	9/11/23	0930	Soil	5	X							X				
FMW-02-17.5	02	"	1130	"	"	X							X				
FMW-02-22.5	03	"	1140	"	"												
FMW-04-21.5	04	"	1440	"	"	X							X				
FMW-05-12.5	05	9/12/23	0755	"	"	X							X				
FMW-05-17.5	06	"	0820	"	"												
FMW-05-22.5	07	"	0830	"	"												
FMW-06-12.5	08	"	1025	"	"												
FMW-06-17.5	09	"	1030	"	"	X							X				
FMW-06-24.0	10	"	1040	"	"												

Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Michael Ysaguirre	FLN	~~1551~~ 9/12/23	1551
Received by:	MATT TRUONG	F&BI	9/12/23	1551
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
Ph. (206) 285-8282

309146 (AP) 309145

SAMPLE CHAIN OF CUSTODY

09/12/23

N2/VS-A2

Report To Peter Kingston

Company Farallon Consulting

Address 975 5th Ave NW

City, State, ZIP Issaquah, WA 98027

Phone _____ Email pkingston@farallonconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: 7602 and 7702 River Road East

PO #: 2220-008

REMARKS: Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- ☐ Standard turnaround
- ☒ RUSH 24 hr TAT

Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other _____

Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	RCRA 8 Metals				Notes
FMW-03-17.0	11 A-E	9/12/23	1125	Soil	5	X							X				
FMW-03-22.0	12 ↓	↓	1135	↓	↓												

Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Michael Ysaguirre	FLN	9/12/23	1551
Received by:	NHUT TRUONG	F&B I	9/12/23	1551
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
Ph. (206) 285-8282

ANALYTICAL REPORT

October 17, 2022

BBG Assessment

Sample Delivery Group:	L1541543
Samples Received:	09/30/2022
Project Number:	0522013017
Description:	7602-7703 River Rd
Site:	PUYALLUP, WA
Report To:	Hannah Knapp 4615 Southwest Freeway Suite 400 Houston, TX 77027

Entire Report Reviewed By:

Heather J Wagner
Project Manager

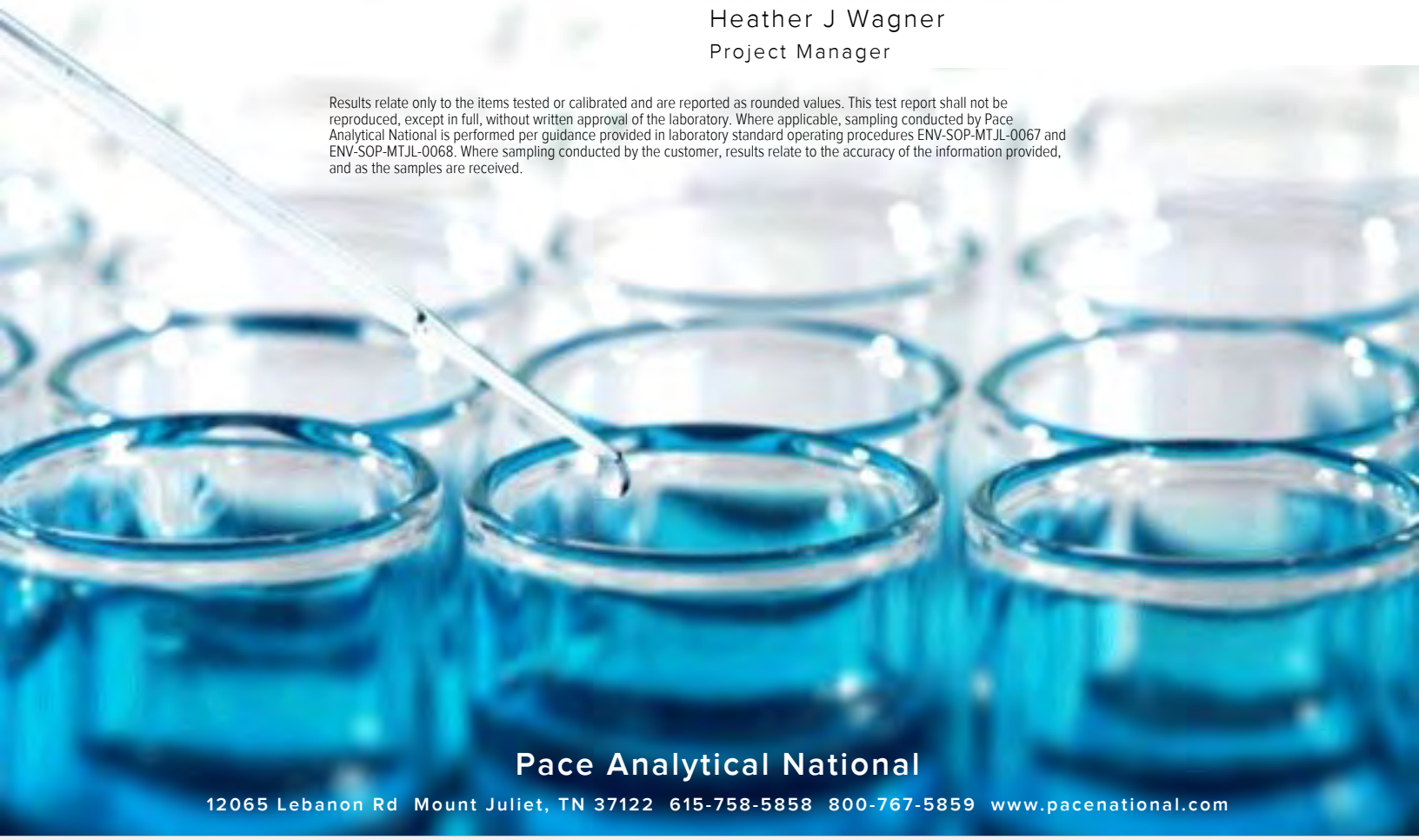


TABLE OF CONTENTS

B1-S1-8 L1541543-01 Solid

Collected by: John Ramus | Collected date/time: 09/28/22 10:31 | Received date/time: 09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1936186	1	10/04/22 08:02	10/04/22 08:07	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1937301	25.3	09/28/22 10:31	10/04/22 20:19	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1938713	1	09/28/22 10:31	10/07/22 03:49	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1938026	1	10/06/22 05:57	10/06/22 15:38	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1938034	1	10/06/22 05:02	10/07/22 18:55	JRM	Mt. Juliet, TN

B2-S1-4 L1541543-02 Solid

Collected by: John Ramus | Collected date/time: 09/28/22 12:50 | Received date/time: 09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1936186	1	10/04/22 08:02	10/04/22 08:07	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1937301	25	09/28/22 12:50	10/04/22 20:40	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1938713	1	09/28/22 12:50	10/07/22 04:07	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1938026	1	10/06/22 05:57	10/06/22 16:15	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1938034	1	10/06/22 05:02	10/07/22 19:13	JRM	Mt. Juliet, TN

B2-S2-7 L1541543-03 Solid

Collected by: John Ramus | Collected date/time: 09/28/22 12:54 | Received date/time: 09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1936186	1	10/04/22 08:02	10/04/22 08:07	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1937301	25	09/28/22 12:54	10/04/22 21:00	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1938713	1	09/28/22 12:54	10/07/22 04:26	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1938026	1	10/06/22 05:57	10/06/22 17:08	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1938034	1	10/06/22 05:02	10/06/22 20:00	JMB	Mt. Juliet, TN

B3-S1-16 L1541543-04 Solid

Collected by: John Ramus | Collected date/time: 09/28/22 14:44 | Received date/time: 09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1936186	1	10/04/22 08:02	10/04/22 08:07	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1937301	25	09/28/22 14:44	10/04/22 21:21	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1938713	1	09/28/22 14:44	10/07/22 04:45	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1938026	1	10/06/22 05:57	10/06/22 15:25	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1938035	1	10/06/22 05:26	10/06/22 17:37	JRM	Mt. Juliet, TN

B4-S1-16 L1541543-05 Solid

Collected by: John Ramus | Collected date/time: 09/28/22 15:55 | Received date/time: 09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1936186	1	10/04/22 08:02	10/04/22 08:07	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1937301	25	09/28/22 15:55	10/04/22 21:41	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1938713	1.15	09/28/22 15:55	10/07/22 05:04	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1938026	1	10/06/22 05:57	10/06/22 16:42	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1938035	1	10/06/22 05:26	10/06/22 21:05	JRM	Mt. Juliet, TN

B5-S1-8 L1541543-06 Solid

Collected by: John Ramus | Collected date/time: 09/28/22 17:24 | Received date/time: 09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1936191	1	10/04/22 12:07	10/04/22 12:27	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1937301	25	09/28/22 17:24	10/04/22 22:02	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1938713	1	09/28/22 17:24	10/07/22 05:22	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1938026	1	10/06/22 05:57	10/06/22 15:38	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1938035	1	10/06/22 05:26	10/06/22 17:54	JRM	Mt. Juliet, TN

B1-W1 L1541543-07 GW

Collected by: John Ramus | Collected date/time: 09/28/22 10:44 | Received date/time: 09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1937365	1	10/05/22 05:09	10/05/22 05:09	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1937533	1	10/05/22 13:35	10/05/22 13:35	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1937473	1	10/06/22 09:30	10/06/22 19:08	HLJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1936774	1	10/05/22 09:40	10/06/22 14:05	AMG	Mt. Juliet, TN

B3-W1 L1541543-08 GW

Collected by: John Ramus | Collected date/time: 09/28/22 15:10 | Received date/time: 09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1937365	1	10/05/22 05:31	10/05/22 05:31	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1937533	1	10/05/22 13:56	10/05/22 13:56	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1937473	1	10/06/22 09:30	10/06/22 19:34	HLJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1936774	1	10/05/22 09:40	10/06/22 14:23	AMG	Mt. Juliet, TN

B4-W1 L1541543-09 GW

Collected by: John Ramus | Collected date/time: 09/28/22 16:32 | Received date/time: 09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1937365	1	10/05/22 05:53	10/05/22 05:53	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1937533	1	10/05/22 14:17	10/05/22 14:17	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1937473	1	10/06/22 09:30	10/06/22 20:00	HLJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1936774	1	10/05/22 09:40	10/06/22 14:40	AMG	Mt. Juliet, TN

B5-W1 L1541543-10 GW

Collected by: John Ramus | Collected date/time: 09/28/22 17:36 | Received date/time: 09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1937365	1	10/05/22 06:15	10/05/22 06:15	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1937533	1	10/05/22 14:38	10/05/22 14:38	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1937473	1	10/06/22 09:30	10/06/22 20:26	HLJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1936774	1	10/05/22 09:40	10/06/22 14:58	AMG	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Heather J Wagner
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.5		1	10/04/2022 08:07	WG1936186

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Gasoline Range Organics-NWTPH	15.0		3.91	25.3	10/04/2022 20:19	WG1937301
(S) a,a,a-Trifluorotoluene(FID)	*101*		*77.0-120*		*10/04/2022 20:19*	WG1937301

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0797	1	10/07/2022 03:49	WG1938713
Acrylonitrile	ND		0.0199	1	10/07/2022 03:49	WG1938713
Benzene	ND		0.00159	1	10/07/2022 03:49	WG1938713
Bromobenzene	ND		0.0199	1	10/07/2022 03:49	WG1938713
Bromodichloromethane	ND		0.00399	1	10/07/2022 03:49	WG1938713
Bromoform	ND		0.0399	1	10/07/2022 03:49	WG1938713
Bromomethane	ND		0.0199	1	10/07/2022 03:49	WG1938713
n-Butylbenzene	ND		0.0199	1	10/07/2022 03:49	WG1938713
sec-Butylbenzene	ND		0.0199	1	10/07/2022 03:49	WG1938713
tert-Butylbenzene	ND		0.00797	1	10/07/2022 03:49	WG1938713
Carbon tetrachloride	ND		0.00797	1	10/07/2022 03:49	WG1938713
Chlorobenzene	ND		0.00399	1	10/07/2022 03:49	WG1938713
Chlorodibromomethane	ND		0.00399	1	10/07/2022 03:49	WG1938713
Chloroethane	ND		0.00797	1	10/07/2022 03:49	WG1938713
Chloroform	ND		0.00399	1	10/07/2022 03:49	WG1938713
Chloromethane	ND	J3	0.0199	1	10/07/2022 03:49	WG1938713
2-Chlorotoluene	ND		0.00399	1	10/07/2022 03:49	WG1938713
4-Chlorotoluene	ND		0.00797	1	10/07/2022 03:49	WG1938713
1,2-Dibromo-3-Chloropropane	ND	J3	0.0399	1	10/07/2022 03:49	WG1938713
1,2-Dibromoethane	ND		0.00399	1	10/07/2022 03:49	WG1938713
Dibromomethane	ND		0.00797	1	10/07/2022 03:49	WG1938713
1,2-Dichlorobenzene	ND		0.00797	1	10/07/2022 03:49	WG1938713
1,3-Dichlorobenzene	ND		0.00797	1	10/07/2022 03:49	WG1938713
1,4-Dichlorobenzene	ND		0.00797	1	10/07/2022 03:49	WG1938713
Dichlorodifluoromethane	ND	C3	0.00399	1	10/07/2022 03:49	WG1938713
1,1-Dichloroethane	ND		0.00399	1	10/07/2022 03:49	WG1938713
1,2-Dichloroethane	ND	C3	0.00399	1	10/07/2022 03:49	WG1938713
1,1-Dichloroethene	ND		0.00399	1	10/07/2022 03:49	WG1938713
cis-1,2-Dichloroethene	ND		0.00399	1	10/07/2022 03:49	WG1938713
trans-1,2-Dichloroethene	ND		0.00797	1	10/07/2022 03:49	WG1938713
1,2-Dichloropropane	ND		0.00797	1	10/07/2022 03:49	WG1938713
1,1-Dichloropropene	ND		0.00399	1	10/07/2022 03:49	WG1938713
1,3-Dichloropropane	ND		0.00797	1	10/07/2022 03:49	WG1938713
cis-1,3-Dichloropropene	ND		0.00399	1	10/07/2022 03:49	WG1938713
trans-1,3-Dichloropropene	ND		0.00797	1	10/07/2022 03:49	WG1938713
2,2-Dichloropropane	ND	C3	0.00399	1	10/07/2022 03:49	WG1938713
Di-isopropyl ether	ND	C3	0.00159	1	10/07/2022 03:49	WG1938713
Ethylbenzene	ND		0.00399	1	10/07/2022 03:49	WG1938713
Hexachloro-1,3-butadiene	ND		0.0399	1	10/07/2022 03:49	WG1938713
Isopropylbenzene	ND		0.00399	1	10/07/2022 03:49	WG1938713
p-Isopropyltoluene	ND		0.00797	1	10/07/2022 03:49	WG1938713
2-Butanone (MEK)	ND	C3	0.159	1	10/07/2022 03:49	WG1938713
Methylene Chloride	ND		0.0399	1	10/07/2022 03:49	WG1938713
4-Methyl-2-pentanone (MIBK)	ND		0.0399	1	10/07/2022 03:49	WG1938713

