

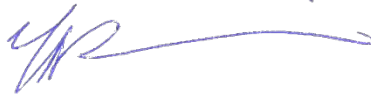
## Remedial Investigation, Focused Feasibility Study, and Cleanup Action Plan

3245 158<sup>th</sup> Avenue Southeast  
Bellevue, Washington

Farallon PN: 2403-008

October 4, 2024

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## ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CAP	cleanup action plan
COC	constituent of concern
DRO	diesel-range organics
Ecology	Washington State Department of Ecology
EHD Map	Washington State Department of Health's Environmental Health Disparities Map
EJ Screening Tool	Environmental Justice Screening and Mapping Tool
EPA	U.S. Environmental Protection Agency
Farallon	Farallon Consulting, L.L.C.
FEMA	Federal Emergency Management Agency
FFS	focused feasibility study
GRO	gasoline-range organics
HVOC	halogenated volatile organic compound
ORO	oil-range organics



MTCA	Washington State Model Toxics Control Act Cleanup Regulation
NFA	No Further Action Determination
PCS	petroleum contaminated soil
Phase I ESA	Phase I Environmental Site Assessment
PLIA	Pollution Liability Insurance Agency
QA/QC	quality assurance/quality control
RI	remedial investigation
RIFFSCAP	Remedial Investigation, Focused Feasibility Study, and Cleanup Action Plan
TEE	Terrestrial Ecological Evaluation
TPH	total petroleum hydrocarbons
UST	underground storage tank
VCP	Ecology Voluntary Cleanup Program
VOC	volatile organic compound
WAC	Washington Administrative Code



## 1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this Remedial Investigation, Focused Feasibility Study Report, and Cleanup Action Plan (collectively referred to as the RIFFSCAP) on behalf of IS Property Investments LLC (IS Property Investments) for the property at 3245 158<sup>th</sup> Avenue Southeast in Bellevue, Washington (herein referred to as the Property) (Figures 1 and 2). The RIFFSCAP was prepared in accordance with the Washington State Model Toxics Control Act Cleanup Regulation (MTCA), Revised Code of Washington (RCW) 70A.305 and its implementing regulation in Chapter 173-340 of the Washington Administrative Code (WAC).

The Site, as defined under MTCA, comprises the area where hazardous substances have come to be located at concentrations exceeding applicable cleanup levels. Based on the RI, the Site includes the western and southern portions of the Property proximate to the Property boundary and does not extend beyond the boundaries of the Property. IS Property Investments will prepare an application to enroll the Site in Ecology's Expedited Voluntary Cleanup Program (VCP) concurrently with this RIFFSCAP.

Farallon conducted an RI at the Property in 2023 and 2024 to assess for potential hazardous substances in soil, soil gas, and groundwater associated with historical operations at and adjacent to the Property. The constituents of concern (COCs) identified for the Site consist of hazardous substances detected at concentrations exceeding applicable MTCA cleanup levels in soil and/or soil gas. Based on the results from the RI, total petroleum hydrocarbons (TPH) as gasoline-range organics (GRO) is retained as a COC for soil and TPH is retained as a COC for soil gas. Soil containing GRO at concentrations exceeding the MTCA Method A cleanup level has been classified as petroleum-contaminated soil (PCS).

The suspected source of soil contamination is the former fuel service station that historically operated on the western portion of the Property (Figure 2). No other source areas of contamination were identified during the RI that may be contributing to the TPH impacts detected in soil gas on the western and southern portions of the Property. The planned cleanup action will consist of excavation and off-Property disposal of PCS identified on the western portion of the Property proximate to the former fuel service station and installation of chemical-resistant vapor barrier to mitigate the potential vapor intrusion pathway.

Based on the results from the remedial investigation, sufficient data have been obtained to demonstrate that the proposed cleanup action for the Site will constitute a permanent



cleanup action to the maximum extent practicable in accordance with MTCA and current and future land use.

## 1.1 PURPOSE

In accordance with WAC 173-340-350, the purpose of the RI is 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 results from the RI enabled the establishment of cleanup standards and the development of and evaluation of cleanup action alternatives. The completed RI provides sufficient data to develop a technically feasible cleanup alternative.

The purpose of the FFS was to develop and evaluate cleanup action alternatives to facilitate selection of a cleanup action in accordance with WAC 173-340-351 through 173-340-370. The FFS was conducted to screen available remediation technologies and identify a set of technically feasible and practicable cleanup action alternatives for evaluation in accordance with the requirements for cleanup actions established in WAC 173-340-360(3) and the expectations for cleanup action alternatives as specified in WAC 173-340-370.

The purpose of the CAP is to describe the selected cleanup action alternative for the Site. The CAP was prepared in accordance with WAC 173-340-360 through 173-340-380. The objective of the planned cleanup action is to protect human health and the environment and meet MTCA requirements to obtain a No Further Action (NFA) determination from Ecology's Expedited VCP.

## 1.2 REPORT ORGANIZATION

This RIFFSCAP 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 and a summary of current and historical uses of the Property and surrounding area.
- **Section 3, Remedial Investigation**, provides a summary of the remedial investigation field program conducted at the Property and presents the analytical results for soil gas, soil, and groundwater samples collected at the Property.
- **Section 4, Conceptual Site Model**, discusses the COCs, media of concern, screening and/or cleanup levels for the cleanup action, confirmed and suspected source areas,



nature and extent of contamination, contaminant fate and transport, exposure pathways and receptors, and cleanup standards for the Property.

- **Section 5, Focused Feasibility Study**, provides a summary of the FFS conducted for the Property impacted by petroleum hydrocarbons in shallow soil, installation of a long-term vapor barrier system to mitigate the potential soil gas to indoor air pathways, and recording of an environmental covenant to require continued use of vapor mitigation measures.
- **Section 6, Cleanup Action Plan**, describes the work elements of the selected cleanup action and vapor mitigation measures, including health and safety protocols, soil removal activities, and performance and confirmation monitoring, and discusses the implementation of institutional and engineered controls and compliance monitoring.
- **Section 7, References**, lists the documents used in preparing this RIFFSCAP.
- **Section 8, Limitations**, provides the limitations associated with this RIFFSCAP.



## 2.0 PROPERTY DESCRIPTION AND BACKGROUND

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

### 2.1 PROPERTY DESCRIPTION

The Property consists of King County Parcel No. 2329000030, which totals 3.95 acres of land developed with a three-story, 69,731-square-foot commercial office building constructed in 1985. Remaining areas of the Property consist of paved parking and landscaped areas (Figure 2). The building on the Property is currently vacant. According to the King County Department of Assessments, the Property is owned by I-90 Bellevue Investments.

The Property is bounded by a bank and an Embassy Suites hotel to the north, 158<sup>th</sup> Avenue Southeast followed by a commercial office building to the east, and Southeast Eastgate Way, followed by Interstate 90 (I-90) to the south and west (Figure 2).

According to the City of Bellevue Map Viewer, the Property and surrounding properties to the north and east are zoned “OLB2” for office and limited business use such as offices, hotels, motels, eating establishments, and retail sales. Properties to the west are zoned “CB” for community business use including multifamily residential development. Properties immediately south of I-90 are zoned “NMU” for neighborhood mixed use, including a mix of retail, service, office, and residential uses.

According to topographic maps reviewed by Farallon, the Property is at an elevation of approximately 333 feet above mean sea level, and Property topography is relatively flat. The Property is located near the high point between Lake Washington to the west and Lake Sammamish to the east, and regional topography generally slopes down to the west and east.

### 2.2 FUTURE PROPERTY USE

Planned redevelopment of the Property will include demolition of the existing building and construction of multifamily townhomes with up to 77 residential units across 15 buildings constructed at and above ground level. A stormwater detention vault also will be installed in the central portion of the Property to a depth of approximately 10 feet below ground surface





(bgs). Remaining subsurface work likely will be limited to installation of utility infrastructure. Preliminary development plans are included in Appendix A.

## **2.3 HISTORICAL PROPERTY USE**

Farallon reviewed documents pertaining to historical uses of the Property during a Phase I Environmental Site Assessment, which was conducted for the Property between October 2023 and March 2024, which was summarized in Farallon's *Phase I Environmental Site Assessment Report* dated March 26, 2024 (Farallon 2024) (Phase I ESA Report). According to documents reviewed during the Phase I ESA, the Property was largely undeveloped prior to the mid-1940s, and was developed with the southwestern portion of the former Bellevue Airfield by 1950. Historical aerial photographs and maps of the former Bellevue Airfield indicate that a fuel service station, former Carter Oil Gasoline Service Station, existed on the western portion of the Property between approximately the late 1950s to the early 1970s, but was removed by the late 1970s (Figure 2). The Bellevue Airfield was reportedly shut down in 1983, and the existing building on the Property was constructed in 1985. The Property has remained largely unchanged from 1985 to the present, and the Property building has been occupied by various commercial businesses including telecommunications companies. The Property building has been vacant since 2020.

Based on the findings of the Phase I ESA, the known and potential release of hazardous substances associated with historical gasoline service station and/or aircraft fueling and maintenance activities conducted on and/or proximate to the Property were identified as a recognized environmental condition in connection with the Property.

## **2.4 CURRENT AND HISTORICAL USES OF SURROUNDING AREA**

This section summarizes the current and historical uses of the properties adjoining and surrounding the Property (Figure 2). Additional information is provided below for adjoining and surrounding properties that have documented releases, remedial actions, and/or where hazardous substances may have been used and stored based on historical land use.

The current and historical land uses for adjoining and surrounding properties were evaluated as part of a Phase I Environmental Site Assessment conducted for the Property by Farallon between September and October 2023, which was summarized in Farallon's Phase I ESA Report.



### 2.4.1 North

The Property is bounded to the north by Key Bank, which was constructed in 2011, and to the northeast by an Embassy Suites hotel, which was constructed in 1990, respectively. North-adjointing properties were largely undeveloped prior to the mid-1940s, and the former Bellevue Airfield was constructed on and northeast of the Property by 1950. Prior to the construction of Key Bank and the Embassy Suites hotel, two fuel service stations and portions of the Bellevue Airfield operated on the north- and northeast-adjointing properties (Figure 2).

The former Shell Byron Ohrt fuel service station, at 3225 158<sup>th</sup> Avenue Southeast, was historically located north of the Property, in the southwestern corner of the existing Embassy Suites hotel parking lot (Figure 2). This former service station was the location of leaking underground storage tanks (USTs), with confirmed releases of gasoline, diesel, other petroleum products, benzene, and halogenated pesticides to soil and was enrolled in the Washington States Pollution Liability Insurance Agency's (PLIA) Petroleum Technical Assistance Program under Project Identification No. PNW088. The former Shell service station is listed in Ecology's contaminated sites database as Facility Site ID No. 56989873 and Cleanup Site ID No. 9759. The facility reportedly operated as a fuel service station from approximately 1964 to 1990. Eight USTs ranging in size from 550 to 8,000 gallons and a concrete sump were removed from the facility during decommissioning, and a remedial excavation was conducted to depths of up to 17 feet bgs to remove contaminated soil. Following excavation activities, a localized area of PCS was left in place at a depth of approximately 17 feet bgs beneath the former concrete sump in the southeastern portion of the facility, and beneath the former pump islands in the northern portion of the facility at a depth of 5 feet bgs. Five groundwater monitoring wells were installed on the facility between 2017 and 2019, and groundwater monitoring events conducted between 2017 and 2020 confirmed that constituents of concern were not present in groundwater at concentrations exceeding MTCA cleanup levels. Groundwater was encountered in monitoring wells at depths between approximately 30 to 35 feet bgs, and was interpreted to flow to the north. Following completion of the groundwater monitoring events, a NFA determination was issued for the facility by PLIA in 2021.