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND	C3	0.00159	1	10/07/2022 03:49	WG1938713
Naphthalene	ND	J3	0.0199	1	10/07/2022 03:49	WG1938713
n-Propylbenzene	ND		0.00797	1	10/07/2022 03:49	WG1938713
Styrene	ND		0.0199	1	10/07/2022 03:49	WG1938713
1,1,1,2-Tetrachloroethane	ND		0.00399	1	10/07/2022 03:49	WG1938713
1,1,2,2-Tetrachloroethane	ND		0.00399	1	10/07/2022 03:49	WG1938713
1,1,2-Trichlorotrifluoroethane	ND		0.00399	1	10/07/2022 03:49	WG1938713
Tetrachloroethene	ND		0.00399	1	10/07/2022 03:49	WG1938713
Toluene	ND		0.00797	1	10/07/2022 03:49	WG1938713
1,2,3-Trichlorobenzene	ND		0.0199	1	10/07/2022 03:49	WG1938713
1,2,4-Trichlorobenzene	ND		0.0199	1	10/07/2022 03:49	WG1938713
1,1,1-Trichloroethane	ND	C3	0.00399	1	10/07/2022 03:49	WG1938713
1,1,2-Trichloroethane	ND		0.00399	1	10/07/2022 03:49	WG1938713
Trichloroethene	ND		0.00159	1	10/07/2022 03:49	WG1938713
Trichlorofluoromethane	ND		0.00399	1	10/07/2022 03:49	WG1938713
1,2,3-Trichloropropane	ND	C3 J3	0.0199	1	10/07/2022 03:49	WG1938713
1,2,4-Trimethylbenzene	ND		0.00797	1	10/07/2022 03:49	WG1938713
1,2,3-Trimethylbenzene	ND		0.00797	1	10/07/2022 03:49	WG1938713
1,3,5-Trimethylbenzene	ND		0.00797	1	10/07/2022 03:49	WG1938713
Vinyl chloride	ND		0.00399	1	10/07/2022 03:49	WG1938713
Xylenes, Total	ND		0.0104	1	10/07/2022 03:49	WG1938713
(S) Toluene-d8	*108*		*75.0-131*		*10/07/2022 03:49*	WG1938713
(S) 4-Bromofluorobenzene	*97.8*		*67.0-138*		*10/07/2022 03:49*	WG1938713
(S) 1,2-Dichloroethane-d4	*78.8*		*70.0-130*		*10/07/2022 03:49*	WG1938713

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	ND		5.10	1	10/06/2022 15:38	WG1938026
Residual Range Organics (RRO)	ND		12.7	1	10/06/2022 15:38	WG1938026
(S) o-Terphenyl	*72.5*		*18.0-148*		*10/06/2022 15:38*	WG1938026

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00765	1	10/07/2022 18:55	WG1938034
Acenaphthene	ND		0.00765	1	10/07/2022 18:55	WG1938034
Acenaphthylene	ND		0.00765	1	10/07/2022 18:55	WG1938034
Benzo(a)anthracene	ND		0.00765	1	10/07/2022 18:55	WG1938034
Benzo(a)pyrene	ND		0.00765	1	10/07/2022 18:55	WG1938034
Benzo(b)fluoranthene	ND		0.00765	1	10/07/2022 18:55	WG1938034
Benzo(g,h,i)perylene	ND		0.00765	1	10/07/2022 18:55	WG1938034
Benzo(k)fluoranthene	ND		0.00765	1	10/07/2022 18:55	WG1938034
Chrysene	ND		0.00765	1	10/07/2022 18:55	WG1938034
Dibenz(a,h)anthracene	ND		0.00765	1	10/07/2022 18:55	WG1938034
Fluoranthene	ND		0.00765	1	10/07/2022 18:55	WG1938034
Fluorene	ND		0.00765	1	10/07/2022 18:55	WG1938034
Indeno(1,2,3-cd)pyrene	ND		0.00765	1	10/07/2022 18:55	WG1938034
Naphthalene	ND		0.0255	1	10/07/2022 18:55	WG1938034
Phenanthrene	0.0134		0.00765	1	10/07/2022 18:55	WG1938034
Pyrene	ND		0.00765	1	10/07/2022 18:55	WG1938034
1-Methylnaphthalene	ND		0.0255	1	10/07/2022 18:55	WG1938034
2-Methylnaphthalene	ND		0.0255	1	10/07/2022 18:55	WG1938034
2-Chloronaphthalene	ND		0.0255	1	10/07/2022 18:55	WG1938034
(S) p-Terphenyl-d14	*74.5*		*23.0-120*		*10/07/2022 18:55*	WG1938034

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) Nitrobenzene-d5	*78.5*		*14.0-149*		*10/07/2022 18:55*	WG1938034
(S) 2-Fluorobiphenyl	*82.0*		*34.0-125*		*10/07/2022 18:55*	WG1938034

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.3		1	10/04/2022 08:07	WG1936186

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Gasoline Range Organics-NWTPH	ND		3.27	25	10/04/2022 20:40	WG1937301
(S) a,a,a-Trifluorotoluene(FID)	*92.8*		*77.0-120*		*10/04/2022 20:40*	WG1937301

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0657	1	10/07/2022 04:07	WG1938713
Acrylonitrile	ND		0.0164	1	10/07/2022 04:07	WG1938713
Benzene	ND		0.00131	1	10/07/2022 04:07	WG1938713
Bromobenzene	ND		0.0164	1	10/07/2022 04:07	WG1938713
Bromodichloromethane	ND		0.00329	1	10/07/2022 04:07	WG1938713
Bromoform	ND		0.0329	1	10/07/2022 04:07	WG1938713
Bromomethane	ND		0.0164	1	10/07/2022 04:07	WG1938713
n-Butylbenzene	ND		0.0164	1	10/07/2022 04:07	WG1938713
sec-Butylbenzene	ND		0.0164	1	10/07/2022 04:07	WG1938713
tert-Butylbenzene	ND		0.00657	1	10/07/2022 04:07	WG1938713
Carbon tetrachloride	ND		0.00657	1	10/07/2022 04:07	WG1938713
Chlorobenzene	ND		0.00329	1	10/07/2022 04:07	WG1938713
Chlorodibromomethane	ND		0.00329	1	10/07/2022 04:07	WG1938713
Chloroethane	ND		0.00657	1	10/07/2022 04:07	WG1938713
Chloroform	ND		0.00329	1	10/07/2022 04:07	WG1938713
Chloromethane	ND	J3	0.0164	1	10/07/2022 04:07	WG1938713
2-Chlorotoluene	ND		0.00329	1	10/07/2022 04:07	WG1938713
4-Chlorotoluene	ND		0.00657	1	10/07/2022 04:07	WG1938713
1,2-Dibromo-3-Chloropropane	ND	J3	0.0329	1	10/07/2022 04:07	WG1938713
1,2-Dibromoethane	ND		0.00329	1	10/07/2022 04:07	WG1938713
Dibromomethane	ND		0.00657	1	10/07/2022 04:07	WG1938713
1,2-Dichlorobenzene	ND		0.00657	1	10/07/2022 04:07	WG1938713
1,3-Dichlorobenzene	ND		0.00657	1	10/07/2022 04:07	WG1938713
1,4-Dichlorobenzene	ND		0.00657	1	10/07/2022 04:07	WG1938713
Dichlorodifluoromethane	ND	C3	0.00329	1	10/07/2022 04:07	WG1938713
1,1-Dichloroethane	ND		0.00329	1	10/07/2022 04:07	WG1938713
1,2-Dichloroethane	ND	C3	0.00329	1	10/07/2022 04:07	WG1938713
1,1-Dichloroethene	ND		0.00329	1	10/07/2022 04:07	WG1938713
cis-1,2-Dichloroethene	ND		0.00329	1	10/07/2022 04:07	WG1938713
trans-1,2-Dichloroethene	ND		0.00657	1	10/07/2022 04:07	WG1938713
1,2-Dichloropropane	ND		0.00657	1	10/07/2022 04:07	WG1938713
1,1-Dichloropropene	ND		0.00329	1	10/07/2022 04:07	WG1938713
1,3-Dichloropropane	ND		0.00657	1	10/07/2022 04:07	WG1938713
cis-1,3-Dichloropropene	ND		0.00329	1	10/07/2022 04:07	WG1938713
trans-1,3-Dichloropropene	ND		0.00657	1	10/07/2022 04:07	WG1938713
2,2-Dichloropropane	ND	C3	0.00329	1	10/07/2022 04:07	WG1938713
Di-isopropyl ether	ND	C3	0.00131	1	10/07/2022 04:07	WG1938713
Ethylbenzene	ND		0.00329	1	10/07/2022 04:07	WG1938713
Hexachloro-1,3-butadiene	ND		0.0329	1	10/07/2022 04:07	WG1938713
Isopropylbenzene	ND		0.00329	1	10/07/2022 04:07	WG1938713
p-Isopropyltoluene	ND		0.00657	1	10/07/2022 04:07	WG1938713
2-Butanone (MEK)	ND	C3	0.131	1	10/07/2022 04:07	WG1938713
Methylene Chloride	ND		0.0329	1	10/07/2022 04:07	WG1938713
4-Methyl-2-pentanone (MIBK)	ND		0.0329	1	10/07/2022 04:07	WG1938713

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND	C3	0.00131	1	10/07/2022 04:07	WG1938713
Naphthalene	ND	J3	0.0164	1	10/07/2022 04:07	WG1938713
n-Propylbenzene	ND		0.00657	1	10/07/2022 04:07	WG1938713
Styrene	ND		0.0164	1	10/07/2022 04:07	WG1938713
1,1,1,2-Tetrachloroethane	ND		0.00329	1	10/07/2022 04:07	WG1938713
1,1,2,2-Tetrachloroethane	ND		0.00329	1	10/07/2022 04:07	WG1938713
1,1,2-Trichlorotrifluoroethane	ND		0.00329	1	10/07/2022 04:07	WG1938713
Tetrachloroethene	ND		0.00329	1	10/07/2022 04:07	WG1938713
Toluene	ND		0.00657	1	10/07/2022 04:07	WG1938713
1,2,3-Trichlorobenzene	ND		0.0164	1	10/07/2022 04:07	WG1938713
1,2,4-Trichlorobenzene	ND		0.0164	1	10/07/2022 04:07	WG1938713
1,1,1-Trichloroethane	ND	C3	0.00329	1	10/07/2022 04:07	WG1938713
1,1,2-Trichloroethane	ND		0.00329	1	10/07/2022 04:07	WG1938713
Trichloroethene	ND		0.00131	1	10/07/2022 04:07	WG1938713
Trichlorofluoromethane	ND		0.00329	1	10/07/2022 04:07	WG1938713
1,2,3-Trichloropropane	ND	C3 J3	0.0164	1	10/07/2022 04:07	WG1938713
1,2,4-Trimethylbenzene	ND		0.00657	1	10/07/2022 04:07	WG1938713
1,2,3-Trimethylbenzene	ND		0.00657	1	10/07/2022 04:07	WG1938713
1,3,5-Trimethylbenzene	ND		0.00657	1	10/07/2022 04:07	WG1938713
Vinyl chloride	ND		0.00329	1	10/07/2022 04:07	WG1938713
Xylenes, Total	ND		0.00854	1	10/07/2022 04:07	WG1938713
(S) Toluene-d8	*106*		*75.0-131*		*10/07/2022 04:07*	WG1938713
(S) 4-Bromofluorobenzene	*97.9*		*67.0-138*		*10/07/2022 04:07*	WG1938713
(S) 1,2-Dichloroethane-d4	*79.5*		*70.0-130*		*10/07/2022 04:07*	WG1938713

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	ND		4.29	1	10/06/2022 16:15	WG1938026
Residual Range Organics (RRO)	14.6		10.7	1	10/06/2022 16:15	WG1938026
(S) o-Terphenyl	*52.7*		*18.0-148*		*10/06/2022 16:15*	WG1938026

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Acenaphthene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Acenaphthylene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Benzo(a)anthracene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Benzo(a)pyrene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Benzo(b)fluoranthene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Benzo(g,h,i)perylene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Benzo(k)fluoranthene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Chrysene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Dibenz(a,h)anthracene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Fluoranthene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Fluorene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Indeno(1,2,3-cd)pyrene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Naphthalene	ND		0.0214	1	10/07/2022 19:13	WG1938034
Phenanthrene	ND		0.00643	1	10/07/2022 19:13	WG1938034
Pyrene	ND		0.00643	1	10/07/2022 19:13	WG1938034
1-Methylnaphthalene	ND		0.0214	1	10/07/2022 19:13	WG1938034
2-Methylnaphthalene	ND		0.0214	1	10/07/2022 19:13	WG1938034
2-Chloronaphthalene	ND		0.0214	1	10/07/2022 19:13	WG1938034
(S) p-Terphenyl-d14	*94.9*		*23.0-120*		*10/07/2022 19:13*	WG1938034

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) Nitrobenzene-d5	*94.2*		*14.0-149*		*10/07/2022 19:13*	WG1938034
(S) 2-Fluorobiphenyl	*94.5*		*34.0-125*		*10/07/2022 19:13*	WG1938034

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.9		1	10/04/2022 08:07	WG1936186

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Gasoline Range Organics-NWTPH	ND		3.32	25	10/04/2022 21:00	WG1937301
(S) a,a,a-Trifluorotoluene(FID)	*92.2*		*77.0-120*		*10/04/2022 21:00*	WG1937301

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0671	1	10/07/2022 04:26	WG1938713
Acrylonitrile	ND		0.0168	1	10/07/2022 04:26	WG1938713
Benzene	ND		0.00134	1	10/07/2022 04:26	WG1938713
Bromobenzene	ND		0.0168	1	10/07/2022 04:26	WG1938713
Bromodichloromethane	ND		0.00335	1	10/07/2022 04:26	WG1938713
Bromoform	ND		0.0335	1	10/07/2022 04:26	WG1938713
Bromomethane	ND		0.0168	1	10/07/2022 04:26	WG1938713
n-Butylbenzene	ND		0.0168	1	10/07/2022 04:26	WG1938713
sec-Butylbenzene	ND		0.0168	1	10/07/2022 04:26	WG1938713
tert-Butylbenzene	ND		0.00671	1	10/07/2022 04:26	WG1938713
Carbon tetrachloride	ND		0.00671	1	10/07/2022 04:26	WG1938713
Chlorobenzene	ND		0.00335	1	10/07/2022 04:26	WG1938713
Chlorodibromomethane	ND		0.00335	1	10/07/2022 04:26	WG1938713
Chloroethane	ND		0.00671	1	10/07/2022 04:26	WG1938713
Chloroform	ND		0.00335	1	10/07/2022 04:26	WG1938713
Chloromethane	ND	J3	0.0168	1	10/07/2022 04:26	WG1938713
2-Chlorotoluene	ND		0.00335	1	10/07/2022 04:26	WG1938713
4-Chlorotoluene	ND		0.00671	1	10/07/2022 04:26	WG1938713
1,2-Dibromo-3-Chloropropane	ND	J3	0.0335	1	10/07/2022 04:26	WG1938713
1,2-Dibromoethane	ND		0.00335	1	10/07/2022 04:26	WG1938713
Dibromomethane	ND		0.00671	1	10/07/2022 04:26	WG1938713
1,2-Dichlorobenzene	ND		0.00671	1	10/07/2022 04:26	WG1938713
1,3-Dichlorobenzene	ND		0.00671	1	10/07/2022 04:26	WG1938713
1,4-Dichlorobenzene	ND		0.00671	1	10/07/2022 04:26	WG1938713
Dichlorodifluoromethane	ND	C3	0.00335	1	10/07/2022 04:26	WG1938713
1,1-Dichloroethane	ND		0.00335	1	10/07/2022 04:26	WG1938713
1,2-Dichloroethane	ND	C3	0.00335	1	10/07/2022 04:26	WG1938713
1,1-Dichloroethene	ND		0.00335	1	10/07/2022 04:26	WG1938713
cis-1,2-Dichloroethene	ND		0.00335	1	10/07/2022 04:26	WG1938713
trans-1,2-Dichloroethene	ND		0.00671	1	10/07/2022 04:26	WG1938713
1,2-Dichloropropane	ND		0.00671	1	10/07/2022 04:26	WG1938713
1,1-Dichloropropene	ND		0.00335	1	10/07/2022 04:26	WG1938713
1,3-Dichloropropane	ND		0.00671	1	10/07/2022 04:26	WG1938713
cis-1,3-Dichloropropene	ND		0.00335	1	10/07/2022 04:26	WG1938713
trans-1,3-Dichloropropene	ND		0.00671	1	10/07/2022 04:26	WG1938713
2,2-Dichloropropane	ND	C3	0.00335	1	10/07/2022 04:26	WG1938713
Di-isopropyl ether	ND	C3	0.00134	1	10/07/2022 04:26	WG1938713
Ethylbenzene	ND		0.00335	1	10/07/2022 04:26	WG1938713
Hexachloro-1,3-butadiene	ND		0.0335	1	10/07/2022 04:26	WG1938713
Isopropylbenzene	ND		0.00335	1	10/07/2022 04:26	WG1938713
p-Isopropyltoluene	ND		0.00671	1	10/07/2022 04:26	WG1938713
2-Butanone (MEK)	ND	C3	0.134	1	10/07/2022 04:26	WG1938713
Methylene Chloride	ND		0.0335	1	10/07/2022 04:26	WG1938713
4-Methyl-2-pentanone (MIBK)	ND		0.0335	1	10/07/2022 04:26	WG1938713