A former Texaco- and Shell-branded gasoline service station operated at 3240 156<sup>th</sup> Avenue Southeast, north of the Property at the location of the existing Key Bank, from approximately the 1970s until the late 2000s, when the property was redeveloped. The facility was identified as the location of confirmed releases of gasoline, benzene, and other petroleum



products to soil. The facility was enrolled in Ecology's VCP under VCP Identification No. NW2350 and listed in Ecology's contaminated sites database as Facility Site ID No. 7687549 and Cleanup Site ID No. 7757. Cleanup activities, including remedial excavation, were conducted during removal of the first generation of UST in 1992, during removal of a hydraulic hoist in 2000, and during removal of the second generation USTs in 2010. Remedial excavation activities extended to depths of up to 17 feet bgs. Ecology's documents indicated that soil at the limits of the UST excavations did not contain petroleum products at concentrations exceeding MTCA cleanup levels. Groundwater reportedly was not encountered during UST removal activities, and groundwater was not evaluated. An NFA determination was issued for the facility under Ecology's Voluntary Cleanup Program (VCP) in 2011.

The runway of the former Bellevue Airfield extended onto the northeast-adjointing property, which is currently developed with the Embassy Suites hotel. The former Bellevue Airfield operated from approximately the mid-1940s until the early 1980s, when it was redeveloped with the existing buildings.

#### **2.4.2 East**

East-adjointing properties were largely undeveloped prior to the mid-1940s, when the former Bellevue Airfield was constructed. Airfield facilities, including hangars, offices, outbuildings, and presumed fueling and maintenance facilities, were present on east-adjointing properties between approximately the mid-1940s until the early 1980s, when the airfield was redeveloped with the existing office buildings. East-adjointing properties have remained largely unchanged from the 1980s to the present.

#### **2.4.3 South**

US Highway 10 was constructed south of the Property between the late 1930s and early 1940s, and properties south of the highway remained largely undeveloped until the late 1960s. US Highway 10 was replaced by I-90 in the 1960s, and I-90 was expanded in the 1970s. Various commercial buildings and offices were constructed south of I-90 during the same time period. South-adjointing properties remained largely unchanged from the 1970s to the present.



#### **2.4.4 West**

West-adjointing properties were largely undeveloped until the construction of I-90 in the 1960s. Properties to the northwest were developed with various commercial buildings, restaurants, and the existing auto dealerships between the 1960s and the present.

### **2.5 REGULATORY STATUS**

IS Property Investments and Farallon initiated discussions with Ecology's Expedited VCP personnel in November 2023 to determine whether the Site would be eligible for the Program. Ecology indicated that the Site would be eligible and could be enrolled in the program once an RI report was prepared summarizing Site conditions. Ecology has provided informal technical assistance on components of the RI conducted to date and the scope of work for the RI. The planned cleanup action has been developed based on the technical assistance provided by Ecology.

### **2.6 GEOLOGY AND HYDROGEOLOGY**

The Puget Sound region is underlain by Quaternary sediments deposited by multiple glacial episodes. Deposition occurred during glacial advances and retreats, which created the existing subsurface conditions. The regional sediments consist primarily of interlayered and/or sequential deposits of alluvial clays, silts, and sands that typically are situated over deposits of glacial till that consist of silty sand to sandy silt with gravel. Outwash sediments consisting of sands, silts, clays, and gravels were deposited by rivers, streams, and post-glacial lakes during the glacial retreats and have been largely over-consolidated by the overriding ice sheets.

Prior to Farallon's RI, a geotechnical investigation was conducted on the Property in October 2023, which consisted of advancing four borings to depths of approximately 20 feet bgs and installing a permanent monitoring well (B-2) in one of the borings (Figure 2). Monitoring well B-2 was constructed with 2-inch, schedule 40 polyvinyl chloride well casing screened between 10 and 20 feet bgs and was completed at the surface with a flush-mounted traffic-rated well monument. Soil conditions encountered during the geotechnical investigation consisted of 0 to 4 feet of dense fill soil comprised of sandy silt with gravel overlying dense sand and silt with varying amounts of gravel interpreted as glacial till.

Based on field observations during Farallon's RI, soil beneath the Property consists of approximately 0 to 5 feet of sandy silt underlain by dense sand with varying amounts of silt and gravel, interpreted as glacial till to the maximum explored depth of 40 feet bgs. Boring



logs describing soil conditions encountered beneath the Property are presented in Appendix B.

Based on depth to groundwater measurements collected between October 2023 and May 2024 in monitoring wells installed during the geotechnical investigation and Farallon's RI, groundwater is encountered at depths of approximately 11 to 24 feet bgs with significant seasonal variability and has been interpreted to flow to the north (Figure 3). Groundwater elevations have been observed to be highest in February during the wet season, and lowest in October just prior to the start of the wet season.

The nearest federally designated wetlands were identified less than 0.1 mile west of the Property within the I-90 corridor. The nearest surface water body were identified as Phantom Lake, approximately 0.8 mile north of the Property, and Lake Sammamish, approximately 1.1 miles east of the Property.

## **2.7 GROUNDWATER USE**

The City of Bellevue water is acquired through the Cascade Water Alliance, which purchases water from the City of Seattle. The water is sourced from the Cedar River and South Fork Tolt River watersheds. There are no drinking water supply wells on or in the vicinity of the Property.

## **2.8 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 Health's Environmental Health Disparities Map (EHD Map);
- The potentially exposed population is located in a census tract that is at or above the 80<sup>th</sup> Washington State percentile of the Demographic Index from the U.S. Environmental Protection Agency's (EPA's) 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 80<sup>th</sup> 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 53033023403, which is in the 47<sup>th</sup> Washington State percentile of the Demographic Index and 25<sup>th</sup> 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 4 on the Environmental Health Disparities Index (Appendix C).

Based on the overall rank of 4 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.

## 2.9 CLIMATE CHANGE

In accordance with WAC 173-340-350(6)(f), Farallon evaluated current and projected local and regional climatological characteristics to determine whether these characteristics could affect the migration of hazardous substances or the resilience of cleanup action alternatives for the Block 38 West Site. 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 this evaluation and the location of the Property in a highly developed area in Bellevue, current and projected local and regional climatological characteristics are not anticipated to affect the migration of hazardous substances or the resilience of cleanup action alternatives at the Property. A summary of this evaluation is presented in the following sections.

### **2.9.1 Sea Level Rise**

The Property is located at an elevation of approximately 333 feet North American Vertical Datum of 1988, and is approximately 5 miles from the nearest marine body of water. According to the Ecology Climate Guidance, high projections estimate up to 4 feet of sea level rise by the year 2100. Due to the elevation of the Property, sea level rise is not expected to affect the migration of hazardous substances or the resilience of cleanup action alternatives at the Property.

### **2.9.2 Flooding**

Farallon reviewed Federal Emergency Management Agency (FEMA) flood maps for the area in the vicinity of the Property, which indicated that the Property is in an area of minimal flood hazard. As described above, sea level rise is not expected to affect the Property, and inundation due to sea level rise is not a concern. In addition, the surrounding public rights-of-way and current and planned future uses of the Property implement stormwater infrastructure to prevent flooding due to heavy precipitation. Based on these conditions, flooding is not likely to affect the migration of hazardous substances or the resilience of cleanup action alternatives at the Property.

### **2.9.3 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 or grasslands. Due to the location of the Property in a highly developed area of Bellevue, fuel sources for wildfires are limited, and risk of wildfires is unlikely.



#### **2.9.4 Landslides and Erosion**

The Property is located in a relatively flat and highly developed area of Bellevue, with minimal exposed ground surface that could create a landslide or erosion hazard. Due to local topography and extensive development covering much of the ground surface in the vicinity of the Property, the risk of landslides and erosion is extremely low.

#### **2.9.5 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. Due to the distance of the Property from the nearest surface water body, shallow groundwater elevations may be influenced by precipitation. However, shallow groundwater is not used at the Property, and the planned cleanup action for the Property does not rely on precipitation to maintain vegetative cover. The remaining drought concerns are not applicable to the Property. Based on the conditions of the Property, drought is not considered to be a potential climate-related impact for the Property.





## 3.0 REMEDIAL INVESTIGATION

The RI was conducted by Farallon and others at the Property in accordance with the provisions of WAC 173-340-350(6) to evaluate whether releases of hazardous substances associated with historical and current operations at the Property and adjacent properties have impacted soil gas, soil, and/or groundwater at the Property. The RI was conducted in several phases between October 2023 and July 2024, with hydrogeological, soil gas, soil, and groundwater analytical data from the early phases used to refine the scope of later phases of the RI. This section presents a summary of the RI field program and results for each phase of investigation.

### 3.1 REMEDIAL INVESTIGATION FIELD PROGRAM

The RI field program was conducted to collect data necessary to adequately characterize the Property for the purpose of developing and evaluating cleanup action alternatives by addressing the recognized environmental condition identified in the Phase I ESA Report. The RI field program was comprised of work elements, including utility reconnaissance, discrete soil gas and ambient air sampling, a passive soil gas survey, soil sample collection, monitoring well installation and development, groundwater monitoring, and management of investigation-derived waste. Boring, soil gas, and monitoring well locations are presented on Figure 2.

The following sections describe the main elements of the RI completed by Farallon at the Property. The main elements of the RI field program included:

- Subsurface utility locating prior to conducting field activities;
- Installing three temporary and eight permanent soil gas monitoring points;
- Conducting a passive soil gas survey;
- Advancing 11 borings;
- Installing and developing three monitoring wells, and developing an existing geotechnical monitoring well;
- Conducting a survey of the monitoring well network to confirm monitoring well locations and top-of-casing elevation;
- Performing five soil gas and/or ambient air monitoring events between October 2023 and July 2024; and



- Performing four groundwater monitoring events between October 2023 and May 2024, which included measurement of groundwater levels and collection of groundwater samples from monitoring wells on the Property for laboratory analysis for petroleum hydrocarbons and/or volatile organic compounds (VOCs).

The components of the RI field program are described in the following sections.

### **3.1.1 Subsurface Utility Location**

Linescape, LLC of Seattle, Washington performed private utility locate surveys before each subsurface investigation and identified underground utilities in the vicinity of each of the proposed investigation locations. Utility Underground Notification Center located public utilities in the vicinity of the Property prior to each phase of ground disturbance.

### **3.1.2 Boring Advancement and Monitoring Well Installation**

Between October 2023 and February 2024, Farallon advanced a total of 11 borings (FB-01 through FB-11) and installed four permanent groundwater monitoring wells (FMW-01 through FMW-04) on the Property. The borings and monitoring wells were completed to evaluate whether hazardous substances were present in soil and/or groundwater at concentrations exceeding MTCA cleanup levels proximate to former fuel service station and airfield operational areas (Figure 2). The borings and wells were advanced to depths of up to 40 feet bgs by Anderson Environmental Contracting (AEC) of Kelso, Washington using a sonic drill rig.

During drilling, a Farallon geologist observed subsurface conditions and recorded observations on boring logs, including soil types encountered, visual and olfactory evidence of soil contamination, and qualitative measurement of volatile organic vapors in soil using a photoionization detector. Soil samples retained for potential laboratory analysis were submitted to F&B under standard chain-of-custody protocols for analysis of one or more of the following:

- Total petroleum hydrocarbons as diesel-range and oil-range organics (DRO and ORO) by Northwest Method NWTPH-Dx;
- GRO by Northwest Method NWTPH-Gx; and
- VOCs by EPA Method 8260D.

Monitoring wells FMW-01 through FMW-04 were constructed using 10 or 15 feet of 0.010-inch slotted screen placed to intersect the surface of the first-encountered groundwater-



bearing zone observed during drilling. The screened interval was placed in a silica sand filter pack, which extended from the bottom of the screened interval to approximately 1 foot above the top of the screened interval. A bentonite seal was installed above the filter pack to a depth of approximately 2 feet bgs, and the borings were backfilled to ground surface with a concrete mix. The monitoring wells were completed at the surface with a watertight locking cap and flush-mounted traffic-rated well monument. Boring logs and monitoring well construction details are provided in Appendix B. Following installation, the monitoring wells also were professionally surveyed for location and elevation by Apex Engineering, Inc. of Tacoma, Washington, a Washington State-licensed surveyor.

### **3.1.3 Monitoring Well Development**

Monitoring wells FMW-01 through FMW-03 were developed after installation using surging and purging techniques until water purged from the wells appeared clear. Low groundwater production was observed immediately following installation, and monitoring well FMW-01 frequently purged dry during development. Monitoring well FMW-04 installed by Farallon, and geotechnical monitoring well B-2, Installed by Terra Associates Inc. prior to the RI field program either were dry or contained only endcap water and were not developed at the time of installation.

Groundwater elevations were observed to rise following completion of the first groundwater monitoring event in October 2023, and additional well development activities were conducted at new monitoring well FMW-01 and existing geotechnical monitoring well B-2 between October 2023 and January 2024 following a rise in groundwater elevations. Additional well development activities included surging and purging a total of approximately 235 gallons of water from FMW-01, and approximately 20 gallons of water from B-2. The additional monitoring well development was conducted following completion of the first groundwater monitoring event in October 2023 to remove any suspended solids and confirm that samples collected from these monitoring wells were representative of subsurface conditions. Monitoring well purge water was placed into 55-gallon steel drums pending off-Property disposal.

### **3.1.4 Groundwater Monitoring**

Farallon conducted a total of four groundwater monitoring events on the Property in October 2023, December 2023, February 2024, and May 2024. The groundwater monitoring events included measuring groundwater elevations and collecting groundwater samples from one or more monitoring wells on the Property. Monitoring well FMW-01 was sampled during all



four monitoring events; monitoring well B-2 was sampled during the October 2023, December 2023, and May 2024 monitoring events; and monitoring wells FMW-02 and FMW-03 were sampled during the October 2023 and May 2024 monitoring events. Monitoring well FMW-04 was dry during each monitoring event and was not sampled during the RI.

During each groundwater monitoring event, Farallon field personnel removed the locking well cap from each monitoring well and allowed groundwater levels to equilibrate to atmospheric pressure for at least 20 minutes. The depth to groundwater was then measured to the nearest 0.01 foot using a water level meter from the top of the well casing. Groundwater samples were collected from the monitoring wells in accordance with standard EPA low-flow groundwater sampling procedures. During purging, temperature, pH, specific conductance, dissolved oxygen, oxidation-reduction potential, and turbidity were monitored to determine when stabilization of these parameters occurred. Following stabilization of the parameters, groundwater samples were collected directly from the low-flow pump outlet. Groundwater samples were transported to F&B under standard chain-of-custody protocols for analysis of one or more of the following:

- GRO by Northwest Method NWTPH-Gx;
- DRO and ORO by Northwest Method NWTPH-Dx;
- VOCs by EPA Method 8260D.

### **3.1.5 Soil Gas Monitoring Point Installation**

A total of three temporary (SG-01 through SG-03) and eight permanent (SG-04 through SG-11) soil gas monitoring points were installed on the Property during the RI to evaluate the potential presence hazardous substances in the subsurface and to evaluate the potential for vapor intrusion for future buildings constructed on the Property. Permanent soil gas monitoring points SG-04 through SG-07 were installed proximate to temporary monitoring points SG-01 through SG-03 to provide repeatable sampling points and evaluate the potential for laboratory and/or sampling interference for samples collected from SG-01 through SG-03. Permanent soil gas monitoring points SG-08 through SG-11 were installed across the remainder of the Property to evaluate the potential presence of hazardous substances in soil gas across the Property. The locations of the temporary and permanent soil gas monitoring points are shown on Figure 2.

Soil gas monitoring points were installed by AEC and Holt Services, Inc, of Edgewood, Washington (Holt) to depths of approximately 5 feet bgs, except for SG-07, which was



installed to a depth of 10 feet bgs. Soil gas monitoring points consisted of a 6-inch stainless-steel screen set in a sand filter pack which was connected to the surface by 0.25-inch polyethylene tubing. The annulus above the sand filter pack in each soil gas monitoring point was sealed with hydrated bentonite chips, and each permanent monitoring point was completed at the surface with a traffic-rated monument. Following sample collection, the temporary soil gas probes were abandoned with bentonite chips and completed at the surface with concrete to match the surrounding grade.

### **3.1.6 Soil Gas and Ambient Air Monitoring**

Discrete soil gas sampling events were conducted on the Property in October 2023, December 2023, February 2024, April 2024, and July 2024. During each sampling event, discrete soil gas samples were collected from one or more monitoring points in accordance with Farallon's standard operating procedures for soil gas sampling and Ecology's *Guidance for Evaluating Vapor Intrusion in Washington State, Investigation and Remedial Action* dated March 2022 (Ecology 2009) (Vapor Intrusion Guidance). The soil gas samples were collected using a 1-liter Summa canister equipped with a 200-milliliter per minute flow controller. Soil gas samples were submitted to F&B under standard chain-of-custody protocols for analysis of air-phase hydrocarbons (APH) by Method MA-APH and VOCs by EPA Method TO-15.

In addition to soil gas sampling, an ambient air sample was collected in the western portion of the Property proximate to the former Carter Oil-branded fuel service station in February 2024 to evaluate whether soil gas analytical results were influenced by ambient conditions. The ambient air sample was collected using a 6-liter Summa canister equipped with an 8-hour flow regulator placed in the approximate breathing zone in the western portion of the Property at the approximate location shown on Figure 2. The ambient air sample was submitted to F&B under standard chain-of-custody protocols for analysis of APH by Method MA-APH and VOCs by EPA Method TO-15.

### **3.1.7 Passive Soil Gas Survey**

Farallon conducted a passive soil gas survey in the western portion of the Property proximate to the former Carter Oil-branded fuel service station between December 11 and 15, 2023. The purpose of the passive soil gas survey was to identify potential source areas of petroleum hydrocarbons and/or HVOCs identified in soil, groundwater, and/or soil gas during previous phases of investigation, and to evaluate whether previous soil gas sampling results were representative of subsurface conditions.



The passive soil gas survey consisted of installing 35 passive soil gas samples to depths of approximately 3 feet bgs in a 25- by 25-foot grid pattern in the western portion of the Property (Figure 2). Borings for the passive soil gas survey were advanced by Holt Services, Inc. of Edgewood, Washington using a handheld rotohammer drill. Passive soil gas samplers were placed into each boring upon reaching total depth and were left in the ground for approximately 3 days prior to retrieval. Upon retrieval, passive soil gas samplers were transported to Amplified Geochemical Imaging, LLC of Newark, Delaware under standard chain of custody protocols for analysis of TPH and VOCs using a modified version of EPA Method 8260. Borings advanced for the passive soil gas survey were backfilled with bentonite chips and completed at the surface with concrete to match the surrounding grade.

### **3.1.8 Management of investigation-Derived Waste**

Soil cuttings, decontamination water, monitoring well purge water, and other wastewater generated during the RI were temporarily stored in labeled 55-gallon steel drums on the Property pending profiling for off-Property disposal.

## **3.2 REMEDIAL INVESTIGATION RESULTS**

This section presents the results of the RI field program performed by Farallon, including a description of the Property geology and hydrogeology; and soil gas, soil, and groundwater analytical results. Select laboratory analytical results for soil gas, ambient air, soil, and groundwater are summarized on Figures 4 through 9 and in Tables 2 through 10. Laboratory analytical reports are included in Appendix D.

### **3.2.1 Geology and Hydrogeology**

As described in Section 2.6, the general stratigraphy encountered in borings advanced on the Property consists of 0 to 5 feet of sandy silt underlain by dense sand with varying amounts of silt and gravel, interpreted as glacial till to the maximum explored depth of 40 feet bgs. Groundwater was encountered intermittently during drilling at depths exceeding 20 feet bgs and was interpreted to consist of one or more perched layers. Significant seasonal variability in groundwater elevations was observed during the RI, and groundwater elevations increased following installation of the monitoring wells. Based on depth to groundwater measurements collected between October 2023 and May 2024 in monitoring wells installed during Farallon's RI, groundwater is encountered at depths of approximately 11 to 24 feet bgs with significant seasonal variability and has been interpreted to flow to the north (Figure 3).



### 3.2.2 Soil Analytical Results

GRO was the only analyte detected in soil at concentrations exceeding the MTCA Method A cleanup level. GRO was detected at concentrations exceeding the MTCA Method A cleanup level in two soil samples collected from monitoring well FMW-01 at depths of 5 and 10 feet bgs (Figure 4; Table 2). GRO was reported non-detect at the laboratory practical quantitation limit (PQL) in the soil sample collected from monitoring well FMW-01 at a depth of 15 feet bgs, and in all other soil samples analyzed. During drilling, impacts of GRO were not observed to be in contact with groundwater. The extent of GRO impacts was bounded vertically and laterally by borings FB-05 through FB-08 (Figure 10).

DRO was detected at a concentration less than the MTCA Method A cleanup level in a single soil sample collected from monitoring well FMW-01 at a depth of 5 feet bgs (Figure 4; Table 2). The laboratory analytical report indicated that the chromatographic pattern for the detection of DRO did not resemble the fuel standard used for quantitation, indicating that the detection of DRO may be the result interference from other petroleum hydrocarbons such as GRO. DRO and ORO were reported non-detect at the laboratory PQL in all other soil samples analyzed.

Ethylbenzene and xylenes were detected at low concentrations, less than MTCA Method A cleanup levels in soil samples collected from monitoring well FMW-01 at depths of 5 and 10 feet bgs. Ethylbenzene and xylenes were reported non-detect at the laboratory PQL in all other soil samples analyzed (Table 2). Remaining petroleum-related VOCs either were reported non-detect at the laboratory PQL or were detected at concentrations less than MTCA cleanup levels (Tables 2 through 4).

Tetrachloroethene (PCE) was detected at a concentration less than the MTCA Method A cleanup level in a single soil sample collected from monitoring well FMW-01 at a depth of 20 feet bgs. PCE and remaining HVOCs were reported non-detect at the laboratory PQL in all remaining soil samples analyzed (Figure 5; Table 3).

Soil analytical results indicate that exceedances of GRO are limited to shallow soil in the vicinity of monitoring well FMW-01, proximate to the former Carter Oil-branded fuel service station and have been laterally delineated within the Property boundary. Exceedances of hazardous substances were not identified in any other soil samples collected on the Property.





### **3.2.3 Groundwater Analytical Results**

As discussed in Section 3.1.4, Groundwater Monitoring, Farallon conducted a total of four groundwater monitoring events on the Property between October 2023 and May 2024. Analytical results for groundwater samples collected during the RI are summarized in the following sections.