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND	C3	0.00134	1	10/07/2022 04:26	WG1938713
Naphthalene	ND	J3	0.0168	1	10/07/2022 04:26	WG1938713
n-Propylbenzene	ND		0.00671	1	10/07/2022 04:26	WG1938713
Styrene	ND		0.0168	1	10/07/2022 04:26	WG1938713
1,1,1,2-Tetrachloroethane	ND		0.00335	1	10/07/2022 04:26	WG1938713
1,1,2,2-Tetrachloroethane	ND		0.00335	1	10/07/2022 04:26	WG1938713
1,1,2-Trichlorotrifluoroethane	ND		0.00335	1	10/07/2022 04:26	WG1938713
Tetrachloroethene	ND		0.00335	1	10/07/2022 04:26	WG1938713
Toluene	ND		0.00671	1	10/07/2022 04:26	WG1938713
1,2,3-Trichlorobenzene	ND		0.0168	1	10/07/2022 04:26	WG1938713
1,2,4-Trichlorobenzene	ND		0.0168	1	10/07/2022 04:26	WG1938713
1,1,1-Trichloroethane	ND	C3	0.00335	1	10/07/2022 04:26	WG1938713
1,1,2-Trichloroethane	ND		0.00335	1	10/07/2022 04:26	WG1938713
Trichloroethene	ND		0.00134	1	10/07/2022 04:26	WG1938713
Trichlorofluoromethane	ND		0.00335	1	10/07/2022 04:26	WG1938713
1,2,3-Trichloropropane	ND	C3 J3	0.0168	1	10/07/2022 04:26	WG1938713
1,2,4-Trimethylbenzene	ND		0.00671	1	10/07/2022 04:26	WG1938713
1,2,3-Trimethylbenzene	ND		0.00671	1	10/07/2022 04:26	WG1938713
1,3,5-Trimethylbenzene	ND		0.00671	1	10/07/2022 04:26	WG1938713
Vinyl chloride	ND		0.00335	1	10/07/2022 04:26	WG1938713
Xylenes, Total	ND		0.00872	1	10/07/2022 04:26	WG1938713
(S) Toluene-d8	*104*		*75.0-131*		*10/07/2022 04:26*	WG1938713
(S) 4-Bromofluorobenzene	*92.2*		*67.0-138*		*10/07/2022 04:26*	WG1938713
(S) 1,2-Dichloroethane-d4	*76.4*		*70.0-130*		*10/07/2022 04:26*	WG1938713

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	24.2		4.31	1	10/06/2022 17:08	WG1938026
Residual Range Organics (RRO)	152		10.8	1	10/06/2022 17:08	WG1938026
(S) o-Terphenyl	*45.9*		*18.0-148*		*10/06/2022 17:08*	WG1938026

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Acenaphthene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Acenaphthylene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Benzo(a)anthracene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Benzo(a)pyrene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Benzo(b)fluoranthene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Benzo(g,h,i)perylene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Benzo(k)fluoranthene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Chrysene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Dibenz(a,h)anthracene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Fluoranthene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Fluorene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Indeno(1,2,3-cd)pyrene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Naphthalene	ND		0.0215	1	10/06/2022 20:00	WG1938034
Phenanthrene	ND		0.00646	1	10/06/2022 20:00	WG1938034
Pyrene	ND		0.00646	1	10/06/2022 20:00	WG1938034
1-Methylnaphthalene	ND		0.0215	1	10/06/2022 20:00	WG1938034
2-Methylnaphthalene	ND		0.0215	1	10/06/2022 20:00	WG1938034
2-Chloronaphthalene	ND		0.0215	1	10/06/2022 20:00	WG1938034
(S) p-Terphenyl-d14	*78.6*		*23.0-120*		*10/06/2022 20:00*	WG1938034

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) Nitrobenzene-d5	*70.9*		*14.0-149*		*10/06/2022 20:00*	WG1938034
(S) 2-Fluorobiphenyl	*82.0*		*34.0-125*		*10/06/2022 20:00*	WG1938034

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.1		1	10/04/2022 08:07	WG1936186

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Gasoline Range Organics-NWTPH	ND		3.81	25	10/04/2022 21:21	WG1937301
(S) a,a,a-Trifluorotoluene(FID)	*93.0*		*77.0-120*		*10/04/2022 21:21*	WG1937301

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0766	1	10/07/2022 04:45	WG1938713
Acrylonitrile	ND		0.0192	1	10/07/2022 04:45	WG1938713
Benzene	ND		0.00153	1	10/07/2022 04:45	WG1938713
Bromobenzene	ND		0.0192	1	10/07/2022 04:45	WG1938713
Bromodichloromethane	ND		0.00383	1	10/07/2022 04:45	WG1938713
Bromoform	ND		0.0383	1	10/07/2022 04:45	WG1938713
Bromomethane	ND		0.0192	1	10/07/2022 04:45	WG1938713
n-Butylbenzene	ND		0.0192	1	10/07/2022 04:45	WG1938713
sec-Butylbenzene	ND		0.0192	1	10/07/2022 04:45	WG1938713
tert-Butylbenzene	ND		0.00766	1	10/07/2022 04:45	WG1938713
Carbon tetrachloride	ND		0.00766	1	10/07/2022 04:45	WG1938713
Chlorobenzene	ND		0.00383	1	10/07/2022 04:45	WG1938713
Chlorodibromomethane	ND		0.00383	1	10/07/2022 04:45	WG1938713
Chloroethane	ND		0.00766	1	10/07/2022 04:45	WG1938713
Chloroform	ND		0.00383	1	10/07/2022 04:45	WG1938713
Chloromethane	ND	J3	0.0192	1	10/07/2022 04:45	WG1938713
2-Chlorotoluene	ND		0.00383	1	10/07/2022 04:45	WG1938713
4-Chlorotoluene	ND		0.00766	1	10/07/2022 04:45	WG1938713
1,2-Dibromo-3-Chloropropane	ND	J3	0.0383	1	10/07/2022 04:45	WG1938713
1,2-Dibromoethane	ND		0.00383	1	10/07/2022 04:45	WG1938713
Dibromomethane	ND		0.00766	1	10/07/2022 04:45	WG1938713
1,2-Dichlorobenzene	ND		0.00766	1	10/07/2022 04:45	WG1938713
1,3-Dichlorobenzene	ND		0.00766	1	10/07/2022 04:45	WG1938713
1,4-Dichlorobenzene	ND		0.00766	1	10/07/2022 04:45	WG1938713
Dichlorodifluoromethane	ND	C3	0.00383	1	10/07/2022 04:45	WG1938713
1,1-Dichloroethane	ND		0.00383	1	10/07/2022 04:45	WG1938713
1,2-Dichloroethane	ND	C3	0.00383	1	10/07/2022 04:45	WG1938713
1,1-Dichloroethene	ND		0.00383	1	10/07/2022 04:45	WG1938713
cis-1,2-Dichloroethene	ND		0.00383	1	10/07/2022 04:45	WG1938713
trans-1,2-Dichloroethene	ND		0.00766	1	10/07/2022 04:45	WG1938713
1,2-Dichloropropane	ND		0.00766	1	10/07/2022 04:45	WG1938713
1,1-Dichloropropene	ND		0.00383	1	10/07/2022 04:45	WG1938713
1,3-Dichloropropane	ND		0.00766	1	10/07/2022 04:45	WG1938713
cis-1,3-Dichloropropene	ND		0.00383	1	10/07/2022 04:45	WG1938713
trans-1,3-Dichloropropene	ND		0.00766	1	10/07/2022 04:45	WG1938713
2,2-Dichloropropane	ND	C3	0.00383	1	10/07/2022 04:45	WG1938713
Di-isopropyl ether	ND	C3	0.00153	1	10/07/2022 04:45	WG1938713
Ethylbenzene	ND		0.00383	1	10/07/2022 04:45	WG1938713
Hexachloro-1,3-butadiene	ND		0.0383	1	10/07/2022 04:45	WG1938713
Isopropylbenzene	ND		0.00383	1	10/07/2022 04:45	WG1938713
p-Isopropyltoluene	ND		0.00766	1	10/07/2022 04:45	WG1938713
2-Butanone (MEK)	ND	C3	0.153	1	10/07/2022 04:45	WG1938713
Methylene Chloride	ND		0.0383	1	10/07/2022 04:45	WG1938713
4-Methyl-2-pentanone (MIBK)	ND		0.0383	1	10/07/2022 04:45	WG1938713

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND	C3	0.00153	1	10/07/2022 04:45	WG1938713
Naphthalene	ND	J3	0.0192	1	10/07/2022 04:45	WG1938713
n-Propylbenzene	ND		0.00766	1	10/07/2022 04:45	WG1938713
Styrene	ND		0.0192	1	10/07/2022 04:45	WG1938713
1,1,1,2-Tetrachloroethane	ND		0.00383	1	10/07/2022 04:45	WG1938713
1,1,2,2-Tetrachloroethane	ND		0.00383	1	10/07/2022 04:45	WG1938713
1,1,2-Trichlorotrifluoroethane	ND		0.00383	1	10/07/2022 04:45	WG1938713
Tetrachloroethene	ND		0.00383	1	10/07/2022 04:45	WG1938713
Toluene	ND		0.00766	1	10/07/2022 04:45	WG1938713
1,2,3-Trichlorobenzene	ND		0.0192	1	10/07/2022 04:45	WG1938713
1,2,4-Trichlorobenzene	ND		0.0192	1	10/07/2022 04:45	WG1938713
1,1,1-Trichloroethane	ND	C3	0.00383	1	10/07/2022 04:45	WG1938713
1,1,2-Trichloroethane	ND		0.00383	1	10/07/2022 04:45	WG1938713
Trichloroethene	ND		0.00153	1	10/07/2022 04:45	WG1938713
Trichlorofluoromethane	ND		0.00383	1	10/07/2022 04:45	WG1938713
1,2,3-Trichloropropane	ND	C3 J3	0.0192	1	10/07/2022 04:45	WG1938713
1,2,4-Trimethylbenzene	ND		0.00766	1	10/07/2022 04:45	WG1938713
1,2,3-Trimethylbenzene	ND		0.00766	1	10/07/2022 04:45	WG1938713
1,3,5-Trimethylbenzene	ND		0.00766	1	10/07/2022 04:45	WG1938713
Vinyl chloride	ND		0.00383	1	10/07/2022 04:45	WG1938713
Xylenes, Total	ND		0.00996	1	10/07/2022 04:45	WG1938713
(S) Toluene-d8	*107*		*75.0-131*		*10/07/2022 04:45*	WG1938713
(S) 4-Bromofluorobenzene	*99.7*		*67.0-138*		*10/07/2022 04:45*	WG1938713
(S) 1,2-Dichloroethane-d4	*79.2*		*70.0-130*		*10/07/2022 04:45*	WG1938713

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	ND		4.99	1	10/06/2022 15:25	WG1938026
Residual Range Organics (RRO)	ND		12.5	1	10/06/2022 15:25	WG1938026
(S) o-Terphenyl	*72.4*		*18.0-148*		*10/06/2022 15:25*	WG1938026

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Acenaphthene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Acenaphthylene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Benzo(a)anthracene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Benzo(a)pyrene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Benzo(b)fluoranthene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Benzo(g,h,i)perylene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Benzo(k)fluoranthene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Chrysene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Dibenz(a,h)anthracene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Fluoranthene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Fluorene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Indeno(1,2,3-cd)pyrene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Naphthalene	ND		0.0250	1	10/06/2022 17:37	WG1938035
Phenanthrene	ND		0.00749	1	10/06/2022 17:37	WG1938035
Pyrene	ND		0.00749	1	10/06/2022 17:37	WG1938035
1-Methylnaphthalene	ND		0.0250	1	10/06/2022 17:37	WG1938035
2-Methylnaphthalene	ND		0.0250	1	10/06/2022 17:37	WG1938035
2-Chloronaphthalene	ND		0.0250	1	10/06/2022 17:37	WG1938035
(S) p-Terphenyl-d14	*85.9*		*23.0-120*		*10/06/2022 17:37*	WG1938035

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) Nitrobenzene-d5	*114*		*14.0-149*		*10/06/2022 17:37*	WG1938035
(S) 2-Fluorobiphenyl	*83.2*		*34.0-125*		*10/06/2022 17:37*	WG1938035

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	75.2		1	10/04/2022 08:07	WG1936186

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Gasoline Range Organics-NWTPH	ND		4.28	25	10/04/2022 21:41	WG1937301
(S) a,a,a-Trifluorotoluene(FID)	*92.2*		*77.0-120*		*10/04/2022 21:41*	WG1937301

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0929	1.15	10/07/2022 05:04	WG1938713
Acrylonitrile	ND		0.0233	1.15	10/07/2022 05:04	WG1938713
Benzene	ND		0.00186	1.15	10/07/2022 05:04	WG1938713
Bromobenzene	ND		0.0233	1.15	10/07/2022 05:04	WG1938713
Bromodichloromethane	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
Bromoform	ND		0.0466	1.15	10/07/2022 05:04	WG1938713
Bromomethane	ND		0.0233	1.15	10/07/2022 05:04	WG1938713
n-Butylbenzene	ND		0.0233	1.15	10/07/2022 05:04	WG1938713
sec-Butylbenzene	ND		0.0233	1.15	10/07/2022 05:04	WG1938713
tert-Butylbenzene	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
Carbon tetrachloride	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
Chlorobenzene	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
Chlorodibromomethane	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
Chloroethane	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
Chloroform	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
Chloromethane	ND	J3	0.0233	1.15	10/07/2022 05:04	WG1938713
2-Chlorotoluene	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
4-Chlorotoluene	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
1,2-Dibromo-3-Chloropropane	ND	J3	0.0466	1.15	10/07/2022 05:04	WG1938713
1,2-Dibromoethane	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
Dibromomethane	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
1,2-Dichlorobenzene	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
1,3-Dichlorobenzene	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
1,4-Dichlorobenzene	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
Dichlorodifluoromethane	ND	C3	0.00466	1.15	10/07/2022 05:04	WG1938713
1,1-Dichloroethane	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
1,2-Dichloroethane	ND	C3	0.00466	1.15	10/07/2022 05:04	WG1938713
1,1-Dichloroethene	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
cis-1,2-Dichloroethene	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
trans-1,2-Dichloroethene	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
1,2-Dichloropropane	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
1,1-Dichloropropene	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
1,3-Dichloropropane	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
cis-1,3-Dichloropropene	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
trans-1,3-Dichloropropene	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
2,2-Dichloropropane	ND	C3	0.00466	1.15	10/07/2022 05:04	WG1938713
Di-isopropyl ether	ND	C3	0.00186	1.15	10/07/2022 05:04	WG1938713
Ethylbenzene	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
Hexachloro-1,3-butadiene	ND		0.0466	1.15	10/07/2022 05:04	WG1938713
Isopropylbenzene	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
p-Isopropyltoluene	0.0116		0.00929	1.15	10/07/2022 05:04	WG1938713
2-Butanone (MEK)	ND	C3	0.186	1.15	10/07/2022 05:04	WG1938713
Methylene Chloride	ND		0.0466	1.15	10/07/2022 05:04	WG1938713
4-Methyl-2-pentanone (MIBK)	ND		0.0466	1.15	10/07/2022 05:04	WG1938713