#### **3.2.3.1 Petroleum Hydrocarbons**

DRO and ORO were detected at concentrations exceeding the MTCA Method A cleanup level in monitoring well B-2 during the October 2023 groundwater monitoring event (Figure 6; Table 5). The groundwater sample collected from monitoring well B-2 during the October 2023 groundwater monitoring event was a grab groundwater sample of suspected endcap water and was collected without prior well development due to the limited volume of water in the well. In addition, the sample chromatographic pattern was flagged as not resembling the fuel standard used for quantitation, indicating that detections of DRO and ORO likely were not representative of a release of DRO and ORO to groundwater. Groundwater elevations increased between October and December 2023, and additional monitoring well development was conducted a monitoring well B-2 as described in Section 3.1.3, Monitoring Well Development. DRO and ORO were reported non-detect at the laboratory PQL in monitoring well B-2 during the December 2023 and May 2024 groundwater monitoring events, indicating that the groundwater sample collected in October 2023 is not representative of groundwater conditions. In addition, no source of DRO and ORO was identified in soil during the RI. DRO and ORO also were reported non-detect at the laboratory PQL in the remaining groundwater samples collected on the Property (Figure 6; Table 5).

GRO and benzene, toluene, ethylbenzene, and xylenes (BTEX) were reported non-detect at the laboratory PQL in all groundwater samples analyzed, indicating that impacts of GRO in shallow soil proximate to FMW-01 are not impacting groundwater (Figure 6; Table 5).

#### **3.2.3.2 HVOCs**

PCE was detected at a concentration slightly exceeding the MTCA Method A cleanup level in the groundwater sample collected from monitoring well FMW-01 during the October 2023 groundwater monitoring event (Figure 7; Table 6). Following additional monitoring well development activities conducted between November 2023 and January 2024, PCE was detected at concentrations at or less than the MTCA Method A cleanup level during the December 2023, February 2024, and May 2024 groundwater monitoring events. The reduction in PCE concentrations following additional well development indicates that





exceedance during the October 2023 monitoring event may have been attributed to suspended solids in the water column resulting from insufficient well development activities and likely was not representative of groundwater conditions. In addition, no source of PCE was detected in soil samples collected on the Property (Figure 5; Table 3).

PCE was detected at a concentration less than the MTCA Method A cleanup level in FMW-02 during the October 2023 and May 2024 groundwater monitoring events and was reported non-detect at the laboratory PQL in the remaining groundwater samples analyzed (Figure 7; Table 6).

Trichloroethene (TCE) was detected at concentrations less than the MTCA Method A cleanup level in groundwater samples collected from FMW-01 in October and December 2023, and was reported non-detect at the laboratory PQL in the remaining groundwater samples analyzed (Figure 7; Table 6).

Remaining HVOCs were reported non-detect at the laboratory PQL in all groundwater samples analyzed (Figure 7; Table 6).

### **3.2.4 Soil Gas and Ambient Air Sampling Results**

Based on discussions with Ecology and the analytical laboratory regarding the range and concentrations of detected aliphatic and aromatic petroleum hydrocarbons, Farallon compared soil gas analytical results for TPH to a calculated Site-specific soil gas screening level in accordance with Ecology's Vapor Intrusion Guidance. TPH analytical results for soil gas samples collected from soil gas probes SG-05, SG-06, and SG-08 through SG-11 between February and July 2024 were used to calculate Site-specific soil gas screening levels for TPH. Calculated TPH screening levels ranged from 2,606 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) in SG-06 in February 2024 to 90,667  $\mu\text{g}/\text{m}^3$  in SG-09 and SG-10 in April 2024. Soil gas analytical results for TPH collected during the RI were compared to a screening level of 2,606  $\mu\text{g}/\text{m}^3$ , which was the most conservative of the calculated soil gas screening levels for TPH.

Soil gas analytical results for SG-04, located proximate to PCS associated with the former Carter Oil fuel service station in the western portion of the Property were not used to calculate Site-specific soil gas screening levels since the source of soil gas impacts will be removed during the cleanup action. Correspondence between Farallon and Ecology regarding the use of a Site-Specific soil gas screening level for TPH is presented in Appendix E, and soil gas screening level calculations are included in Appendix F.



The initial discrete soil gas sampling event in October 2023 included collection of soil gas samples from temporary soil gas probes SG-01 through SG-03. TPH and benzene were detected at concentrations exceeding the Site-specific soil gas screening level for TPH and the Method B screening level for a residential land use for benzene in all three soil gas samples, with the highest concentrations detected in soil gas probe SG-02, which was located proximate to the former Carter Oil-branded fuel service station where a release of GRO was confirmed to soil (Figure 7; Table 7).

Additional discrete soil gas samples were collected from soil gas probes SG-04 through SG-06 and SG-08 through SG-11 between December 2023 and July 2024 to evaluate the representativeness of soil gas results from temporary probes SG-01 through SG-03, and to evaluate the distribution of hazardous substances in soil gas across the remainder of the Property. TPH was detected at concentrations exceeding the Site-specific soil gas screening level in soil gas samples collected from SG-04 and SG-05 in December 2023 and from SG-04, SG-06, SG-08, and SG-09 in July 2024. Benzene was detected at a concentration less than the MTCA Method B subsurface soil gas screening level for a residential exposure scenario at SG-08 in July 2024 and was reported non-detect in the remaining soil gas samples collected from soil gas monitoring points SG-04 through SG-11, indicating that detections of benzene in SG-01 through SG-03 were not representative of subsurface conditions (Figure 7; Table 7).

Elevated concentrations of TPH in soil gas samples collected from SG-01 and SG-03 during the October 2023 soil gas sampling event, and from SG-05 during the December 2023 soil gas sampling event were interpreted to be the result of laboratory interference and are not considered to be representative of subsurface conditions. According to the analytical laboratory, high concentrations of TPH in soil gas in Summa canisters collected from soil gas monitoring points SG-02 and SG-04 likely caused results from the remaining samples, which were extracted and analyzed concurrently, to be biased high. Documentation from the analytical laboratory describing why these soil gas analytical results should not be considered representative of subsurface conditions is included in Appendix G. Subsequent soil gas samples collected from soil gas monitoring points SG-05, SG-06, and SG-08 through SG-11 analyzed independently of SG-04 contained significantly lower concentrations of TPH in soil gas. In addition, as described in Sections 3.2.2 and 3.2.3, no source of TPH was identified in soil or groundwater samples collected proximate to soil gas monitoring points SG-01, SG-03, and SG-05 through SG-11 (Figure 4; Table 2).



Acrolein, bromodichloromethane, and/or chloroform were detected at concentrations exceeding MTCA Method B screening levels for residential exposure in one or more soil gas samples collected from SG-08 through SG-11. These compounds are commonly attributed to sampling and/or laboratory interference and are not considered representative of subsurface conditions. In addition, none of these compounds were detected in soil samples collected during installation of the soil gas probes. Remaining VOCs either were detected at concentrations less than MTCA Method B screening levels, where established, or were reported non-detect at laboratory PQLs.

#### **3.2.4.1 Ambient Air Sampling Results**

Ambient air analytical results indicated that benzene and naphthalene were detected at concentrations slightly exceeding the MTCA Method B indoor air cleanup level for residential exposure. The calculated value for TPH also exceeded the MTCA Method B indoor air cleanup level due to reporting limits for APH exceeding the MTCA Method B indoor air cleanup level. Detections of TPH and benzene in outdoor ambient are suspected to be the result of proximity to I-90 and emissions from vehicles.

#### **3.2.4.2 Passive Soil Gas Survey Results**

Passive soil gas results indicated that elevated concentrations of TPH and naphthalene were detected in soil gas in a localized area in the western portion of the Property proximate to monitoring well FMW-01 and the former Carter Oil-branded fuel service station (Figures 9A and 9C). Benzene also was detected at elevated concentrations in two passive soil gas sampling locations in the western portion of the Property (Figure 9B). PCE was detected in a single passive soil gas sample at a low concentration in the western corner of the Property, west of monitoring well FMW-01 (Figure 9D). Passive soil gas results were used to support selection of boring locations and soil gas monitoring points during subsurface investigation activities.



## **4.0 CONCEPTUAL SITE MODEL**

This section provides a summary of the conceptual site model derived from the results of the RI. Included in this section is a discussion of COCs, confirmed and suspected source areas, affected environmental media, contaminant fate and transport, and exposure pathways and receptors. 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.

### **4.1 CONFIRMED AND SUSPECTED SOURCES**

The results of the RI confirm that historical operations of the Carter Oil-branded fuel service station resulted in releases of petroleum hydrocarbons to soil in the western portion of the Property. No other confirmed sources of hazardous substances have been identified in soil on the Property. Detections of TPH in soil gas in the western portion of the Property are attributed to operations at the former Carter Oil-branded fuel service station. No confirmed source has been identified for detections of TPH in soil gas across the remainder of the Property. Detections of TPH in soil gas across the remainder of the Property may be attributed to residual impacts of petroleum hydrocarbons in soil on north-adjointing properties, the potential presence of shallow fill material across portions of the Property, and/or associated with historical airfield activities. Detections of petroleum hydrocarbons on soil were limited to soil samples collected proximate to the former Carter Oil-branded fuel service station on the western portion of the Property.

Section 2.4 provides a summary of historical releases of hazardous substances and subsequent cleanup actions on north-adjointing properties, including the releases of petroleum products to soil as a result of historical fuel service station operations on north-adjointing properties.

### **4.2 AFFECTED ENVIRONMENTAL MEDIA**

Soil is a medium of concern on the Property based on GRO being detected in soil at concentrations exceeding the MTCA Method A cleanup level.

Groundwater has been eliminated as a medium of concern due hazardous substances, including DRO, ORO, GRO, and VOCs, either being reported non-detect at the laboratory PQL or being detected at concentrations less than MTCA cleanup levels in representative groundwater samples collected on the Property. Although DRO, ORO, and PCE were detected in groundwater at concentrations exceeding MTCA Method A cleanup levels during the



October 2023 groundwater monitoring event, these samples were considered to not be representative of subsurface conditions, and subsequent groundwater samples did not contain exceedances of these compounds.

Indoor air has been retained as a potential medium of concern, based on the presence of TPH in soil gas at concentrations exceeding the Site-specific soil gas screening level beneath portions of the Property. The planned cleanup action will include removal of PCS that is suspected to be a potential source of soil gas impacts, and planned redevelopment of the Property will include the installation of a chemical-resistant vapor barrier rated for TPH and VOCs beneath portions of the future building foundations, if necessary, pending additional post-cleanup action soil gas monitoring. Installation of a chemical-resistant vapor barrier, if necessary, will eliminate the potential vapor intrusion exposure pathway for future building occupants.

### **4.3 TRANSPORT PATHWAYS**

Hazardous substances in soil and/or soil gas at the Site have the potential to migrate through natural mechanisms that may result in exposure to human and ecological receptors. The primary potential migration pathways at the Site are the following.

#### **4.3.1 Soil to Groundwater**

Based on the RI results, the soil-to-groundwater pathway is incomplete. Petroleum hydrocarbons detected at concentrations exceeding MTCA Method A cleanup levels in soil were not observed to be in contact with groundwater, and petroleum hydrocarbons were reported non-detect at the laboratory PQL in all representative groundwater samples collected on the Property. HVOCs were reported non detect at the laboratory PQL, and HVOCs either were reported non-detect at the laboratory PQL or were detected at concentrations less than MTCA cleanup levels in groundwater samples collected.

The planned cleanup action for the Site will remove soil containing GRO at concentrations exceeding the MTCA Method A cleanup level from within the limits of the Property, eliminating the soil to groundwater pathway from the Property.

#### **4.3.2 Soil/Groundwater to Air**

Volatile compounds in soil have the potential to volatilize to the vapor phase and intrude into nearby structures. Based on the soil and soil gas data collected during the RI, the COCs present in soil and/or soil gas have the potential to volatilize to indoor air. The planned cleanup action for the Site will remove soil containing GRO at concentrations exceeding the



MTCA Method A cleanup level, which will eliminate a potential source of soil gas impacts at the Site. The soil/soil gas pathway to air is considered potentially complete.

#### **4.3.3 Groundwater to Surface Water and Sediment**

The groundwater to surface water pathway is considered incomplete since there are no MTCA exceedances of COCs in groundwater, and since the nearest surface water features are at least 0.8 mile away from the Property.

### **4.4 POTENTIAL RECEPTORS AND EXPOSURE PATHWAYS**

The exposure risks associated with the presence of hazardous substances in soil and/or soil gas at the Site are identified as human health and terrestrial ecological receptors. This subsection presents the evaluation and conclusions pertaining to the exposure pathways at the Site.

#### **4.4.1 Soil Direct Contact**

The direct contact pathway for soil currently is considered incomplete due to the presence of asphalt pavement over soil containing GRO at concentrations exceeding MTCA Method A cleanup levels. However, the soil direct contact pathway would be considered complete if the pavement was removed, or if soil was disturbed during redevelopment activities or subsurface utility work. The proposed cleanup action, including excavation of all soil containing GRO at concentrations exceeding MTCA Method A cleanup levels will eliminate the direct contact pathway for soil on the Property.

#### **4.4.2 Groundwater Ingestion/Drinking Water Beneficial Use**

Based on the results from the RI and interim actions, the groundwater contact and/or ingestion exposure pathway is incomplete at the Site. No hazardous substances were detected in groundwater at concentrations exceeding MTCA Method A cleanup levels. Therefore, groundwater is not retained as a medium of concern for the Site.

#### **4.4.3 Vapor Intrusion**

Based on the RI soil gas results, there is a potential vapor intrusion risk from TPH, which was detected at concentrations exceeding Site-specific soil gas screening levels protective of indoor air in soil gas samples on the southern portion of the Property. The cleanup action includes the installation of a chemical resistant vapor barrier, if post-cleanup soil gas sampling indicates that TPH in soil gas remains at concentrations exceeding Site-specific screening levels protective of indoor air following completion of the cleanup action.



#### **4.4.4 Terrestrial Ecological Evaluation**

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 there are fewer than 1.5 acres of contiguous undeveloped land on the Property or within 500 feet of any area of the Property, and the Property is not contaminated with any of the hazardous substances listed in WAC 173-340-7491(1)(c)(ii). No further consideration of terrestrial ecological impacts is required under MTCA. The Ecology TEE form for the Property is provided in Appendix H.

#### **4.5 CONSTITUENTS OF CONCERN**

The COCs for the Property consist of hazardous substances exceeding MTCA cleanup levels that have been detected in soil and/or groundwater. GRO was identified as the only COC for soil on the Property.

As discussed above in Section 4.2, no COCs were detected in groundwater at concentrations exceeding the MTCA Method A cleanup levels. Based on the results from the RI, no hazardous substances were retained as COCs for groundwater.

TPH has been identified as a potential COC for indoor air based on exceedances of the Site-specific screening level for soil gas.

#### **4.6 CLEANUP STANDARDS**

Cleanup levels are established based on the potential exposure pathways and receptors (identified in Section 4.2) to identify a conservative basis for defining the extent of contamination for each hazardous substance and medium at a site. The cleanup standards for the Property have been established in accordance with WAC 173-340-700 through 173-340-750 to be protective of human health and the environment.

MTCA Method A cleanup levels for unrestricted land use are appropriate cleanup levels for soil at the Property due to the limited number of COCs in soil and the planned residential



use of the Property. GRO is the only COC identified in soil, and the proposed cleanup level for GRO in soil is 100 milligrams per kilogram since benzene has not been detected in soil on the Property.

The proposed cleanup level for COCs in indoor air is the MTCA Method B Indoor Air Cleanup Level for residential exposure for TPH: 86 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ).





## 5.0 FOCUSED FEASIBILITY STUDY

This section provides a summary of an Focused Feasibility Study (FFS) to select and implement a preferred cleanup alternative for soil, soil gas, and indoor air at the Property in accordance with WAC 173-340-350(8). The FFS is intended to provide sufficient information to select a preferred cleanup action alternative under the Expedited VCP. The cleanup action will be conducted during redevelopment of the Property.

Existing structures on the Property will be demolished to allow for regrading to support future development activities. The future development plan includes construction of up to 77 residential townhome units in 15 buildings with slab-on-grade foundations.

The FFS identifies the cleanup technologies appropriate for the COCs and affected media and a preferred cleanup action.

### 5.1 TECHNOLOGY SCREENING

The RI identified GRO in soil and TPH in soil gas at concentrations exceeding the MTCA Method A cleanup level and/or Site-specific soil gas screening level. The source of soil impacts on the Property is associated with operation of a former Carter Oil-branded fuel service station on the western portion of the Property, and soil gas impacts on the Property are suspected to be associated with the former fuel service stations on and/or in the vicinity of the Property and/or former airfield operations.

Multiple remedial technologies are appropriate to remediate PCS and mitigate the potential for vapor intrusion. These technologies include excavation, soil vapor extraction, chemical-resistant vapor barriers, subslab depressurization systems, and passive venting systems. Based on the localized extent of PCS in the western portion of the Property, impacts of TPH in soil gas in the western and southern portions of the Property, and slab-on-grade construction of future buildings on the Property, excavation of PCS and installation of chemical-resistant vapor barriers is the most feasible and cost effective cleanup alternative for the Property with the shortest restoration time frame. Based on the complete removal of the source of soil contamination and installation of a chemical resistant vapor barrier to mitigate the potential vapor intrusion exposure pathway, no further evaluation of other remedial technologies is necessary.

The planned redevelopment foundations will be slab-on-grade and will not require mass excavation of soil and/or interception of the groundwater table. Construction of the new



foundations at the Property will incorporate a chemical-resistant vapor barrier designed to prevent direct contact with HVOCs in soil gas and groundwater, eliminating the potential for future vapor intrusion into the finished structure.

Residual impacts of TPH in soil gas suspected to be the result of historical Property operations may remain on the Property following completion of the cleanup action. Any exposure pathway from soil gas to indoor air associated with residual impacts of TPH in soil gas beneath the Property will be mitigated by the vapor barrier system installed below building foundations proximate to impacts of TPH in soil gas. The selected cleanup alternative will include installation of a chemical-resistant vapor barrier designed to meet the requirements of MTCA and Ecology's Vapor Intrusion Guidance to ensure protection of human health and the environment until soil gas screening levels are attained for the Site, and institutional controls such as recording an environmental covenant to integrity and/or maintenance of vapor mitigation measures on the Property.

Institutional controls are measures undertaken to limit or prohibit activities that may interfere with the integrity of a cleanup action or that could result in adverse exposure to hazardous substances at the Property and are implemented in accordance with WAC 173-340-440. Institutional controls can be effective protective measures, preventing exposure to impacted soil gas, and are considered to be readily implementable at the Property at a significantly lower cost than active cleanup technologies. Institutional controls that were evaluated for the FFS included an environmental covenant requiring vapor mitigation measures to be implemented on the Property, consistent with residential land use and screening and/or cleanup levels. The environmental covenant would require that vapor mitigation measures be installed and maintained on the Property as long as a potential vapor intrusion risk exists for Property buildings.

## **5.2 SELECTED CLEANUP ACTION**

Sufficient information is presented in this RIFFSCAP to select, design, and implement a permanent cleanup action at the Property that is protective of human health and the environment. Based on the RI data and assessment of practical remedial alternatives in light of redevelopment of the Property, the selected cleanup action will include (a) excavation of all PCS in the western portion of the Property; (b) installation of permanent vapor barriers beneath future Property buildings where a potential risk of vapor intrusion has been identified to eliminate the potential for any future vapor intrusion into indoor air;



and (c) the recording of an environmental covenant to require continued use of vapor mitigation measures.

Residual impacts of TPH in soil gas following completion of the cleanup action will remain isolated beneath the vapor barriers incorporated into the new building foundations.

No active dewatering is planned during redevelopment activities, other than management of surface water from storm events during construction. Stormwater will be collected at a low point on the Property or in a temporary sump location, pumped to a holding tank, and treated as necessary to meet discharge requirements prior to discharging to either the stormwater or sanitary sewer line. Construction stormwater treatment system performance will be monitored throughout the period of redevelopment to ensure discharge criteria are met.

### **5.3 THRESHOLD CRITERIA**

The selected cleanup action for the Property will meet threshold requirements for cleanup actions identified under WAC 173-340-360 to be protective of human health and the environment, comply with cleanup standards, and provide for compliance monitoring as appropriate. Excavation and off-Property disposal of PCS is suitable to eliminate transport and exposure pathways, and installation of vapor mitigation system will eliminate any potential future migration of soil gas to indoor air at the Property.



## 6.0 CLEANUP ACTION PLAN

This section presents a description of the proposed cleanup action, the components of the cleanup action, and a discussion of compliance monitoring; and summarizes the primary activities and technical elements of the cleanup action, including contaminated soil excavation activities, vapor intrusion mitigation, performance and confirmation monitoring, waste disposal, and documentation.

### 6.1 DESCRIPTION OF CLEANUP ACTION

The selected cleanup action includes the excavation and off-Property disposal of all PCS on the western portion of the Property. In addition, chemical-resistant vapor barriers may be installed beneath new building foundations if soil containing petroleum hydrocarbons is left in place at concentrations less than MTCA Method A cleanup levels but exceeding screening levels for potential vapor intrusion established in Ecology's Vapor Intrusion Guidance, or if post-cleanup soil gas monitoring indicates that TPH remains in soil gas at concentrations exceeding the Site-specific screening level. Excavation of PCS will be conducted in advance of Property redevelopment, and vapor barriers will be installed as necessary during Property redevelopment. Figure 11 shows the conceptual layout of future development and vapor barrier extent.

The cleanup action will include the following primary activities:

- Obtaining necessary permits, including a grading permit for cleanup action excavation activities.
- Updating the existing Property-specific health and safety plan for cleanup action activities.
- Decommissioning monitoring wells on the Property in advance of cleanup and redevelopment activities.
- Implementing temporary erosion and sedimentation control measures.
- Preparing a soil management plan to describe procedures for sampling, handling, and disposal of PCS during the cleanup action, and petroleum-impacted soil that may be encountered during Property redevelopment.
- Documenting the installation of a chemical-resistant vapor barrier as needed for each building foundation requiring vapor mitigation measures during redevelopment with quality assurance/quality control (QA/QC) checklists, and performing a smoke



test on the completed vapor barriers post-rebar installation and prior to the pouring of the concrete foundation. The vapor barrier will be designed and installed to eliminate the potential threat of vapor intrusion into the newly constructed buildings.

- Recording an environmental covenant on the Property.

## **6.2 POTENTIALLY APPLICABLE LOCAL, STATE, AND FEDERAL LAWS**

The cleanup action must comply with applicable local, state, and federal laws (WAC 173-340-710). The potentially applicable local, state, and federal laws for the cleanup action are provided below.