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND	C3	0.00186	1.15	10/07/2022 05:04	WG1938713
Naphthalene	ND	J3	0.0233	1.15	10/07/2022 05:04	WG1938713
n-Propylbenzene	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
Styrene	ND		0.0233	1.15	10/07/2022 05:04	WG1938713
1,1,1,2-Tetrachloroethane	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
1,1,2,2-Tetrachloroethane	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
1,1,2-Trichlorotrifluoroethane	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
Tetrachloroethene	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
Toluene	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
1,2,3-Trichlorobenzene	ND		0.0233	1.15	10/07/2022 05:04	WG1938713
1,2,4-Trichlorobenzene	ND		0.0233	1.15	10/07/2022 05:04	WG1938713
1,1,1-Trichloroethane	ND	C3	0.00466	1.15	10/07/2022 05:04	WG1938713
1,1,2-Trichloroethane	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
Trichloroethene	ND		0.00186	1.15	10/07/2022 05:04	WG1938713
Trichlorofluoromethane	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
1,2,3-Trichloropropane	ND	C3 J3	0.0233	1.15	10/07/2022 05:04	WG1938713
1,2,4-Trimethylbenzene	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
1,2,3-Trimethylbenzene	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
1,3,5-Trimethylbenzene	ND		0.00929	1.15	10/07/2022 05:04	WG1938713
Vinyl chloride	ND		0.00466	1.15	10/07/2022 05:04	WG1938713
Xylenes, Total	ND		0.0121	1.15	10/07/2022 05:04	WG1938713
(S) Toluene-d8	*107*		*75.0-131*		*10/07/2022 05:04*	WG1938713
(S) 4-Bromofluorobenzene	*99.5*		*67.0-138*		*10/07/2022 05:04*	WG1938713
(S) 1,2-Dichloroethane-d4	*79.7*		*70.0-130*		*10/07/2022 05:04*	WG1938713

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	35.5		5.32	1	10/06/2022 16:42	WG1938026
Residual Range Organics (RRO)	29.8		13.3	1	10/06/2022 16:42	WG1938026
(S) o-Terphenyl	*36.8*		*18.0-148*		*10/06/2022 16:42*	WG1938026

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00798	1	10/06/2022 21:05	WG1938035
Acenaphthene	ND		0.00798	1	10/06/2022 21:05	WG1938035
Acenaphthylene	ND		0.00798	1	10/06/2022 21:05	WG1938035
Benzo(a)anthracene	0.0115		0.00798	1	10/06/2022 21:05	WG1938035
Benzo(a)pyrene	ND		0.00798	1	10/06/2022 21:05	WG1938035
Benzo(b)fluoranthene	ND		0.00798	1	10/06/2022 21:05	WG1938035
Benzo(g,h,i)perylene	ND		0.00798	1	10/06/2022 21:05	WG1938035
Benzo(k)fluoranthene	ND		0.00798	1	10/06/2022 21:05	WG1938035
Chrysene	0.0193		0.00798	1	10/06/2022 21:05	WG1938035
Dibenz(a,h)anthracene	ND		0.00798	1	10/06/2022 21:05	WG1938035
Fluoranthene	0.0131		0.00798	1	10/06/2022 21:05	WG1938035
Fluorene	0.00804		0.00798	1	10/06/2022 21:05	WG1938035
Indeno(1,2,3-cd)pyrene	ND		0.00798	1	10/06/2022 21:05	WG1938035
Naphthalene	0.0288		0.0266	1	10/06/2022 21:05	WG1938035
Phenanthrene	0.0697		0.00798	1	10/06/2022 21:05	WG1938035
Pyrene	0.0126		0.00798	1	10/06/2022 21:05	WG1938035
1-Methylnaphthalene	0.0558		0.0266	1	10/06/2022 21:05	WG1938035
2-Methylnaphthalene	0.0787		0.0266	1	10/06/2022 21:05	WG1938035
2-Chloronaphthalene	ND		0.0266	1	10/06/2022 21:05	WG1938035
(S) p-Terphenyl-d14	*72.2*		*23.0-120*		*10/06/2022 21:05*	WG1938035

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) Nitrobenzene-d5	*90.4*		*14.0-149*		*10/06/2022 21:05*	WG1938035
(S) 2-Fluorobiphenyl	*73.2*		*34.0-125*		*10/06/2022 21:05*	WG1938035

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.3		1	10/04/2022 12:27	WG1936191

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Gasoline Range Organics-NWTPH	ND		2.82	25	10/04/2022 22:02	WG1937301
(S) a,a,a-Trifluorotoluene(FID)	*92.3*		*77.0-120*		*10/04/2022 22:02*	WG1937301

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0562	1	10/07/2022 05:22	WG1938713
Acrylonitrile	ND		0.0140	1	10/07/2022 05:22	WG1938713
Benzene	ND		0.00112	1	10/07/2022 05:22	WG1938713
Bromobenzene	ND		0.0140	1	10/07/2022 05:22	WG1938713
Bromodichloromethane	ND		0.00281	1	10/07/2022 05:22	WG1938713
Bromoform	ND		0.0281	1	10/07/2022 05:22	WG1938713
Bromomethane	ND		0.0140	1	10/07/2022 05:22	WG1938713
n-Butylbenzene	ND		0.0140	1	10/07/2022 05:22	WG1938713
sec-Butylbenzene	ND		0.0140	1	10/07/2022 05:22	WG1938713
tert-Butylbenzene	ND		0.00562	1	10/07/2022 05:22	WG1938713
Carbon tetrachloride	ND		0.00562	1	10/07/2022 05:22	WG1938713
Chlorobenzene	ND		0.00281	1	10/07/2022 05:22	WG1938713
Chlorodibromomethane	ND		0.00281	1	10/07/2022 05:22	WG1938713
Chloroethane	ND		0.00562	1	10/07/2022 05:22	WG1938713
Chloroform	ND		0.00281	1	10/07/2022 05:22	WG1938713
Chloromethane	ND	J3	0.0140	1	10/07/2022 05:22	WG1938713
2-Chlorotoluene	ND		0.00281	1	10/07/2022 05:22	WG1938713
4-Chlorotoluene	ND		0.00562	1	10/07/2022 05:22	WG1938713
1,2-Dibromo-3-Chloropropane	ND	J3	0.0281	1	10/07/2022 05:22	WG1938713
1,2-Dibromoethane	ND		0.00281	1	10/07/2022 05:22	WG1938713
Dibromomethane	ND		0.00562	1	10/07/2022 05:22	WG1938713
1,2-Dichlorobenzene	ND		0.00562	1	10/07/2022 05:22	WG1938713
1,3-Dichlorobenzene	ND		0.00562	1	10/07/2022 05:22	WG1938713
1,4-Dichlorobenzene	ND		0.00562	1	10/07/2022 05:22	WG1938713
Dichlorodifluoromethane	ND	C3	0.00281	1	10/07/2022 05:22	WG1938713
1,1-Dichloroethane	ND		0.00281	1	10/07/2022 05:22	WG1938713
1,2-Dichloroethane	ND	C3	0.00281	1	10/07/2022 05:22	WG1938713
1,1-Dichloroethene	ND		0.00281	1	10/07/2022 05:22	WG1938713
cis-1,2-Dichloroethene	ND		0.00281	1	10/07/2022 05:22	WG1938713
trans-1,2-Dichloroethene	ND		0.00562	1	10/07/2022 05:22	WG1938713
1,2-Dichloropropane	ND		0.00562	1	10/07/2022 05:22	WG1938713
1,1-Dichloropropene	ND		0.00281	1	10/07/2022 05:22	WG1938713
1,3-Dichloropropane	ND		0.00562	1	10/07/2022 05:22	WG1938713
cis-1,3-Dichloropropene	ND		0.00281	1	10/07/2022 05:22	WG1938713
trans-1,3-Dichloropropene	ND		0.00562	1	10/07/2022 05:22	WG1938713
2,2-Dichloropropane	ND	C3	0.00281	1	10/07/2022 05:22	WG1938713
Di-isopropyl ether	ND	C3	0.00112	1	10/07/2022 05:22	WG1938713
Ethylbenzene	ND		0.00281	1	10/07/2022 05:22	WG1938713
Hexachloro-1,3-butadiene	ND		0.0281	1	10/07/2022 05:22	WG1938713
Isopropylbenzene	ND		0.00281	1	10/07/2022 05:22	WG1938713
p-Isopropyltoluene	ND		0.00562	1	10/07/2022 05:22	WG1938713
2-Butanone (MEK)	ND	C3	0.112	1	10/07/2022 05:22	WG1938713
Methylene Chloride	ND		0.0281	1	10/07/2022 05:22	WG1938713
4-Methyl-2-pentanone (MIBK)	ND		0.0281	1	10/07/2022 05:22	WG1938713

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND	C3	0.00112	1	10/07/2022 05:22	WG1938713
Naphthalene	ND	J3	0.0140	1	10/07/2022 05:22	WG1938713
n-Propylbenzene	ND		0.00562	1	10/07/2022 05:22	WG1938713
Styrene	ND		0.0140	1	10/07/2022 05:22	WG1938713
1,1,1,2-Tetrachloroethane	ND		0.00281	1	10/07/2022 05:22	WG1938713
1,1,2,2-Tetrachloroethane	ND		0.00281	1	10/07/2022 05:22	WG1938713
1,1,2-Trichlorotrifluoroethane	ND		0.00281	1	10/07/2022 05:22	WG1938713
Tetrachloroethene	ND		0.00281	1	10/07/2022 05:22	WG1938713
Toluene	ND		0.00562	1	10/07/2022 05:22	WG1938713
1,2,3-Trichlorobenzene	ND		0.0140	1	10/07/2022 05:22	WG1938713
1,2,4-Trichlorobenzene	ND		0.0140	1	10/07/2022 05:22	WG1938713
1,1,1-Trichloroethane	ND	C3	0.00281	1	10/07/2022 05:22	WG1938713
1,1,2-Trichloroethane	ND		0.00281	1	10/07/2022 05:22	WG1938713
Trichloroethene	ND		0.00112	1	10/07/2022 05:22	WG1938713
Trichlorofluoromethane	ND		0.00281	1	10/07/2022 05:22	WG1938713
1,2,3-Trichloropropane	ND	C3 J3	0.0140	1	10/07/2022 05:22	WG1938713
1,2,4-Trimethylbenzene	ND		0.00562	1	10/07/2022 05:22	WG1938713
1,2,3-Trimethylbenzene	ND		0.00562	1	10/07/2022 05:22	WG1938713
1,3,5-Trimethylbenzene	ND		0.00562	1	10/07/2022 05:22	WG1938713
Vinyl chloride	ND		0.00281	1	10/07/2022 05:22	WG1938713
Xylenes, Total	ND		0.00731	1	10/07/2022 05:22	WG1938713
(S) Toluene-d8	*102*		*75.0-131*		*10/07/2022 05:22*	WG1938713
(S) 4-Bromofluorobenzene	*97.1*		*67.0-138*		*10/07/2022 05:22*	WG1938713
(S) 1,2-Dichloroethane-d4	*85.2*		*70.0-130*		*10/07/2022 05:22*	WG1938713

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	ND		4.24	1	10/06/2022 15:38	WG1938026
Residual Range Organics (RRO)	ND		10.6	1	10/06/2022 15:38	WG1938026
(S) o-Terphenyl	*60.8*		*18.0-148*		*10/06/2022 15:38*	WG1938026

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Acenaphthene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Acenaphthylene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Benzo(a)anthracene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Benzo(a)pyrene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Benzo(b)fluoranthene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Benzo(g,h,i)perylene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Benzo(k)fluoranthene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Chrysene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Dibenz(a,h)anthracene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Fluoranthene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Fluorene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Indeno(1,2,3-cd)pyrene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Naphthalene	ND		0.0212	1	10/06/2022 17:54	WG1938035
Phenanthrene	ND		0.00637	1	10/06/2022 17:54	WG1938035
Pyrene	ND		0.00637	1	10/06/2022 17:54	WG1938035
1-Methylnaphthalene	ND		0.0212	1	10/06/2022 17:54	WG1938035
2-Methylnaphthalene	ND		0.0212	1	10/06/2022 17:54	WG1938035
2-Chloronaphthalene	ND		0.0212	1	10/06/2022 17:54	WG1938035
(S) p-Terphenyl-d14	*86.0*		*23.0-120*		*10/06/2022 17:54*	WG1938035

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) Nitrobenzene-d5	*112*		*14.0-149*		*10/06/2022 17:54*	WG1938035
(S) 2-Fluorobiphenyl	*83.0*		*34.0-125*		*10/06/2022 17:54*	WG1938035

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	ND		100	1	10/05/2022 05:09	WG1937365
(S) a,a,a-Trifluorotoluene(FID)	*107*		*78.0-120*		*10/05/2022 05:09*	WG1937365

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/05/2022 13:35	WG1937533
Acrolein	ND		50.0	1	10/05/2022 13:35	WG1937533
Acrylonitrile	ND		10.0	1	10/05/2022 13:35	WG1937533
Benzene	ND		1.00	1	10/05/2022 13:35	WG1937533
Bromobenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
Bromodichloromethane	ND		1.00	1	10/05/2022 13:35	WG1937533
Bromoform	ND		1.00	1	10/05/2022 13:35	WG1937533
Bromomethane	ND		5.00	1	10/05/2022 13:35	WG1937533
n-Butylbenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
sec-Butylbenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
tert-Butylbenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
Carbon tetrachloride	ND		1.00	1	10/05/2022 13:35	WG1937533
Chlorobenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
Chlorodibromomethane	ND		1.00	1	10/05/2022 13:35	WG1937533
Chloroethane	ND		5.00	1	10/05/2022 13:35	WG1937533
Chloroform	ND		5.00	1	10/05/2022 13:35	WG1937533
Chloromethane	ND		2.50	1	10/05/2022 13:35	WG1937533
2-Chlorotoluene	ND		1.00	1	10/05/2022 13:35	WG1937533
4-Chlorotoluene	ND		1.00	1	10/05/2022 13:35	WG1937533
1,2-Dibromo-3-Chloropropane	ND	C3	5.00	1	10/05/2022 13:35	WG1937533
1,2-Dibromoethane	ND		1.00	1	10/05/2022 13:35	WG1937533
Dibromomethane	ND		1.00	1	10/05/2022 13:35	WG1937533
1,2-Dichlorobenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
1,3-Dichlorobenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
1,4-Dichlorobenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
Dichlorodifluoromethane	ND		5.00	1	10/05/2022 13:35	WG1937533
1,1-Dichloroethane	ND		1.00	1	10/05/2022 13:35	WG1937533
1,2-Dichloroethane	ND		1.00	1	10/05/2022 13:35	WG1937533
1,1-Dichloroethene	ND		1.00	1	10/05/2022 13:35	WG1937533
cis-1,2-Dichloroethene	ND	J4	1.00	1	10/05/2022 13:35	WG1937533
trans-1,2-Dichloroethene	ND		1.00	1	10/05/2022 13:35	WG1937533
1,2-Dichloropropane	ND		1.00	1	10/05/2022 13:35	WG1937533
1,1-Dichloropropene	ND		1.00	1	10/05/2022 13:35	WG1937533
1,3-Dichloropropane	ND		1.00	1	10/05/2022 13:35	WG1937533
cis-1,3-Dichloropropene	ND		1.00	1	10/05/2022 13:35	WG1937533
trans-1,3-Dichloropropene	ND		1.00	1	10/05/2022 13:35	WG1937533
2,2-Dichloropropane	ND		1.00	1	10/05/2022 13:35	WG1937533
Di-isopropyl ether	ND		1.00	1	10/05/2022 13:35	WG1937533
Ethylbenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
Hexachloro-1,3-butadiene	ND	C3	1.00	1	10/05/2022 13:35	WG1937533
Isopropylbenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
p-Isopropyltoluene	ND		1.00	1	10/05/2022 13:35	WG1937533
2-Butanone (MEK)	ND		10.0	1	10/05/2022 13:35	WG1937533
Methylene Chloride	ND	J4	5.00	1	10/05/2022 13:35	WG1937533
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/05/2022 13:35	WG1937533
Methyl tert-butyl ether	ND		1.00	1	10/05/2022 13:35	WG1937533
Naphthalene	ND	C3	5.00	1	10/05/2022 13:35	WG1937533
n-Propylbenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
Styrene	ND		1.00	1	10/05/2022 13:35	WG1937533

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	ND		1.00	1	10/05/2022 13:35	WG1937533
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/05/2022 13:35	WG1937533
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/05/2022 13:35	WG1937533
Tetrachloroethene	ND		1.00	1	10/05/2022 13:35	WG1937533
Toluene	ND		1.00	1	10/05/2022 13:35	WG1937533
1,2,3-Trichlorobenzene	ND	C4	1.00	1	10/05/2022 13:35	WG1937533
1,2,4-Trichlorobenzene	ND	C4	1.00	1	10/05/2022 13:35	WG1937533
1,1,1-Trichloroethane	ND		1.00	1	10/05/2022 13:35	WG1937533
1,1,2-Trichloroethane	ND		1.00	1	10/05/2022 13:35	WG1937533
Trichloroethene	ND		1.00	1	10/05/2022 13:35	WG1937533
Trichlorofluoromethane	ND		5.00	1	10/05/2022 13:35	WG1937533
1,2,3-Trichloropropane	ND		2.50	1	10/05/2022 13:35	WG1937533
1,2,4-Trimethylbenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
1,2,3-Trimethylbenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
1,3,5-Trimethylbenzene	ND		1.00	1	10/05/2022 13:35	WG1937533
Vinyl chloride	ND		1.00	1	10/05/2022 13:35	WG1937533
Xylenes, Total	ND		3.00	1	10/05/2022 13:35	WG1937533
(S) Toluene-d8	*105*		*80.0-120*		*10/05/2022 13:35*	WG1937533
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*10/05/2022 13:35*	WG1937533
(S) 1,2-Dichloroethane-d4	*83.4*		*70.0-130*		*10/05/2022 13:35*	WG1937533

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	ND		200	1	10/06/2022 19:08	WG1937473
Residual Range Organics (RRO)	ND		250	1	10/06/2022 19:08	WG1937473
(S) o-Terphenyl	*54.2*		*52.0-156*		*10/06/2022 19:08*	WG1937473

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0500	1	10/06/2022 14:05	WG1936774
Acenaphthene	ND		0.0500	1	10/06/2022 14:05	WG1936774
Acenaphthylene	ND		0.0500	1	10/06/2022 14:05	WG1936774
Benzo(a)anthracene	ND		0.0500	1	10/06/2022 14:05	WG1936774
Benzo(a)pyrene	ND		0.0500	1	10/06/2022 14:05	WG1936774
Benzo(b)fluoranthene	ND		0.0500	1	10/06/2022 14:05	WG1936774
Benzo(g,h,i)perylene	ND		0.0500	1	10/06/2022 14:05	WG1936774
Benzo(k)fluoranthene	ND		0.0500	1	10/06/2022 14:05	WG1936774
Chrysene	ND		0.0500	1	10/06/2022 14:05	WG1936774
Dibenz(a,h)anthracene	ND		0.0500	1	10/06/2022 14:05	WG1936774
Fluoranthene	ND		0.100	1	10/06/2022 14:05	WG1936774
Fluorene	ND		0.0500	1	10/06/2022 14:05	WG1936774
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	10/06/2022 14:05	WG1936774
Naphthalene	ND		0.250	1	10/06/2022 14:05	WG1936774
Phenanthrene	ND		0.0500	1	10/06/2022 14:05	WG1936774
Pyrene	ND		0.0500	1	10/06/2022 14:05	WG1936774
1-Methylnaphthalene	ND		0.250	1	10/06/2022 14:05	WG1936774
2-Methylnaphthalene	ND		0.250	1	10/06/2022 14:05	WG1936774
2-Chloronaphthalene	ND		0.250	1	10/06/2022 14:05	WG1936774
(S) Nitrobenzene-d5	*133*		*31.0-160*		*10/06/2022 14:05*	WG1936774
(S) 2-Fluorobiphenyl	*99.5*		*48.0-148*		*10/06/2022 14:05*	WG1936774
(S) p-Terphenyl-d14	*79.5*		*37.0-146*		*10/06/2022 14:05*	WG1936774

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	ND		100	1	10/05/2022 05:31	WG1937365
(S) a,a,a-Trifluorotoluene(FID)	*108*		*78.0-120*		*10/05/2022 05:31*	WG1937365

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/05/2022 13:56	WG1937533
Acrolein	ND		50.0	1	10/05/2022 13:56	WG1937533
Acrylonitrile	ND		10.0	1	10/05/2022 13:56	WG1937533
Benzene	ND		1.00	1	10/05/2022 13:56	WG1937533
Bromobenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
Bromodichloromethane	ND		1.00	1	10/05/2022 13:56	WG1937533
Bromoform	ND		1.00	1	10/05/2022 13:56	WG1937533
Bromomethane	ND		5.00	1	10/05/2022 13:56	WG1937533
n-Butylbenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
sec-Butylbenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
tert-Butylbenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
Carbon tetrachloride	ND		1.00	1	10/05/2022 13:56	WG1937533
Chlorobenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
Chlorodibromomethane	ND		1.00	1	10/05/2022 13:56	WG1937533
Chloroethane	ND		5.00	1	10/05/2022 13:56	WG1937533
Chloroform	ND		5.00	1	10/05/2022 13:56	WG1937533
Chloromethane	ND		2.50	1	10/05/2022 13:56	WG1937533
2-Chlorotoluene	ND		1.00	1	10/05/2022 13:56	WG1937533
4-Chlorotoluene	ND		1.00	1	10/05/2022 13:56	WG1937533
1,2-Dibromo-3-Chloropropane	ND	C3	5.00	1	10/05/2022 13:56	WG1937533
1,2-Dibromoethane	ND		1.00	1	10/05/2022 13:56	WG1937533
Dibromomethane	ND		1.00	1	10/05/2022 13:56	WG1937533
1,2-Dichlorobenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
1,3-Dichlorobenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
1,4-Dichlorobenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
Dichlorodifluoromethane	ND		5.00	1	10/05/2022 13:56	WG1937533
1,1-Dichloroethane	ND		1.00	1	10/05/2022 13:56	WG1937533
1,2-Dichloroethane	ND		1.00	1	10/05/2022 13:56	WG1937533
1,1-Dichloroethene	ND		1.00	1	10/05/2022 13:56	WG1937533
cis-1,2-Dichloroethene	ND	J4	1.00	1	10/05/2022 13:56	WG1937533
trans-1,2-Dichloroethene	ND		1.00	1	10/05/2022 13:56	WG1937533
1,2-Dichloropropane	ND		1.00	1	10/05/2022 13:56	WG1937533
1,1-Dichloropropene	ND		1.00	1	10/05/2022 13:56	WG1937533
1,3-Dichloropropane	ND		1.00	1	10/05/2022 13:56	WG1937533
cis-1,3-Dichloropropene	ND		1.00	1	10/05/2022 13:56	WG1937533
trans-1,3-Dichloropropene	ND		1.00	1	10/05/2022 13:56	WG1937533
2,2-Dichloropropane	ND		1.00	1	10/05/2022 13:56	WG1937533
Di-isopropyl ether	ND		1.00	1	10/05/2022 13:56	WG1937533
Ethylbenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
Hexachloro-1,3-butadiene	ND	C3	1.00	1	10/05/2022 13:56	WG1937533
Isopropylbenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
p-Isopropyltoluene	ND		1.00	1	10/05/2022 13:56	WG1937533
2-Butanone (MEK)	ND		10.0	1	10/05/2022 13:56	WG1937533
Methylene Chloride	ND	J4	5.00	1	10/05/2022 13:56	WG1937533
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/05/2022 13:56	WG1937533
Methyl tert-butyl ether	ND		1.00	1	10/05/2022 13:56	WG1937533
Naphthalene	ND	C3	5.00	1	10/05/2022 13:56	WG1937533
n-Propylbenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
Styrene	ND		1.00	1	10/05/2022 13:56	WG1937533

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	ND		1.00	1	10/05/2022 13:56	WG1937533
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/05/2022 13:56	WG1937533
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/05/2022 13:56	WG1937533
Tetrachloroethene	ND		1.00	1	10/05/2022 13:56	WG1937533
Toluene	ND		1.00	1	10/05/2022 13:56	WG1937533
1,2,3-Trichlorobenzene	ND	C4	1.00	1	10/05/2022 13:56	WG1937533
1,2,4-Trichlorobenzene	ND	C4	1.00	1	10/05/2022 13:56	WG1937533
1,1,1-Trichloroethane	ND		1.00	1	10/05/2022 13:56	WG1937533
1,1,2-Trichloroethane	ND		1.00	1	10/05/2022 13:56	WG1937533
Trichloroethene	ND		1.00	1	10/05/2022 13:56	WG1937533
Trichlorofluoromethane	ND		5.00	1	10/05/2022 13:56	WG1937533
1,2,3-Trichloropropane	ND		2.50	1	10/05/2022 13:56	WG1937533
1,2,4-Trimethylbenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
1,2,3-Trimethylbenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
1,3,5-Trimethylbenzene	ND		1.00	1	10/05/2022 13:56	WG1937533
Vinyl chloride	ND		1.00	1	10/05/2022 13:56	WG1937533
Xylenes, Total	ND		3.00	1	10/05/2022 13:56	WG1937533
(S) Toluene-d8	*105*		*80.0-120*		*10/05/2022 13:56*	WG1937533
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*10/05/2022 13:56*	WG1937533
(S) 1,2-Dichloroethane-d4	*84.1*		*70.0-130*		*10/05/2022 13:56*	WG1937533

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	ND		200	1	10/06/2022 19:34	WG1937473
Residual Range Organics (RRO)	ND		250	1	10/06/2022 19:34	WG1937473
(S) o-Terphenyl	*54.7*		*52.0-156*		*10/06/2022 19:34*	WG1937473

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0500	1	10/06/2022 14:23	WG1936774
Acenaphthene	ND		0.0500	1	10/06/2022 14:23	WG1936774
Acenaphthylene	ND		0.0500	1	10/06/2022 14:23	WG1936774
Benzo(a)anthracene	ND		0.0500	1	10/06/2022 14:23	WG1936774
Benzo(a)pyrene	ND		0.0500	1	10/06/2022 14:23	WG1936774
Benzo(b)fluoranthene	ND		0.0500	1	10/06/2022 14:23	WG1936774
Benzo(g,h,i)perylene	ND		0.0500	1	10/06/2022 14:23	WG1936774
Benzo(k)fluoranthene	ND		0.0500	1	10/06/2022 14:23	WG1936774
Chrysene	ND		0.0500	1	10/06/2022 14:23	WG1936774
Dibenz(a,h)anthracene	ND		0.0500	1	10/06/2022 14:23	WG1936774
Fluoranthene	ND		0.100	1	10/06/2022 14:23	WG1936774
Fluorene	ND		0.0500	1	10/06/2022 14:23	WG1936774
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	10/06/2022 14:23	WG1936774
Naphthalene	ND		0.250	1	10/06/2022 14:23	WG1936774
Phenanthrene	ND		0.0500	1	10/06/2022 14:23	WG1936774
Pyrene	ND		0.0500	1	10/06/2022 14:23	WG1936774
1-Methylnaphthalene	ND		0.250	1	10/06/2022 14:23	WG1936774
2-Methylnaphthalene	ND		0.250	1	10/06/2022 14:23	WG1936774
2-Chloronaphthalene	ND		0.250	1	10/06/2022 14:23	WG1936774
(S) Nitrobenzene-d5	*147*		*31.0-160*		*10/06/2022 14:23*	WG1936774
(S) 2-Fluorobiphenyl	*113*		*48.0-148*		*10/06/2022 14:23*	WG1936774
(S) p-Terphenyl-d14	*106*		*37.0-146*		*10/06/2022 14:23*	WG1936774

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	ND		100	1	10/05/2022 05:53	WG1937365
(S) a,a,a-Trifluorotoluene(FID)	*107*		*78.0-120*		*10/05/2022 05:53*	WG1937365

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/05/2022 14:17	WG1937533
Acrolein	ND		50.0	1	10/05/2022 14:17	WG1937533
Acrylonitrile	ND		10.0	1	10/05/2022 14:17	WG1937533
Benzene	ND		1.00	1	10/05/2022 14:17	WG1937533
Bromobenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
Bromodichloromethane	ND		1.00	1	10/05/2022 14:17	WG1937533
Bromoform	ND		1.00	1	10/05/2022 14:17	WG1937533
Bromomethane	ND		5.00	1	10/05/2022 14:17	WG1937533
n-Butylbenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
sec-Butylbenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
tert-Butylbenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
Carbon tetrachloride	ND		1.00	1	10/05/2022 14:17	WG1937533
Chlorobenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
Chlorodibromomethane	ND		1.00	1	10/05/2022 14:17	WG1937533
Chloroethane	ND		5.00	1	10/05/2022 14:17	WG1937533
Chloroform	ND		5.00	1	10/05/2022 14:17	WG1937533
Chloromethane	ND		2.50	1	10/05/2022 14:17	WG1937533
2-Chlorotoluene	ND		1.00	1	10/05/2022 14:17	WG1937533
4-Chlorotoluene	ND		1.00	1	10/05/2022 14:17	WG1937533
1,2-Dibromo-3-Chloropropane	ND	C3	5.00	1	10/05/2022 14:17	WG1937533
1,2-Dibromoethane	ND		1.00	1	10/05/2022 14:17	WG1937533
Dibromomethane	ND		1.00	1	10/05/2022 14:17	WG1937533
1,2-Dichlorobenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
1,3-Dichlorobenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
1,4-Dichlorobenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
Dichlorodifluoromethane	ND		5.00	1	10/05/2022 14:17	WG1937533
1,1-Dichloroethane	ND		1.00	1	10/05/2022 14:17	WG1937533
1,2-Dichloroethane	ND		1.00	1	10/05/2022 14:17	WG1937533
1,1-Dichloroethene	ND		1.00	1	10/05/2022 14:17	WG1937533
cis-1,2-Dichloroethene	ND	J4	1.00	1	10/05/2022 14:17	WG1937533
trans-1,2-Dichloroethene	ND		1.00	1	10/05/2022 14:17	WG1937533
1,2-Dichloropropane	ND		1.00	1	10/05/2022 14:17	WG1937533
1,1-Dichloropropene	ND		1.00	1	10/05/2022 14:17	WG1937533
1,3-Dichloropropane	ND		1.00	1	10/05/2022 14:17	WG1937533
cis-1,3-Dichloropropene	ND		1.00	1	10/05/2022 14:17	WG1937533
trans-1,3-Dichloropropene	ND		1.00	1	10/05/2022 14:17	WG1937533
2,2-Dichloropropane	ND		1.00	1	10/05/2022 14:17	WG1937533
Di-isopropyl ether	ND		1.00	1	10/05/2022 14:17	WG1937533
Ethylbenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
Hexachloro-1,3-butadiene	ND	C3	1.00	1	10/05/2022 14:17	WG1937533
Isopropylbenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
p-Isopropyltoluene	ND		1.00	1	10/05/2022 14:17	WG1937533
2-Butanone (MEK)	ND		10.0	1	10/05/2022 14:17	WG1937533
Methylene Chloride	ND	J4	5.00	1	10/05/2022 14:17	WG1937533
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/05/2022 14:17	WG1937533
Methyl tert-butyl ether	ND		1.00	1	10/05/2022 14:17	WG1937533
Naphthalene	ND	C3	5.00	1	10/05/2022 14:17	WG1937533
n-Propylbenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
Styrene	ND		1.00	1	10/05/2022 14:17	WG1937533