### **6.2.1 Washington State Model Toxics Control Act Cleanup Regulation**

The MTCA statute (Chapter 70A.305 RCW) is the primary law that governs cleanup of contaminated sites in the state of Washington. The MTCA cleanup regulation (WAC 173-340) specifies criteria for the evaluation and conduct of a cleanup action. It requires that cleanup actions protect human health and the environment, meet environmental standards in other applicable laws, and provide for monitoring to confirm compliance with cleanup levels.

For cleanup actions involving containment of hazardous substances, MTCA has requirements that must be met for the cleanup action to be considered in compliance with soil cleanup standards. These include implementing a compliance monitoring program that is designed to ensure the long-term integrity of the containment system and applying institutional controls where appropriate to the affected areas (WAC 173-340-440).

### **6.2.2 State Environmental Policy Act**

The State Environmental Policy Act (SEPA) (WAC 197-11) and the SEPA procedures (WAC 173-802) provide the framework for state agencies to evaluate the environmental consequences of a project and ensure appropriate measures are taken to mitigate environmental impacts. Completion of a SEPA checklist may be required to obtain a City of Bellevue grading permit for Property redevelopment. According to the City of Bellevue, a SEPA checklist will not be required to conduct cleanup action excavation activities in advance of Property redevelopment due to the limited size and scope of the proposed cleanup action excavation.

### **6.2.3 Solid and Hazardous Waste Management**

The Washington Dangerous Waste Regulations (WAC 173-303) would apply if dangerous wastes are generated, and U.S. Department of Transportation and Washington State



Department of Transportation regulations regarding transport of hazardous materials (49 CFR Parts 171-180) would apply if regulated material is transported off-site as part of the cleanup action. No Dangerous Waste is expected to be generated during the cleanup action. The Washington Solid Waste Handling Standards (WAC 173-350) regulate handling, treatment, or off-site disposal of nonhazardous solid waste.

#### **6.2.4 Construction Stormwater General Permit**

Cleanup action excavation activities are not anticipated to require a National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit since dewatering and discharge to the waters of the State of Washington is not anticipated to be necessary. A Construction Stormwater General Permit may be necessary for Property redevelopment activities since the construction area for Property redevelopment will be greater than 1 acre in size.

#### **6.2.5 City of Bellevue Grading Permit**

A grading permit from the City of Bellevue will be required for the cleanup action because of excavation and backfilling associated the removal of PCS. Substantive requirements of the grading permits include erosion control, which is addressed by implementation of best management practices in accordance with a project-specific temporary erosion and sediment control plan. A separate grading permit will be obtained from the City of Bellevue for Property redevelopment.

#### **6.2.6 Worker Safety Regulations**

The Occupational Safety and Health Administration (29 CFR 1910.120) and Washington Industrial Safety and Health Act (WAC 296-62) govern worker safety during the cleanup action. Compliance would be achieved through preparation and implementation of site-specific health and safety plan(s) with appropriate controls, worker training and certifications, and occupational monitoring.

#### **6.2.7 Washington State Water Well Construction Regulations**

Monitoring wells will be installed and decommissioned as part of the cleanup action in accordance with the Minimum Standards for Construction and Maintenance of Wells (WAC 173-160).



### **6.2.8 Historical and Cultural Resource Protection**

As required by state law, appropriate measures will be taken to evaluate the potential presence of historical, archaeological, or cultural resources during the cleanup action.

## **6.3 COMPONENTS OF THE CLEANUP ACTION**

The following sections describe the main components of the cleanup action.

### **6.3.1 Permitting and Safety**

The cleanup action includes obtaining permits and authorizations required by state and local jurisdictions. A City of Bellevue grading permit will be obtained prior to commencing the cleanup action.

A HASP that includes protection monitoring and measures to minimize potential short-term exposure during the excavation will be prepared to protect personnel during cleanup activities that involve potential exposure to hazardous materials (WAC 173-340-820). The HASP will comply with the requirements of the Occupational Safety and Health Administration and the Washington Industrial Safety and Health Act.

### **6.3.2 Groundwater Monitoring Well Decommissioning**

Monitoring wells on the Property will be decommissioned in accordance with the Minimum Standards for Construction and Maintenance of Wells (WAC 173-160) prior to the start of the cleanup action.

### **6.3.3 Shoring**

The planned excavation is anticipated to extend to a depth of 12 feet bgs and will require a 1-foot to 1-foot slope to maintain the sidewalls of the excavation. Additional shoring is not anticipated to be necessary to facilitate cleanup action excavation activities. A geotechnical engineer will confirm excavation sloping and backfill requirements prior to conducting the cleanup action excavation.

### **6.3.4 Soil Excavation and Disposal**

GRO has been detected at concentrations exceeding the MTCA Method A cleanup level in a localized area of shallow soil in the western portion of the Property to a depth of approximately 12 feet bgs (Figure 10). Cleanup action excavation activities will consist of excavation and off-Property disposal of all PCS in the western portion of the Property for disposal at an approved Subtitle D disposal facility selected by IS Property Investments.



Compliance soil samples will be collected from the base and sidewalls of the excavation area. Farallon anticipates that up to 300 tons of PCS will be removed from the Property during cleanup action excavation activities.

### **6.3.5 Vapor Mitigation Measures**

The cleanup action excavation is expected to remove all PCS that is a source of TPH in soil gas in the western portion of the Property. TPH also has been detected in soil gas at concentrations exceeding Site-specific soil gas screening levels in the western and southern portions of the Property. The source of TPH in soil gas across the remainder of the Property has not been identified but may be attributable to residual petroleum impacts from fuel service stations and/or historical airfield operations on and in the vicinity of the Property.

Chemical-resistant vapor barrier will be installed beneath buildings within the localized area where TPH is detected in soil gas at concentrations exceeding the Site-specific soil gas screening level during post-cleanup soil gas monitoring. Prior to the installation of the vapor barrier, a round of soil gas monitoring will be conducted to evaluate whether vapor mitigation measures are still necessary following removal of the TPH source in soil. Vapor barriers will be installed during construction of the new residential buildings, as warranted. The vapor barrier will mitigate the risk of exposure of TPH in soil gas and eliminate the potential vapor intrusion to indoor air exposure pathway. The estimated extent of vapor barriers based on existing soil gas data is presented on Figure 11. The final extent of vapor barriers will be determined based on the results of post-cleanup soil gas monitoring. The specification for the vapor barrier and quality assurance measures required during installation of the vapor barrier are summarized in the sections below.

#### **6.3.5.1 Vapor Barrier Installation**

The vapor barrier system design comprises a 20-millimeter high-density polyethylene liner that will extend under horizontal foundation slabs of the buildings. The vapor barrier currently proposed is a 20-millimeter Drago Wrap Vapor Intrusion Barrier (Drago Wrap) from Stego Industries, LLC of San Clemente, California (Appendix I) or approved equivalent. Per ASTM International Standard E1745, Drago Wrap is specifically engineered to mitigate petroleum hydrocarbons, which are the only identified COC for the Property. Drago Wrap is a multi-layered plastic extrusion that meets the standards of ASTM E1745 for water vapor retarders in contact with soil or granular fill under concrete slabs. Drago Wrap will be installed per the manufacturer's specifications (Appendix I).





#### **6.3.5.2 Vapor Barrier Quality Assurance and Testing**

Installation of a chemical-resistant vapor barrier for each building foundation during redevelopment will be documented with QA/QC checklists, and the performance of smoke tests on the completed vapor barrier post-rebar installation and prior to the pouring of the concrete foundation (Appendix J).

#### **6.3.6 Unforeseen Conditions**

Unforeseen conditions may be encountered during grading and excavation at a formerly developed property with a history of various uses. Unforeseen conditions that may be encountered during implementation of the cleanup action include but are not limited to discovery of USTs or contaminated media previously not identified by sampling conducted during the RI.

In the event that a UST(s) is encountered during construction excavation, the General Contractor will temporarily suspend excavation activities proximate to the UST and immediately notify IS Property Investments and Farallon as soon as possible after the encounter. Each UST encountered will be permanently decommissioned by excavation and removal in accordance with Washington State Underground Storage Tank Regulations (WAC 173-360) and Ecology Guidance. A certified specialty subcontractor selected by the General Contractor will provide a UST Decommissioner to conduct the UST decommissioning and removal activities, which will include inerting and rinsing the interior of the UST, as necessary, and removing the UST from the Property for recycling.

At the request of IS Property Investments, Farallon will support the permitting and inspection activities required for permanent decommissioning of USTs encountered during construction excavation. Farallon will provide a Washington State-certified UST Assessor to observe the UST decommissioning activities and will perform performance and/or confirmation soil sampling at the limits of soil excavation related to removal of the UST in accordance with Ecology regulations. Confirmation soil samples will be collected from the UST excavation and submitted for analysis for appropriate constituents based on field observations, Ecology Guidance, and regulatory requirements. Farallon will complete the *Underground Storage Tank – Site Check/Site Assessment Checklist* form (Ecology 1999) and submit it to Ecology following receipt of the confirmation soil sample analytical data. The results from the UST decommissioning activities will be incorporated into the Cleanup Action Closure Report that will be prepared for the Property.



If field observations indicate the presence of potentially contaminated soil, groundwater, and/or stormwater related to USTs, or other potentially affected media during construction excavation, excavation work will stop pending characterization of the potentially contaminated media and development of an appropriate treatment and/or disposal alternative by Farallon to be approved by IS Property Investments. The General Contractor will direct the appropriate subcontractor(s) to implement the selected treatment and/or disposal remedy. Following characterization and delineation of contaminated media, the media will be removed or remediated to the maximum extent practicable.

## 6.4 COMPLIANCE MONITORING

Three types of compliance monitoring have been identified for cleanup actions performed under MTCA (WAC 173-340-410): protection monitoring, performance monitoring, and confirmational monitoring. A paraphrased purpose for each is presented below (WAC 173-340-410[1]):

- **Protection Monitoring** confirms whether human health and the environment are adequately protected during the cleanup action;
- **Performance Monitoring** confirms that the cleanup action has attained screening levels or other performance standards necessary to demonstrate compliance with a permit or the substantive requirements of other laws; and
- **Confirmational Monitoring** confirms the long-term effectiveness of the cleanup action once screening levels or other performance standards have been attained.

### 6.4.1 Protection Monitoring

The existing Property-specific HASP will be updated for the cleanup action and will meet the minimum requirements for such a plan identified in federal (29 CFR 1910.120 and 1926) and state (WAC 173-340-810 and 296) regulations. The HASP will identify all known physical, chemical, and biological hazards; hazard monitoring protocols; and administrative and engineering controls required to mitigate the identified hazards. Protection monitoring will be performed in accordance with the HASP.

Workers involved in the cleanup action who will encounter potentially impacted soil will have completed 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training in accordance with 29 CFR 1910.120 and will have completed Annual 8-Hour HAZWOPER refresher training, as needed.



#### **6.4.2 Performance Monitoring**

Performance monitoring will provide soil analytical results to refine, classify, and/or identify the presence of hazardous substances exceeding cleanup levels within the cleanup action excavation area. Soil samples collected during the RI confirm that GRO is present at concentrations exceeding MTCA Method A cleanup areas in a localized area in the western portion of the Property proximate to monitoring well FMW-01. Additional performance soil samples may be collected if field screening observations indicate that hazardous substances may extend beyond the anticipated limits of the cleanup action excavation.

Performance monitoring will involve collecting in-situ soil samples for laboratory analysis to quantify concentrations of hazardous substances in soil. Discrete soil samples will be collected from the cleanup action excavation area to serve as confirmation samples where screening levels are attained.