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	ND		1.00	1	10/05/2022 14:17	WG1937533
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/05/2022 14:17	WG1937533
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/05/2022 14:17	WG1937533
Tetrachloroethene	ND		1.00	1	10/05/2022 14:17	WG1937533
Toluene	ND		1.00	1	10/05/2022 14:17	WG1937533
1,2,3-Trichlorobenzene	ND	C4	1.00	1	10/05/2022 14:17	WG1937533
1,2,4-Trichlorobenzene	ND	C4	1.00	1	10/05/2022 14:17	WG1937533
1,1,1-Trichloroethane	ND		1.00	1	10/05/2022 14:17	WG1937533
1,1,2-Trichloroethane	ND		1.00	1	10/05/2022 14:17	WG1937533
Trichloroethene	ND		1.00	1	10/05/2022 14:17	WG1937533
Trichlorofluoromethane	ND		5.00	1	10/05/2022 14:17	WG1937533
1,2,3-Trichloropropane	ND		2.50	1	10/05/2022 14:17	WG1937533
1,2,4-Trimethylbenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
1,2,3-Trimethylbenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
1,3,5-Trimethylbenzene	ND		1.00	1	10/05/2022 14:17	WG1937533
Vinyl chloride	ND		1.00	1	10/05/2022 14:17	WG1937533
Xylenes, Total	ND		3.00	1	10/05/2022 14:17	WG1937533
(S) Toluene-d8	*106*		*80.0-120*		*10/05/2022 14:17*	WG1937533
(S) 4-Bromofluorobenzene	*106*		*77.0-126*		*10/05/2022 14:17*	WG1937533
(S) 1,2-Dichloroethane-d4	*86.3*		*70.0-130*		*10/05/2022 14:17*	WG1937533

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	ND		200	1	10/06/2022 20:00	WG1937473
Residual Range Organics (RRO)	ND		250	1	10/06/2022 20:00	WG1937473
(S) o-Terphenyl	*56.3*		*52.0-156*		*10/06/2022 20:00*	WG1937473

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0500	1	10/06/2022 14:40	WG1936774
Acenaphthene	ND		0.0500	1	10/06/2022 14:40	WG1936774
Acenaphthylene	ND		0.0500	1	10/06/2022 14:40	WG1936774
Benzo(a)anthracene	ND		0.0500	1	10/06/2022 14:40	WG1936774
Benzo(a)pyrene	ND		0.0500	1	10/06/2022 14:40	WG1936774
Benzo(b)fluoranthene	ND		0.0500	1	10/06/2022 14:40	WG1936774
Benzo(g,h,i)perylene	ND		0.0500	1	10/06/2022 14:40	WG1936774
Benzo(k)fluoranthene	ND		0.0500	1	10/06/2022 14:40	WG1936774
Chrysene	ND		0.0500	1	10/06/2022 14:40	WG1936774
Dibenz(a,h)anthracene	ND		0.0500	1	10/06/2022 14:40	WG1936774
Fluoranthene	ND		0.100	1	10/06/2022 14:40	WG1936774
Fluorene	ND		0.0500	1	10/06/2022 14:40	WG1936774
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	10/06/2022 14:40	WG1936774
Naphthalene	ND		0.250	1	10/06/2022 14:40	WG1936774
Phenanthrene	ND		0.0500	1	10/06/2022 14:40	WG1936774
Pyrene	ND		0.0500	1	10/06/2022 14:40	WG1936774
1-Methylnaphthalene	ND		0.250	1	10/06/2022 14:40	WG1936774
2-Methylnaphthalene	ND		0.250	1	10/06/2022 14:40	WG1936774
2-Chloronaphthalene	ND		0.250	1	10/06/2022 14:40	WG1936774
(S) Nitrobenzene-d5	*141*		*31.0-160*		*10/06/2022 14:40*	WG1936774
(S) 2-Fluorobiphenyl	*105*		*48.0-148*		*10/06/2022 14:40*	WG1936774
(S) p-Terphenyl-d14	*105*		*37.0-146*		*10/06/2022 14:40*	WG1936774

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	ND		100	1	10/05/2022 06:15	WG1937365
(S) a,a,a-Trifluorotoluene(FID)	*107*		*78.0-120*		*10/05/2022 06:15*	WG1937365

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/05/2022 14:38	WG1937533
Acrolein	ND		50.0	1	10/05/2022 14:38	WG1937533
Acrylonitrile	ND		10.0	1	10/05/2022 14:38	WG1937533
Benzene	ND		1.00	1	10/05/2022 14:38	WG1937533
Bromobenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
Bromodichloromethane	ND		1.00	1	10/05/2022 14:38	WG1937533
Bromoform	ND		1.00	1	10/05/2022 14:38	WG1937533
Bromomethane	ND		5.00	1	10/05/2022 14:38	WG1937533
n-Butylbenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
sec-Butylbenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
tert-Butylbenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
Carbon tetrachloride	ND		1.00	1	10/05/2022 14:38	WG1937533
Chlorobenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
Chlorodibromomethane	ND		1.00	1	10/05/2022 14:38	WG1937533
Chloroethane	ND		5.00	1	10/05/2022 14:38	WG1937533
Chloroform	ND		5.00	1	10/05/2022 14:38	WG1937533
Chloromethane	ND		2.50	1	10/05/2022 14:38	WG1937533
2-Chlorotoluene	ND		1.00	1	10/05/2022 14:38	WG1937533
4-Chlorotoluene	ND		1.00	1	10/05/2022 14:38	WG1937533
1,2-Dibromo-3-Chloropropane	ND	C3	5.00	1	10/05/2022 14:38	WG1937533
1,2-Dibromoethane	ND		1.00	1	10/05/2022 14:38	WG1937533
Dibromomethane	ND		1.00	1	10/05/2022 14:38	WG1937533
1,2-Dichlorobenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
1,3-Dichlorobenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
1,4-Dichlorobenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
Dichlorodifluoromethane	ND		5.00	1	10/05/2022 14:38	WG1937533
1,1-Dichloroethane	ND		1.00	1	10/05/2022 14:38	WG1937533
1,2-Dichloroethane	ND		1.00	1	10/05/2022 14:38	WG1937533
1,1-Dichloroethene	ND		1.00	1	10/05/2022 14:38	WG1937533
cis-1,2-Dichloroethene	ND	J4	1.00	1	10/05/2022 14:38	WG1937533
trans-1,2-Dichloroethene	ND		1.00	1	10/05/2022 14:38	WG1937533
1,2-Dichloropropane	ND		1.00	1	10/05/2022 14:38	WG1937533
1,1-Dichloropropene	ND		1.00	1	10/05/2022 14:38	WG1937533
1,3-Dichloropropane	ND		1.00	1	10/05/2022 14:38	WG1937533
cis-1,3-Dichloropropene	ND		1.00	1	10/05/2022 14:38	WG1937533
trans-1,3-Dichloropropene	ND		1.00	1	10/05/2022 14:38	WG1937533
2,2-Dichloropropane	ND		1.00	1	10/05/2022 14:38	WG1937533
Di-isopropyl ether	ND		1.00	1	10/05/2022 14:38	WG1937533
Ethylbenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
Hexachloro-1,3-butadiene	ND	C3	1.00	1	10/05/2022 14:38	WG1937533
Isopropylbenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
p-Isopropyltoluene	ND		1.00	1	10/05/2022 14:38	WG1937533
2-Butanone (MEK)	ND		10.0	1	10/05/2022 14:38	WG1937533
Methylene Chloride	ND	J4	5.00	1	10/05/2022 14:38	WG1937533
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/05/2022 14:38	WG1937533
Methyl tert-butyl ether	ND		1.00	1	10/05/2022 14:38	WG1937533
Naphthalene	ND	C3	5.00	1	10/05/2022 14:38	WG1937533
n-Propylbenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
Styrene	ND		1.00	1	10/05/2022 14:38	WG1937533

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	ND		1.00	1	10/05/2022 14:38	WG1937533
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/05/2022 14:38	WG1937533
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/05/2022 14:38	WG1937533
Tetrachloroethene	ND		1.00	1	10/05/2022 14:38	WG1937533
Toluene	ND		1.00	1	10/05/2022 14:38	WG1937533
1,2,3-Trichlorobenzene	ND	C4	1.00	1	10/05/2022 14:38	WG1937533
1,2,4-Trichlorobenzene	ND	C4	1.00	1	10/05/2022 14:38	WG1937533
1,1,1-Trichloroethane	ND		1.00	1	10/05/2022 14:38	WG1937533
1,1,2-Trichloroethane	ND		1.00	1	10/05/2022 14:38	WG1937533
Trichloroethene	ND		1.00	1	10/05/2022 14:38	WG1937533
Trichlorofluoromethane	ND		5.00	1	10/05/2022 14:38	WG1937533
1,2,3-Trichloropropane	ND		2.50	1	10/05/2022 14:38	WG1937533
1,2,4-Trimethylbenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
1,2,3-Trimethylbenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
1,3,5-Trimethylbenzene	ND		1.00	1	10/05/2022 14:38	WG1937533
Vinyl chloride	ND		1.00	1	10/05/2022 14:38	WG1937533
Xylenes, Total	ND		3.00	1	10/05/2022 14:38	WG1937533
(S) Toluene-d8	*104*		*80.0-120*		*10/05/2022 14:38*	WG1937533
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*10/05/2022 14:38*	WG1937533
(S) 1,2-Dichloroethane-d4	*83.8*		*70.0-130*		*10/05/2022 14:38*	WG1937533

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	ND		200	1	10/06/2022 20:26	WG1937473
Residual Range Organics (RRO)	ND		250	1	10/06/2022 20:26	WG1937473
(S) o-Terphenyl	*52.6*		*52.0-156*		*10/06/2022 20:26*	WG1937473

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0500	1	10/06/2022 14:58	WG1936774
Acenaphthene	ND		0.0500	1	10/06/2022 14:58	WG1936774
Acenaphthylene	ND		0.0500	1	10/06/2022 14:58	WG1936774
Benzo(a)anthracene	ND		0.0500	1	10/06/2022 14:58	WG1936774
Benzo(a)pyrene	ND		0.0500	1	10/06/2022 14:58	WG1936774
Benzo(b)fluoranthene	ND		0.0500	1	10/06/2022 14:58	WG1936774
Benzo(g,h,i)perylene	ND		0.0500	1	10/06/2022 14:58	WG1936774
Benzo(k)fluoranthene	ND		0.0500	1	10/06/2022 14:58	WG1936774
Chrysene	ND		0.0500	1	10/06/2022 14:58	WG1936774
Dibenz(a,h)anthracene	ND		0.0500	1	10/06/2022 14:58	WG1936774
Fluoranthene	ND		0.100	1	10/06/2022 14:58	WG1936774
Fluorene	ND		0.0500	1	10/06/2022 14:58	WG1936774
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	10/06/2022 14:58	WG1936774
Naphthalene	ND		0.250	1	10/06/2022 14:58	WG1936774
Phenanthrene	ND		0.0500	1	10/06/2022 14:58	WG1936774
Pyrene	ND		0.0500	1	10/06/2022 14:58	WG1936774
1-Methylnaphthalene	ND		0.250	1	10/06/2022 14:58	WG1936774
2-Methylnaphthalene	ND		0.250	1	10/06/2022 14:58	WG1936774
2-Chloronaphthalene	ND		0.250	1	10/06/2022 14:58	WG1936774
(S) Nitrobenzene-d5	*141*		*31.0-160*		*10/06/2022 14:58*	WG1936774
(S) 2-Fluorobiphenyl	*107*		*48.0-148*		*10/06/2022 14:58*	WG1936774
(S) p-Terphenyl-d14	*107*		*37.0-146*		*10/06/2022 14:58*	WG1936774

Method Blank (MB)

(MB) R3844730-1 10/04/22 08:07

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1541399-31 Original Sample (OS) • Duplicate (DUP)

(OS) L1541399-31 10/04/22 08:07 • (DUP) R3844730-3 10/04/22 08:07

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.0	88.8	1	2.44		10

Laboratory Control Sample (LCS)

(LCS) R3844730-2 10/04/22 08:07

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3844810-1 10/04/22 12:27

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1541561-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1541561-07 10/04/22 12:27 • (DUP) R3844810-3 10/04/22 12:27

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	81.6	80.5	1	1.34		10

Laboratory Control Sample (LCS)

(LCS) R3844810-2 10/04/22 12:27

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3845525-2 10/04/22 18:01

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	U		0.848	2.50
(S) a,a,a-Trifluorotoluene(FID)	*92.5*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3845525-1 10/04/22 17:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C6 - C12	5.50	5.07	92.2	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*102*	*77.0-120*	

L1541543-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541543-01 10/04/22 20:19 • (MS) R3845525-3 10/05/22 03:08 • (MSD) R3845525-4 10/05/22 03:28

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	215	15.0	216	198	93.7	85.1	25.3	50.0-150			8.96	27
(S) a,a,a-Trifluorotoluene(FID)					*99.2*	*98.8*		*77.0-120*				

Method Blank (MB)

(MB) R3846008-2 10/05/22 04:47

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*107*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3846008-1 10/05/22 03:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	6040	110	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*99.6*	*78.0-120*	

Method Blank (MB)

(MB) R3845339-3 10/05/22 09:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00
Hexachloro-1,3-butadiene	U		0.337	1.00

Method Blank (MB)