Soil samples collected for performance monitoring, confirmation monitoring, to support soil profiling and disposal, and clean soil imported for backfill will be analyzed for one or more of the following:

- GRO by Northwest Method NWTPH-Gx;
- DRO and ORO by Northwest Method NWTPH-Dx; and
- BTEX by EPA Method 8260D.

The performance and confirmation soil samples will be analyzed on an appropriate turnaround schedule to prevent delays in the cleanup action excavation schedule. The procedures for soil sample collection (e.g., frequency, location) and sample handling are described in the following sections.

#### **6.4.3 Confirmational Monitoring**

Confirmational monitoring for soil will consist of collecting in-situ soil samples from the base and sidewalls of the excavation area to confirm whether hazardous substances are present at concentrations exceeding screening levels. Performance monitoring soil sample locations will be used as confirmation soil sampling points in cases where the analytical results for the performance soil samples confirm that concentrations of hazardous substances less than the cleanup levels have been attained at the limits of the cleanup action excavation.

Confirmation soil samples will be collected from the final lateral and vertical limits of the excavation at the rate of at least one soil sample from the base of the excavation and at



least two soil samples from each of the four sidewalls of the excavation, including sidewall samples at depths of approximately 5 and 10 feet bgs.

Following completion of cleanup activities, Farallon will conduct additional soil gas monitoring to evaluate whether TPH remains in soil gas at concentrations exceeding the Site-specific soil gas screening level which would necessitate the installation of vapor barriers to mitigate the potential for vapor intrusion into future Property buildings.

If vapor barriers are necessary, confirmation monitoring for planned vapor barriers will consist of documenting the installation and testing of the vapor barrier with QA/QC checklists, and the performance of smoke tests on the completed vapor barrier post-rebar installation and prior to the pouring of the concrete foundation. The vapor barrier QA/QC checklist and smoke testing procedures are included in Appendix J.

Confirmational groundwater monitoring will not be conducted since groundwater is not a medium of concern for the Site.

## **6.5 CLEANUP ACTION REPORT**

Following completion of cleanup action excavation activities, a Cleanup Action Report will be prepared to document that the cleanup action has met the requirements for an NFA determination for the Property. The Cleanup Action Report will include a summary of the results from the cleanup action conducted at the Property, and will provide the technical basis supporting a request for the NFA determination. The Cleanup Action Report will include the following elements:

- A summary of the characterization and remediation completed at the Property;
- Plan maps and summary tables documenting confirmation sampling results;
- Conclusions regarding the effectiveness of the cleanup; and
- A request for an NFA determination for the Site from Ecology under the Expedited VCP.



## 7.0 REFERENCES

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## 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 IS Property Investments, and currently accepted industry standards. No other warranties, representations, or certifications are made.

### 8.2 LIMITATION ON RELIANCE BY THIRD PARTIES

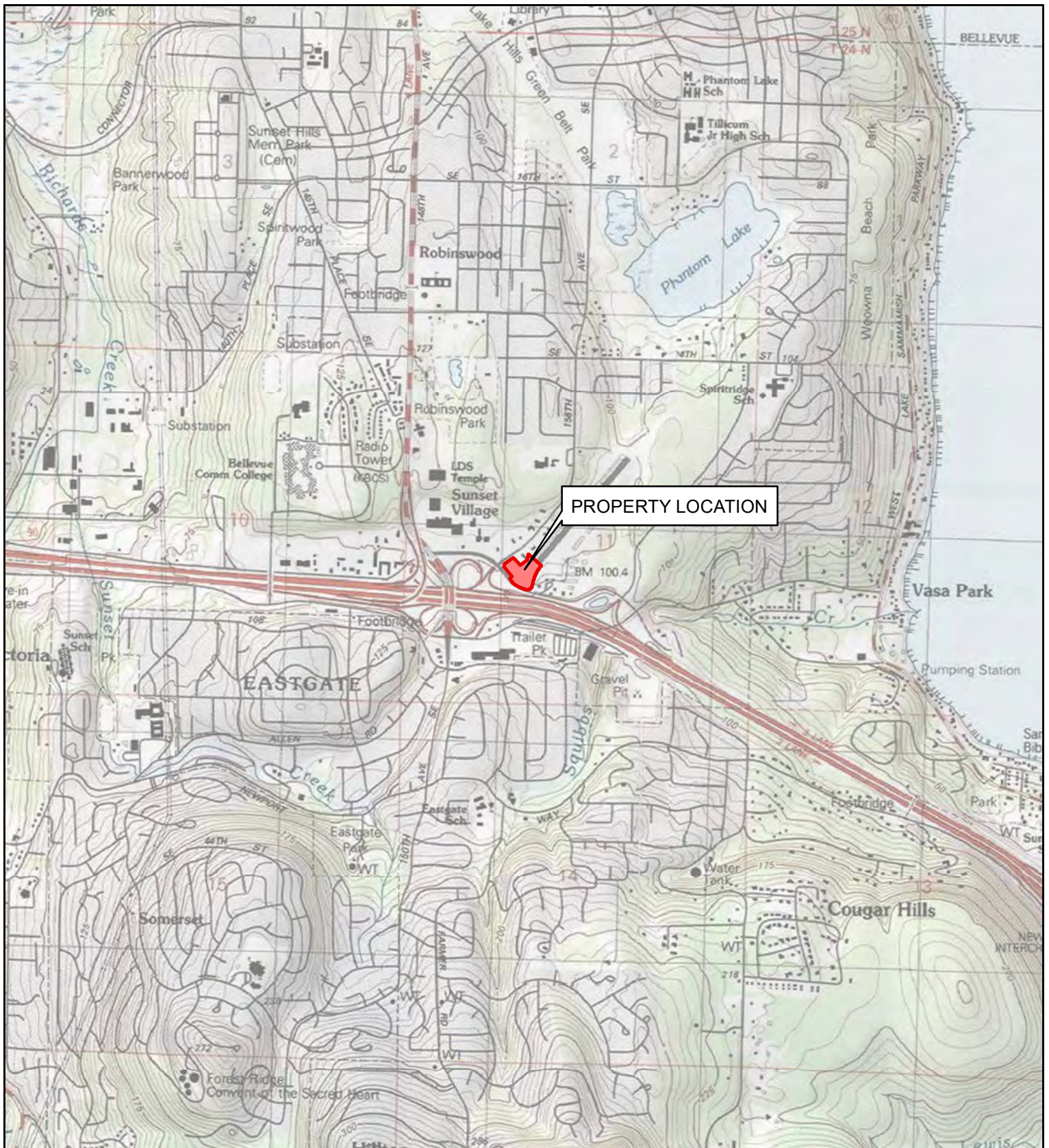
**Reliance by third parties is prohibited.** This report/assessment has been prepared for the exclusive use of IS Property Investments to address the unique needs of IS Property Investments at the Property at a specific point in time.

## **FIGURES**

REMEDIAL INVESTIGATION AND CLEANUP ACTION PLAN  
3245 158<sup>th</sup> Avenue Southeast  
Bellevue, Washington

Farallon PN: 2403-008





REFERENCE: 7.5 MINUTE USGS QUADRANGLE MERCER ISLAND, WASHINGTON, DATED 2013



0 2,000  
SCALE IN FEET



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Oregon  
Portland | Baker City

California  
Oakland | Irvine

## FIGURE 1

PROPERTY VICINITY MAP  
3245 158th AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

FARALLON PN: 2403-008

Drawn By: Imurock

Checked By: YP

Date: 9/12/2024

Disc Reference:

Path: Q:\Projects\2403 Intracorp\008 3245 158th Ave SE\Mapfiles\007\Figure-01\_PropertyVicinityMap.mxd





**LEGEND**

- BORING (FARALLON, 2023)
- ⊕ MONITORING WELL (FARALLON, 2023)
- ⊕ GEOTECH MONITORING WELL (TERRA, 2023)
- ⊕ SOIL GAS PROBE (FARALLON, 2023)
- ⊕ TEMPORARY SOIL GAS SAMPLING LOCATION (FARALLON, 2023)
- FORMER PROPERTY FEATURE
- ▬ PROPERTY BOUNDARY
- ▬ KING COUNTY PARCEL BOUNDARY

**NOTES:**

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

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Oregon  
Portland | Baker City

California  
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**FIGURE 2**

**PROPERTY PLAN**  
3245 158th AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

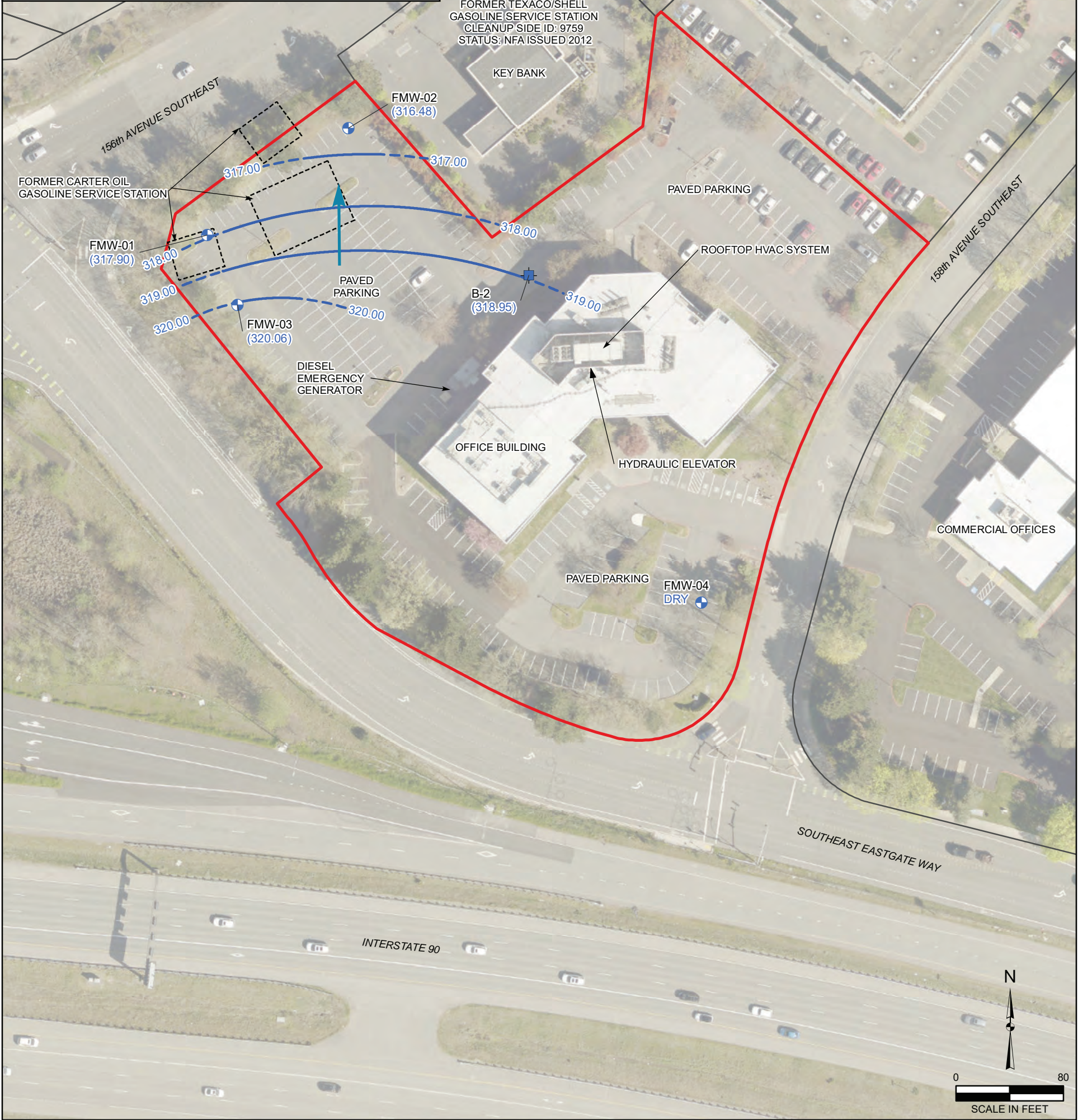
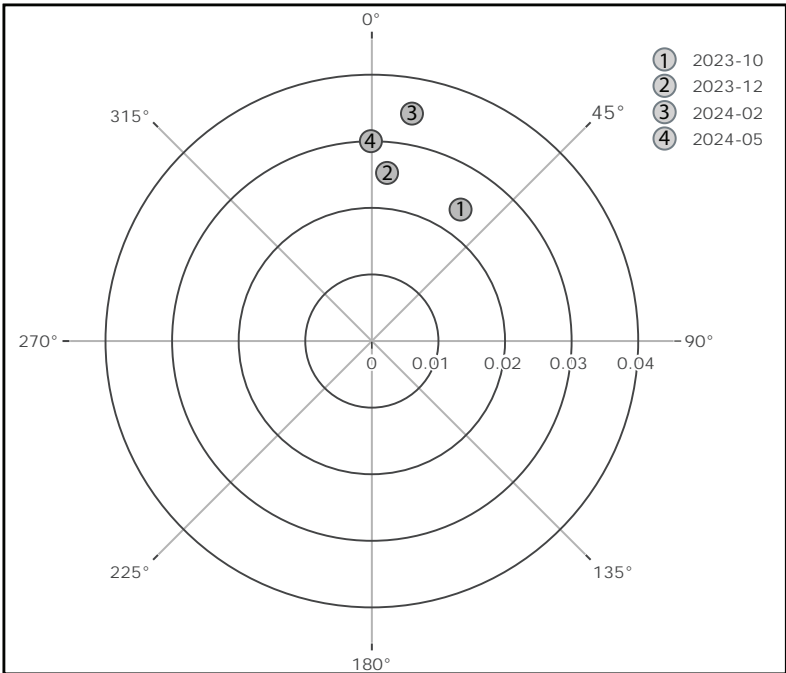
FARALLON PN: 2403-008