(MB) R3845339-3 10/05/22 09:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*107*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.2*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*84.6*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3845339-1 10/05/22 08:20 • (LCSD) R3845339-2 10/05/22 08:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	24.4	25.0	97.6	100	19.0-160			2.43	27
Acrolein	25.0	26.4	23.0	106	92.0	10.0-160			13.8	26
Acrylonitrile	25.0	28.6	29.3	114	117	55.0-149			2.42	20
Benzene	5.00	5.95	6.12	119	122	70.0-123			2.82	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3845339-1 10/05/22 08:20 • (LCSD) R3845339-2 10/05/22 08:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	5.00	4.64	4.60	92.8	92.0	73.0-121			0.866	20
Bromodichloromethane	5.00	5.17	5.22	103	104	75.0-120			0.962	20
Bromoform	5.00	4.29	4.71	85.8	94.2	68.0-132			9.33	20
Bromomethane	5.00	5.16	5.82	103	116	10.0-160			12.0	25
n-Butylbenzene	5.00	4.00	4.09	80.0	81.8	73.0-125			2.22	20
sec-Butylbenzene	5.00	4.89	5.10	97.8	102	75.0-125			4.20	20
tert-Butylbenzene	5.00	4.99	4.94	99.8	98.8	76.0-124			1.01	20
Carbon tetrachloride	5.00	5.49	5.64	110	113	68.0-126			2.70	20
Chlorobenzene	5.00	5.55	5.42	111	108	80.0-121			2.37	20
Chlorodibromomethane	5.00	4.69	4.56	93.8	91.2	77.0-125			2.81	20
Chloroethane	5.00	5.67	5.66	113	113	47.0-150			0.177	20
Chloroform	5.00	5.86	5.75	117	115	73.0-120			1.89	20
Chloromethane	5.00	4.38	4.53	87.6	90.6	41.0-142			3.37	20
2-Chlorotoluene	5.00	4.82	4.86	96.4	97.2	76.0-123			0.826	20
4-Chlorotoluene	5.00	4.65	4.60	93.0	92.0	75.0-122			1.08	20
1,2-Dibromo-3-Chloropropane	5.00	3.88	4.27	77.6	85.4	58.0-134			9.57	20
1,2-Dibromoethane	5.00	5.18	5.02	104	100	80.0-122			3.14	20
Dibromomethane	5.00	5.88	5.27	118	105	80.0-120			10.9	20
1,2-Dichlorobenzene	5.00	4.80	4.96	96.0	99.2	79.0-121			3.28	20
1,3-Dichlorobenzene	5.00	4.75	4.89	95.0	97.8	79.0-120			2.90	20
1,4-Dichlorobenzene	5.00	4.90	5.02	98.0	100	79.0-120			2.42	20
Dichlorodifluoromethane	5.00	4.37	4.65	87.4	93.0	51.0-149			6.21	20
1,1-Dichloroethane	5.00	5.69	5.83	114	117	70.0-126			2.43	20
1,2-Dichloroethane	5.00	5.10	5.01	102	100	70.0-128			1.78	20
1,1-Dichloroethene	5.00	6.05	6.04	121	121	71.0-124			0.165	20
cis-1,2-Dichloroethene	5.00	6.24	5.83	125	117	73.0-120	J4		6.79	20
trans-1,2-Dichloroethene	5.00	5.89	5.97	118	119	73.0-120			1.35	20
1,2-Dichloropropane	5.00	5.38	5.75	108	115	77.0-125			6.65	20
1,1-Dichloropropene	5.00	5.89	5.86	118	117	74.0-126			0.511	20
1,3-Dichloropropane	5.00	5.22	5.04	104	101	80.0-120			3.51	20
cis-1,3-Dichloropropene	5.00	4.98	4.98	99.6	99.6	80.0-123			0.000	20
trans-1,3-Dichloropropene	5.00	4.34	4.33	86.8	86.6	78.0-124			0.231	20
2,2-Dichloropropane	5.00	5.80	5.70	116	114	58.0-130			1.74	20
Di-isopropyl ether	5.00	5.28	4.98	106	99.6	58.0-138			5.85	20
Ethylbenzene	5.00	5.58	5.29	112	106	79.0-123			5.34	20
Hexachloro-1,3-butadiene	5.00	3.49	4.14	69.8	82.8	54.0-138			17.0	20
Isopropylbenzene	5.00	5.43	5.50	109	110	76.0-127			1.28	20
p-Isopropyltoluene	5.00	4.73	4.84	94.6	96.8	76.0-125			2.30	20
2-Butanone (MEK)	25.0	25.5	25.3	102	101	44.0-160			0.787	20
Methylene Chloride	5.00	6.28	6.18	126	124	67.0-120	J4	J4	1.61	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3845339-1 10/05/22 08:20 • (LCSD) R3845339-2 10/05/22 08:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	25.0	22.5	22.3	90.0	89.2	68.0-142			0.893	20
Methyl tert-butyl ether	5.00	5.67	5.87	113	117	68.0-125			3.47	20
Naphthalene	5.00	3.30	3.79	66.0	75.8	54.0-135			13.8	20
n-Propylbenzene	5.00	4.71	4.69	94.2	93.8	77.0-124			0.426	20
Styrene	5.00	5.27	5.11	105	102	73.0-130			3.08	20
1,1,1,2-Tetrachloroethane	5.00	4.99	5.00	99.8	100	75.0-125			0.200	20
1,1,2,2-Tetrachloroethane	5.00	5.04	4.79	101	95.8	65.0-130			5.09	20
1,1,2-Trichlorotrifluoroethane	5.00	6.19	6.31	124	126	69.0-132			1.92	20
Tetrachloroethene	5.00	5.71	5.97	114	119	72.0-132			4.45	20
Toluene	5.00	4.98	5.00	99.6	100	79.0-120			0.401	20
1,2,3-Trichlorobenzene	5.00	3.65	4.14	73.0	82.8	50.0-138			12.6	20
1,2,4-Trichlorobenzene	5.00	3.10	3.60	62.0	72.0	57.0-137			14.9	20
1,1,1-Trichloroethane	5.00	5.47	5.64	109	113	73.0-124			3.06	20
1,1,2-Trichloroethane	5.00	5.08	5.28	102	106	80.0-120			3.86	20
Trichloroethene	5.00	6.10	6.01	122	120	78.0-124			1.49	20
Trichlorofluoromethane	5.00	5.10	5.40	102	108	59.0-147			5.71	20
1,2,3-Trichloropropane	5.00	5.07	4.77	101	95.4	73.0-130			6.10	20
1,2,4-Trimethylbenzene	5.00	4.51	4.60	90.2	92.0	76.0-121			1.98	20
1,2,3-Trimethylbenzene	5.00	4.61	4.77	92.2	95.4	77.0-120			3.41	20
1,3,5-Trimethylbenzene	5.00	4.90	4.92	98.0	98.4	76.0-122			0.407	20
Vinyl chloride	5.00	5.57	5.65	111	113	67.0-131			1.43	20
Xylenes, Total	15.0	16.7	16.6	111	111	79.0-123			0.601	20
(S) Toluene-d8				*103*	*101*	*80.0-120*				
(S) 4-Bromofluorobenzene				*103*	*101*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*84.4*	*87.3*	*70.0-130*				

Method Blank (MB)

(MB) R3847238-3 10/07/22 03:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Di-isopropyl ether	U		0.000410	0.00100
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
Isopropylbenzene	U		0.000425	0.00250

Method Blank (MB)

(MB) R3847238-3 10/07/22 03:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	0.00293	J	0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*102*			*75.0-131*
(S) 4-Bromofluorobenzene	*94.9*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*82.5*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3847238-1 10/07/22 01:56 • (LCSD) R3847238-2 10/07/22 02:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.563	0.628	90.1	100	10.0-160			10.9	31
Acrylonitrile	0.625	0.539	0.562	86.2	89.9	45.0-153			4.18	22
Benzene	0.125	0.124	0.129	99.2	103	70.0-123			3.95	20
Bromobenzene	0.125	0.115	0.122	92.0	97.6	73.0-121			5.91	20
Bromodichloromethane	0.125	0.113	0.116	90.4	92.8	73.0-121			2.62	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3847238-1 10/07/22 01:56 • (LCSD) R3847238-2 10/07/22 02:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.125	0.125	0.138	100	110	64.0-132			9.89	20
Bromomethane	0.125	0.106	0.104	84.8	83.2	56.0-147			1.90	20
n-Butylbenzene	0.125	0.123	0.126	98.4	101	68.0-135			2.41	20
sec-Butylbenzene	0.125	0.117	0.129	93.6	103	74.0-130			9.76	20
tert-Butylbenzene	0.125	0.115	0.121	92.0	96.8	75.0-127			5.08	20
Carbon tetrachloride	0.125	0.101	0.114	80.8	91.2	66.0-128			12.1	20
Chlorobenzene	0.125	0.116	0.119	92.8	95.2	76.0-128			2.55	20
Chlorodibromomethane	0.125	0.115	0.128	92.0	102	74.0-127			10.7	20
Chloroethane	0.125	0.130	0.124	104	99.2	61.0-134			4.72	20
Chloroform	0.125	0.106	0.108	84.8	86.4	72.0-123			1.87	20
Chloromethane	0.125	0.107	0.0761	85.6	60.9	51.0-138		J3	33.8	20
2-Chlorotoluene	0.125	0.116	0.119	92.8	95.2	75.0-124			2.55	20
4-Chlorotoluene	0.125	0.108	0.113	86.4	90.4	75.0-124			4.52	20
1,2-Dibromo-3-Chloropropane	0.125	0.100	0.123	80.0	98.4	59.0-130		J3	20.6	20
1,2-Dibromoethane	0.125	0.116	0.121	92.8	96.8	74.0-128			4.22	20
Dibromomethane	0.125	0.117	0.124	93.6	99.2	75.0-122			5.81	20
1,2-Dichlorobenzene	0.125	0.109	0.122	87.2	97.6	76.0-124			11.3	20
1,3-Dichlorobenzene	0.125	0.114	0.122	91.2	97.6	76.0-125			6.78	20
1,4-Dichlorobenzene	0.125	0.104	0.118	83.2	94.4	77.0-121			12.6	20
Dichlorodifluoromethane	0.125	0.0988	0.106	79.0	84.8	43.0-156			7.03	20
1,1-Dichloroethane	0.125	0.114	0.122	91.2	97.6	70.0-127			6.78	20
1,2-Dichloroethane	0.125	0.0963	0.104	77.0	83.2	65.0-131			7.69	20
1,1-Dichloroethene	0.125	0.107	0.117	85.6	93.6	65.0-131			8.93	20
cis-1,2-Dichloroethene	0.125	0.118	0.125	94.4	100	73.0-125			5.76	20
trans-1,2-Dichloroethene	0.125	0.114	0.116	91.2	92.8	71.0-125			1.74	20
1,2-Dichloropropane	0.125	0.122	0.125	97.6	100	74.0-125			2.43	20
1,1-Dichloropropene	0.125	0.114	0.124	91.2	99.2	73.0-125			8.40	20
1,3-Dichloropropane	0.125	0.124	0.127	99.2	102	80.0-125			2.39	20
cis-1,3-Dichloropropene	0.125	0.119	0.122	95.2	97.6	76.0-127			2.49	20
trans-1,3-Dichloropropene	0.125	0.113	0.117	90.4	93.6	73.0-127			3.48	20
2,2-Dichloropropane	0.125	0.0986	0.116	78.9	92.8	59.0-135			16.2	20
Di-isopropyl ether	0.125	0.0953	0.104	76.2	83.2	60.0-136			8.73	20
Ethylbenzene	0.125	0.121	0.126	96.8	101	74.0-126			4.05	20
Hexachloro-1,3-butadiene	0.125	0.111	0.128	88.8	102	57.0-150			14.2	20
Isopropylbenzene	0.125	0.121	0.127	96.8	102	72.0-127			4.84	20
p-Isopropyltoluene	0.125	0.117	0.129	93.6	103	72.0-133			9.76	20
2-Butanone (MEK)	0.625	0.498	0.540	79.7	86.4	30.0-160			8.09	24
Methylene Chloride	0.125	0.120	0.129	96.0	103	68.0-123			7.23	20
4-Methyl-2-pentanone (MIBK)	0.625	0.526	0.577	84.2	92.3	56.0-143			9.25	20
Methyl tert-butyl ether	0.125	0.0908	0.109	72.6	87.2	66.0-132			18.2	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3847238-1 10/07/22 01:56 • (LCSD) R3847238-2 10/07/22 02:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.125	0.121	0.155	96.8	124	59.0-130		J3	24.6	20
n-Propylbenzene	0.125	0.117	0.129	93.6	103	74.0-126			9.76	20
Styrene	0.125	0.112	0.116	89.6	92.8	72.0-127			3.51	20
1,1,1,2-Tetrachloroethane	0.125	0.115	0.111	92.0	88.8	74.0-129			3.54	20
1,1,2,2-Tetrachloroethane	0.125	0.103	0.111	82.4	88.8	68.0-128			7.48	20
1,1,2-Trichlorotrifluoroethane	0.125	0.127	0.148	102	118	61.0-139			15.3	20
Tetrachloroethene	0.125	0.108	0.118	86.4	94.4	70.0-136			8.85	20
Toluene	0.125	0.119	0.119	95.2	95.2	75.0-121			0.000	20
1,2,3-Trichlorobenzene	0.125	0.124	0.143	99.2	114	59.0-139			14.2	20
1,2,4-Trichlorobenzene	0.125	0.120	0.136	96.0	109	62.0-137			12.5	20
1,1,1-Trichloroethane	0.125	0.0992	0.107	79.4	85.6	69.0-126			7.57	20
1,1,2-Trichloroethane	0.125	0.125	0.135	100	108	78.0-123			7.69	20
Trichloroethene	0.125	0.119	0.119	95.2	95.2	76.0-126			0.000	20
Trichlorofluoromethane	0.125	0.115	0.115	92.0	92.0	61.0-142			0.000	20
1,2,3-Trichloropropane	0.125	0.0867	0.112	69.4	89.6	67.0-129		J3	25.5	20
1,2,4-Trimethylbenzene	0.125	0.118	0.120	94.4	96.0	70.0-126			1.68	20
1,2,3-Trimethylbenzene	0.125	0.107	0.119	85.6	95.2	74.0-124			10.6	20
1,3,5-Trimethylbenzene	0.125	0.119	0.122	95.2	97.6	73.0-127			2.49	20
Vinyl chloride	0.125	0.137	0.130	110	104	63.0-134			5.24	20
Xylenes, Total	0.375	0.359	0.378	95.7	101	72.0-127			5.16	20
(S) Toluene-d8				*101*	*101*	*75.0-131*				
(S) 4-Bromofluorobenzene				*101*	*98.9*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*86.1*	*86.4*	*70.0-130*				

Method Blank (MB)

(MB) R3846096-1 10/06/22 13:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*59.5*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3846096-2 10/06/22 13:30 • (LCSD) R3846096-3 10/06/22 13:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1140	1150	76.0	76.7	50.0-150			0.873	20
(S) o-Terphenyl				*74.5*	*75.5*	*52.0-156*				

Method Blank (MB)

(MB) R3845751-1 10/06/22 15:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Diesel Range Organics (DRO)	U		1.33	4.00
Residual Range Organics (RRO)	U		3.33	10.0
(S) o-Terphenyl	*79.1*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3845751-2 10/06/22 15:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	41.0	82.0	50.0-150	
(S) o-Terphenyl			*86.6*	*18.0-148*	

L1541137-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541137-01 10/06/22 16:03 • (MS) R3845751-3 10/06/22 16:15 • (MSD) R3845751-4 10/06/22 16:28

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	64.3	11.1	53.4	47.6	65.8	56.8	1	50.0-150			11.5	20
(S) o-Terphenyl					*65.0*	*62.8*		*18.0-148*				

Method Blank (MB)

(MB) R3845462-3 10/06/22 05:59

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Anthracene	U		0.0190	0.0500
Acenaphthene	U		0.0190	0.0500
Acenaphthylene	U		0.0171	0.0500
Benzo(a)anthracene	U		0.0203	0.0500
Benzo(a)pyrene	U		0.0184	0.0500
Benzo(b)fluoranthene	U		0.0168	0.0500
Benzo(g,h,i)perylene	U		0.0184	0.0500
Benzo(k)fluoranthene	U		0.0202	0.0500
Chrysene	U		0.0179	0.0500
Dibenz(a,h)anthracene	U		0.0160	0.0500
Fluoranthene	U		0.0270	0.100
Fluorene	U		0.0169	0.0500
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500
Naphthalene	U		0.0917	0.250
Phenanthrene	U		0.0180	0.0500
Pyrene	U		0.0169	0.0500
1-Methylnaphthalene	U		0.0687	0.250
2-Methylnaphthalene	U		0.0674	0.250
2-Chloronaphthalene	U		0.0682	0.250
(S) Nitrobenzene-d5	*151*			*31.0-160*
(S) 2-Fluorobiphenyl	*112*			*48.0-148*
(S) p-Terphenyl-d14	*110*			*37.0-146*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3845462-1 10/06/22 05:25 • (LCSD) R3845462-2 10/06/22 05:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	2.00	2.49	2.09	124	104	67.0-150			17.5	20
Acenaphthene	2.00	2.45	2.13	122	106	65.0-138			14.0	20
Acenaphthylene	2.00	2.51	2.16	126	108	66.0-140			15.0	20
Benzo(a)anthracene	2.00	2.52	2.19	126	109	61.0-140			14.0	20
Benzo(a)pyrene	2.00	2.63	2.29	132	115	60.0-143			13.8	20
Benzo(b)fluoranthene	2.00	2.29	1.99	115	99.5	58.0-141			14.0	20
Benzo(g,h,i)perylene	2.00	2.20	1.93	110	96.5	52.0-153			13.1	20
Benzo(k)fluoranthene	2.00	2.40	2.10	120	105	58.0-148			13.3	20
Chrysene	2.00	2.45	2.12	122	106	64.0-144			14.4	20
Dibenz(a,h)anthracene	2.00	2.28	2.01	114	100	52.0-155			12.6	20
Fluoranthene	2.00	2.54	2.15	127	107	69.0-153			16.6	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3845462-1 10/06/22 05:25 • (LCSD) R3845462-2 10/06/22 05:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Fluorene	2.00	2.47	2.13	123	106	64.0-136			14.8	20
Indeno(1,2,3-cd)pyrene	2.00	2.34	2.06	117	103	54.0-153			12.7	20
Naphthalene	2.00	2.43	2.06	122	103	61.0-137			16.5	20
Phenanthrene	2.00	2.35	1.98	117	99.0	62.0-137			17.1	20
Pyrene	2.00	2.48	2.13	124	106	60.0-142			15.2	20
1-Methylnaphthalene	2.00	2.52	2.11	126	105	66.0-142			17.7	20
2-Methylnaphthalene	2.00	2.61	2.23	131	111	62.0-136			15.7	20
2-Chloronaphthalene	2.00	2.28	1.97	114	98.5	64.0-140			14.6	20
(S) Nitrobenzene-d5				*163*	*142*	*31.0-160*	J1			
(S) 2-Fluorobiphenyl				*122*	*107*	*48.0-148*				
(S) p-Terphenyl-d14				*118*	*103*	*37.0-146*				

Method Blank (MB)

(MB) R3845776-2 10/06/22 13:29

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) p-Terphenyl-d14	*85.9*			*23.0-120*
(S) Nitrobenzene-d5	*77.0*			*14.0-149*
(S) 2-Fluorobiphenyl	*82.1*			*34.0-125*

Laboratory Control Sample (LCS)

(LCS) R3845776-1 10/06/22 13:11

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0678	84.8	50.0-126	
Acenaphthene	0.0800	0.0701	87.6	50.0-120	
Acenaphthylene	0.0800	0.0657	82.1	50.0-120	
Benzo(a)anthracene	0.0800	0.0677	84.6	45.0-120	
Benzo(a)pyrene	0.0800	0.0657	82.1	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0718	89.8	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0668	83.5	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0663	82.9	49.0-125	
Chrysene	0.0800	0.0731	91.4	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0685	85.6	47.0-125	
Fluoranthene	0.0800	0.0720	90.0	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3845776-1 10/06/22 13:11

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0711	88.9	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0689	86.1	46.0-125	
Naphthalene	0.0800	0.0696	87.0	50.0-120	
Phenanthrene	0.0800	0.0712	89.0	47.0-120	
Pyrene	0.0800	0.0731	91.4	43.0-123	
1-Methylnaphthalene	0.0800	0.0687	85.9	51.0-121	
2-Methylnaphthalene	0.0800	0.0698	87.3	50.0-120	
2-Chloronaphthalene	0.0800	0.0682	85.3	50.0-120	
(S) p-Terphenyl-d14			*85.4*	*23.0-120*	
(S) Nitrobenzene-d5			*83.0*	*14.0-149*	
(S) 2-Fluorobiphenyl			*87.3*	*34.0-125*	

L1541543-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541543-03 10/06/22 20:00 • (MS) R3845740-1 10/06/22 20:20 • (MSD) R3845740-2 10/06/22 20:40

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0862	ND	0.0816	0.0849	94.8	98.5	1	10.0-145			3.88	30
Acenaphthene	0.0862	ND	0.0753	0.0773	87.4	89.8	1	14.0-127			2.68	27
Acenaphthylene	0.0862	ND	0.0816	0.0855	94.8	99.3	1	21.0-124			4.64	25
Benzo(a)anthracene	0.0862	ND	0.0843	0.0880	97.9	102	1	10.0-139			4.25	30
Benzo(a)pyrene	0.0862	ND	0.0846	0.0882	98.2	102	1	10.0-141			4.11	31
Benzo(b)fluoranthene	0.0862	ND	0.0666	0.0690	77.3	80.1	1	10.0-140			3.65	36
Benzo(g,h,i)perylene	0.0862	ND	0.0713	0.0753	80.4	85.0	1	10.0-140			5.44	33
Benzo(k)fluoranthene	0.0862	ND	0.0675	0.0701	78.4	81.4	1	10.0-137			3.76	31
Chrysene	0.0862	ND	0.0795	0.0824	88.2	91.5	1	10.0-145			3.59	30
Dibenz(a,h)anthracene	0.0862	ND	0.0702	0.0719	81.5	83.5	1	10.0-132			2.42	31
Fluoranthene	0.0862	ND	0.0854	0.0887	99.1	103	1	10.0-153			3.83	33
Fluorene	0.0862	ND	0.0785	0.0823	91.1	95.5	1	11.0-130			4.69	29
Indeno(1,2,3-cd)pyrene	0.0862	ND	0.0769	0.0801	89.3	93.0	1	10.0-137			4.12	32
Naphthalene	0.0862	ND	0.0762	0.0803	88.5	93.3	1	10.0-135			5.23	27
Phenanthrene	0.0862	ND	0.0744	0.0776	86.4	90.1	1	10.0-144			4.25	31
Pyrene	0.0862	ND	0.0824	0.0859	93.0	97.1	1	10.0-148			4.22	35
1-Methylnaphthalene	0.0862	ND	0.0794	0.0832	92.1	96.6	1	10.0-142			4.77	28
2-Methylnaphthalene	0.0862	ND	0.0796	0.0842	92.4	97.8	1	10.0-137			5.65	28
2-Chloronaphthalene	0.0862	ND	0.0703	0.0729	81.6	84.6	1	29.0-120			3.61	24
(S) p-Terphenyl-d14					*79.7*	*75.9*		*23.0-120*				
(S) Nitrobenzene-d5					*79.0*	*79.5*		*14.0-149*				
(S) 2-Fluorobiphenyl					*81.5*	*79.6*		*34.0-125*				

Method Blank (MB)

(MB) R3845922-2 10/06/22 17:19

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) p-Terphenyl-d14	*82.9*			*23.0-120*
(S) Nitrobenzene-d5	*109*			*14.0-149*
(S) 2-Fluorobiphenyl	*81.3*			*34.0-125*

Laboratory Control Sample (LCS)

(LCS) R3845922-1 10/06/22 17:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0728	91.0	50.0-126	
Acenaphthene	0.0800	0.0743	92.9	50.0-120	
Acenaphthylene	0.0800	0.0752	94.0	50.0-120	
Benzo(a)anthracene	0.0800	0.0731	91.4	45.0-120	
Benzo(a)pyrene	0.0800	0.0644	80.5	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0695	86.9	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0683	85.4	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0721	90.1	49.0-125	
Chrysene	0.0800	0.0751	93.9	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0669	83.6	47.0-125	
Fluoranthene	0.0800	0.0745	93.1	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3845922-1 10/06/22 17:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0729	91.1	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0716	89.5	46.0-125	
Naphthalene	0.0800	0.0704	88.0	50.0-120	
Phenanthrene	0.0800	0.0698	87.3	47.0-120	
Pyrene	0.0800	0.0767	95.9	43.0-123	
1-Methylnaphthalene	0.0800	0.0725	90.6	51.0-121	
2-Methylnaphthalene	0.0800	0.0728	91.0	50.0-120	
2-Chloronaphthalene	0.0800	0.0678	84.8	50.0-120	
(S) p-Terphenyl-d14			*82.7*	*23.0-120*	
(S) Nitrobenzene-d5			*117*	*14.0-149*	
(S) 2-Fluorobiphenyl			*85.7*	*34.0-125*	

L1541576-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541576-05 10/06/22 19:55 • (MS) R3845922-3 10/06/22 20:13 • (MSD) R3845922-4 10/06/22 20:30

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0975	ND	ND	0.0730	0.000	74.9	1	10.0-145	J6	J3	200	30
Acenaphthene	0.0975	ND	0.145	0.127	149	130	1	14.0-127	J5	J5	13.5	27
Acenaphthylene	0.0975	ND	0.0776	ND	79.6	0.000	1	21.0-124		J3 J6	200	25
Benzo(a)anthracene	0.0975	ND	0.0815	0.0853	83.6	87.5	1	10.0-139			4.53	30
Benzo(a)pyrene	0.0975	ND	0.0845	0.0878	86.6	90.0	1	10.0-141			3.82	31
Benzo(b)fluoranthene	0.0975	ND	0.0771	0.0764	79.1	78.4	1	10.0-140			0.952	36
Benzo(g,h,i)perylene	0.0975	ND	0.0715	0.0747	73.4	76.6	1	10.0-140			4.33	33
Benzo(k)fluoranthene	0.0975	ND	0.0731	0.0792	75.0	81.3	1	10.0-137			8.00	31
Chrysene	0.0975	ND	0.0818	0.0847	79.8	82.8	1	10.0-145			3.51	30
Dibenz(a,h)anthracene	0.0975	ND	0.0720	0.0748	73.9	76.8	1	10.0-132			3.82	31
Fluoranthene	0.0975	ND	0.0819	0.0881	84.0	90.4	1	10.0-153			7.31	33
Fluorene	0.0975	0.150	0.213	0.178	65.0	28.7	1	11.0-130			18.1	29
Indeno(1,2,3-cd)pyrene	0.0975	ND	0.0758	0.0790	77.8	81.0	1	10.0-137			4.09	32
Naphthalene	0.0975	0.547	0.595	0.379	48.8	0.000	1	10.0-135		J3 V	44.3	27
Phenanthrene	0.0975	0.229	0.341	0.249	115	20.0	1	10.0-144		J3	31.4	31
Pyrene	0.0975	0.0717	0.149	0.121	79.0	50.3	1	10.0-148			20.8	35
1-Methylnaphthalene	0.0975	1.30	1.40	0.835	100	0.000	1	10.0-142		J3 V	50.7	28
2-Methylnaphthalene	0.0975	1.86	2.04	1.20	175	0.000	1	10.0-137	V	J3 V	51.4	28
2-Chloronaphthalene	0.0975	ND	0.0613	0.0669	62.9	68.6	1	29.0-120			8.75	24
(S) p-Terphenyl-d14					*75.8*	*77.2*		*23.0-120*				
(S) Nitrobenzene-d5					*0.000*	*0.000*		*14.0-149*	J2	J2		
(S) 2-Fluorobiphenyl					*55.8*	*62.7*		*34.0-125*				

L1541576-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541576-05 10/06/22 19:55 • (MS) R3845922-3 10/06/22 20:13 • (MSD) R3845922-4 10/06/22 20:30

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%

Sample Narrative:

OS: Surrogate failure due to matrix interference

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C4	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Data is likely to show a low bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.

GLOSSARY OF TERMS

Qualifier	Description
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
BBG Assessment

4615 Southwest Freeway
Suite 400
Houston. TX 77027

Billing Information:
BBG Accounts Payable
4615 Southwest Freeway
Suite 400
Houston, TX 77027

Pres Chk

Report to: **Hannah Knapp**

Email To: **hknapp@bbgres.com;**

Project Description: **7602-7703 River Rd**

City/State Collected: Puyallup, WA

Please Circle: (PT) MT CT ET

Phone:

Client Project # **0522013017**

Lab Project # **DSBBGHTX-WA**

Collected by (print): John Ramus

Site/Facility ID # **PUYALLUP, WA**

P.O. #

Collected by (signature): John Ramus

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPH-Dx 40mlAmb-HCl-BT	NWTPH-Dx 4ozClr-NoPres	NWTPH-Gx 40mlAmb HCl	NWTPH-Gx 40mlAmb/MeOH10ml/Syr	PAHSIMLVI 40mlAmb-NoPres-WT	SV8270PAHSIM 4ozClr-NoPres	V8260 40mlAmb-HCl	V8260 40mlAmb/MeOH10ml/Syr			Remarks	Sample # (lab only)
B1-S1-8	Grab	SS	8	9/28/22	10:31	4		X		X		X		X				-01
B2-S1-4	" "	SS	4	" "	12:50	4		X		X		X		X				-02
B2-S2-7	" "	SS	7	" "	12:54	4		X		X		X		X				-03
B3-S1-16	" "	SS	16	" "	14:44	4		X		X		X		X				-04
B4-S1-16	" "	SS	16	" "	15:55	4		X		X		X		X				-05
B5-S1-8	" "	SS	8	" "	17:24	4		X		X		X		X				-06
—		SS																
—		SS																
—		SS																
—		SS																

Chain of Custody Page 1 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # 154543

D057

Acctnum: **DSBBGHTX**
Template: **T216810**
Prelogin: **P952413**
PM: 873 - Heather J Wagner
PB: 9/27/22 dated
Shipped Via: **FedEX Saver**

* Matrix:
(SS - Soil) AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 5882 7561 2197

Sample Receipt Checklist
COC Seal Present/Intact: ✓ NP Y N
COC Signed/Accurate: ✓ Y N
Bottles arrive intact: ✓ Y N
Correct bottles used: ✓ Y N
Sufficient volume sent: ✓ Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: ✓ Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: (Yes) / No HCL / MeoH TBR	If preservation required by Login: Date/Time
John Ren	9/29/22	15:04		R	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 4.5+6 °C Bottles Received: 4.7+0=4.7 2464	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Caleb Tapp	Date: 9/30/22 Time: 10:00 9/30	Hold: Condition: NCF / OK

Company Name/Address:
BBG Assessment

4615 Southwest Freeway
Suite 400
Houston. TX 77027

Billing Information:
BBG Accounts Payable
4615 Southwest Freeway
Suite 400
Houston, TX 77027

Pres Chk

Report to: **Hannah Knapp**

Email To: **hknapp@bbgres.com;**

Project Description: **7602-7703 River Rd**

City/State Collected: **Puyallup, WA**

Please Circle: PT MT CT ET

Phone:

Client Project # **0522013017**

Lab Project # **DSBBGHTX-WA**

Collected by (print): **John Ramus**

Site/Facility ID # **PUYALLUP, WA**

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # 1541543
A210

Acctnum: **DSBBGHTX**
Template: **T216810**
Prelogin: **P952413**
PM: 873 - Heather J Wagner
PB: 9/30/22 JDD
Shipped Via: **FedEX Saver**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPH-Dx 40mlAmb-HCl-BT	NWTPH-Dx 4ozClr-NoPres	NWTPH-Gx 40mlAmb HCl	NWTPH-Gx 40mlAmb/MeOH10ml/Syr	PAHSIMLVI 40mlAmb-NoPres-WT	SV8270PAHSIM 4ozClr-NoPres	V8260 40mlAmb-HCl	V8260 40mlAmb/MeOH10ml/Syr	Remarks	Sample # (lab only)
—		SS														
—		SS														
—		GW														
B1-W1	Grab	GW	NA	9/28/22	10:44	10	X		X		X		X			-07
B3-W1	" "	GW	NA	" "	15:10	10	X		X		X		X			-08
B4-W1	" "	GW	NA	" "	16:32	10	X		X		X		X			-09
B5-W1	" "	GW	NA	" "	17:36	10	X		X		X		X			-10
		GW		"												
		GW														

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 5882 7561 2201

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No (HCl / MeOH TBR)	If preservation required by Login: Date/Time
John Ramus	9/29/22	15:04		2	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: NA °C Bottles Received: 4564 2.8+0=2.8	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 09/30/22 Time: 1000	Hold: Condition: NCF / OK