0 70  
SCALE IN FEET

Drawn By: Imurock Checked By: YP Date: 9/18/2024 Disc Reference:

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**LEGEND**

- GEOTECH MONITORING WELL (FARALLON, 2023)
- MONITORING WELL (FARALLON, 2023)
- FORMER PROPERTY FEATURE
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY
- GROUNDWATER ELEVATION MEASURED IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
- GROUNDWATER ELEVATION CONTOUR (DASHED WHERE 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.



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Oregon  
Portland | Baker City  
  
California  
Oakland | Irvine

**FIGURE 3**

GROUNDWATER ELEVATION CONTOURS  
MAY 2024  
3245 158th AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

FARALLON PN: 2403-008

Drawn By: Imurock

Checked By: YP

Date: 9/18/2024

Disc Reference:

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NOTES:  
SOIL DEPTH AND ANALYTICAL RESULTS AS:  
DEPTH IN FEET BELOW GROUND SURFACE | GRO | DRO | ORO  
SOIL ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM.  
**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  
DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS  
GRO = TPH AS GASOLINE-RANGE ORGANICS  
ORO = TPH AS OIL-RANGE ORGANICS

LEGEND

- BORING (FARALLON, 2024)
- ⊕ MONITORING WELL (FARALLON, 2023)
- ⊕ SOIL GAS SAMPLING LOCATION (FARALLON, 2024)
- ▭ PROPERTY BOUNDARY
- ▭ KING COUNTY PARCEL BOUNDARY

0 80  
SCALE IN FEET

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



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FIGURE 4

SOIL ANALYTICAL RESULTS FOR  
PETROLEUM HYDROCARBONS  
3245 158th AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

FARALLON PN: 2403-008





NOTES:  
SOIL DEPTH AND ANALYTICAL RESULTS AS:  
DEPTH IN FEET BELOW GROUND SURFACE | PCE|TCE|VC  
SOIL ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM.  
< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE LISTED REPORTING LIMIT  
PCE = TETRACHLOROETHENE  
TCE = TRICHLOROETHENE  
VC = VINYL CHLORIDE  
VOC = VOLATILE ORGANIC COMPOUND

LEGEND

- BORING (FARALLON, 2024)
- ⊕ MONITORING WELL (FARALLON, 2023)
- ⊕ SOIL GAS SAMPLING LOCATION (FARALLON, 2024)
- ▭ PROPERTY BOUNDARY
- ▭ KING COUNTY PARCEL BOUNDARY

NOTES:  
1. ALL LOCATIONS ARE APPROXIMATE.  
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FIGURE 5

SOIL ANALYTICAL RESULTS FOR  
HALOGENATED VOCs  
3245 158th AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

FARALLON PN: 2403-008

Drawn By: jjones

Checked By: YP

Date: 9/20/2024

Disc Reference:

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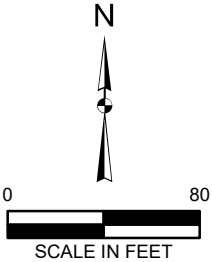




NOTES:  
GROUNDWATER SAMPLE DATE AND ANALYTICAL RESULTS AS:  
DATE SAMPLED | GRO | DRO | ORO  
GROUNDWATER ANALYTICAL RESULTS IN MICROGRAMS PER LITER.  
**BOLD** = DENOTES CONCENTRATIONS THAT EXCEED THE WASHINGTON STATE  
MODEL TOXICS CONTROL ACT CLEANUP REGULATION CLEANUP LEVEL  
< = DENOTES ANALYTE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

LEGEND

- GEOTECH MONITORING WELL (FARALLON, 2023)
- MONITORING WELL (FARALLON, 2023)
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY



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



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Portland | Baker City  
  
California  
Oakland | Irvine

FIGURE 6

GROUNDWATER ANALYTICAL RESULTS FOR  
PETROLEUM HYDROCARBONS  
3245 158th AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

FARALLON PN: 2403-008

Drawn By: Imurock

Checked By: YP

Date: 9/12/2024

Disc Reference:

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**LEGEND**

- GEOTECH MONITORING WELL (FARALLON, 2023)
- MONITORING WELL (FARALLON, 2023)
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY

0 80

SCALE IN FEET

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

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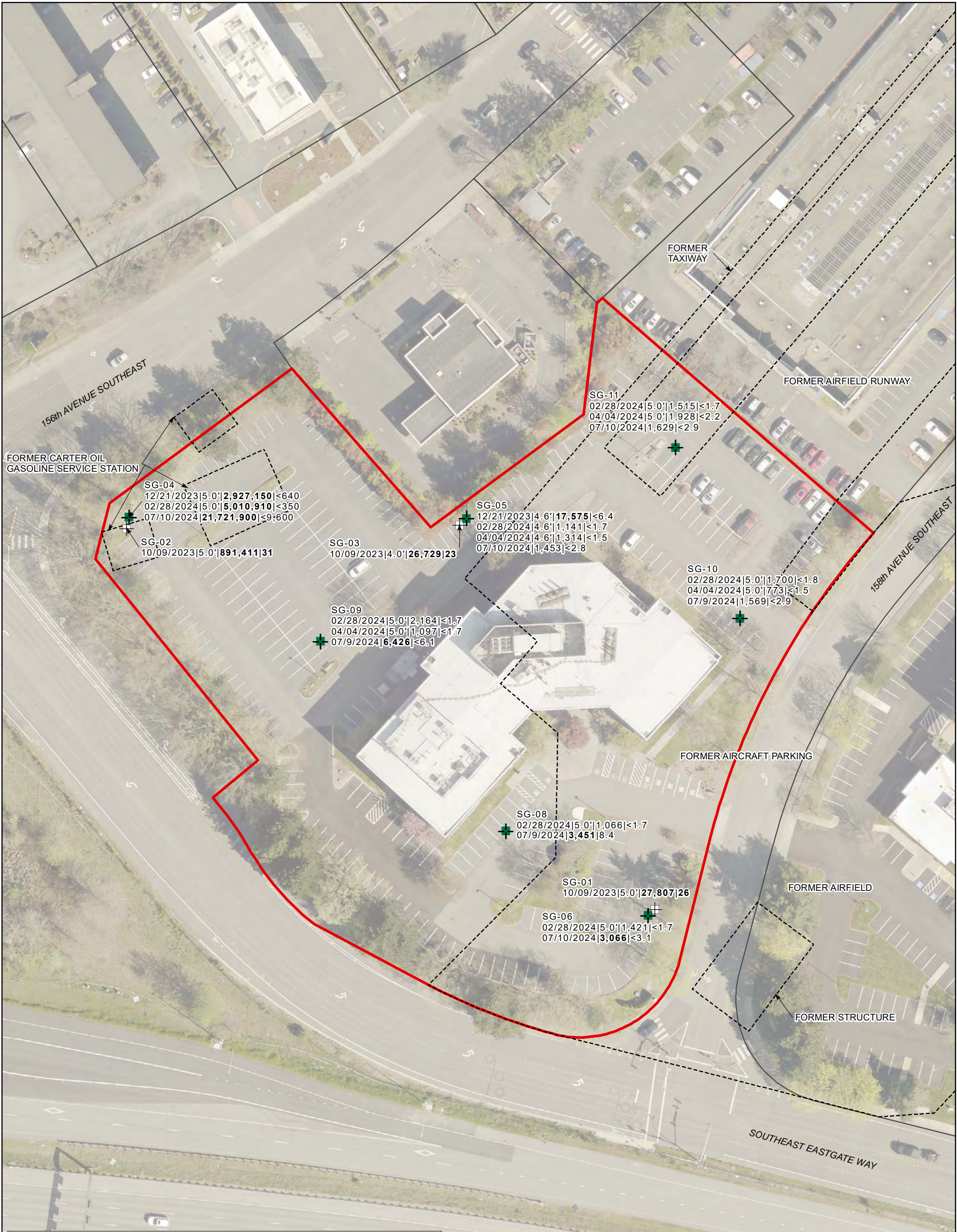
Drawn By: Imurock      Checked By: YP      Date: 9/12/2024      Disc Reference:

**FIGURE 7**

GROUNDWATER ANALYTICAL RESULTS FOR  
HALOGENATED VOCs  
3245 158th AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

FARALLON PN: 2403-008

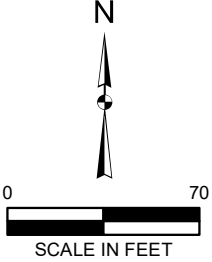




NOTES:  
SOIL GAS SAMPLE DEPTH AND ANALYTICAL RESULTS AS:  
SAMPLE DATE | DEPTH IN FEET BELOW GROUND SURFACE | TOTAL PETROLEUM  
HYDROCARBONS | BENZENE  
SOIL GAS ANALYTICAL RESULTS IN MICROGRAMS PER CUBIC METER.  
**BOLD** = DENOTES CONCENTRATIONS THAT EXCEED THE WASHINGTON STATE MODEL TOXICS  
CONTROL ACT CLEANUP REGULATION CLEANUP LEVEL  
<= DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE LISTED REPORTING LIMIT

LEGEND

- SOIL GAS PROBE (FARALLON, 2023)
- TEMPORARY SOIL GAS SAMPLING LOCATION (FARALLON, 2023)
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY



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



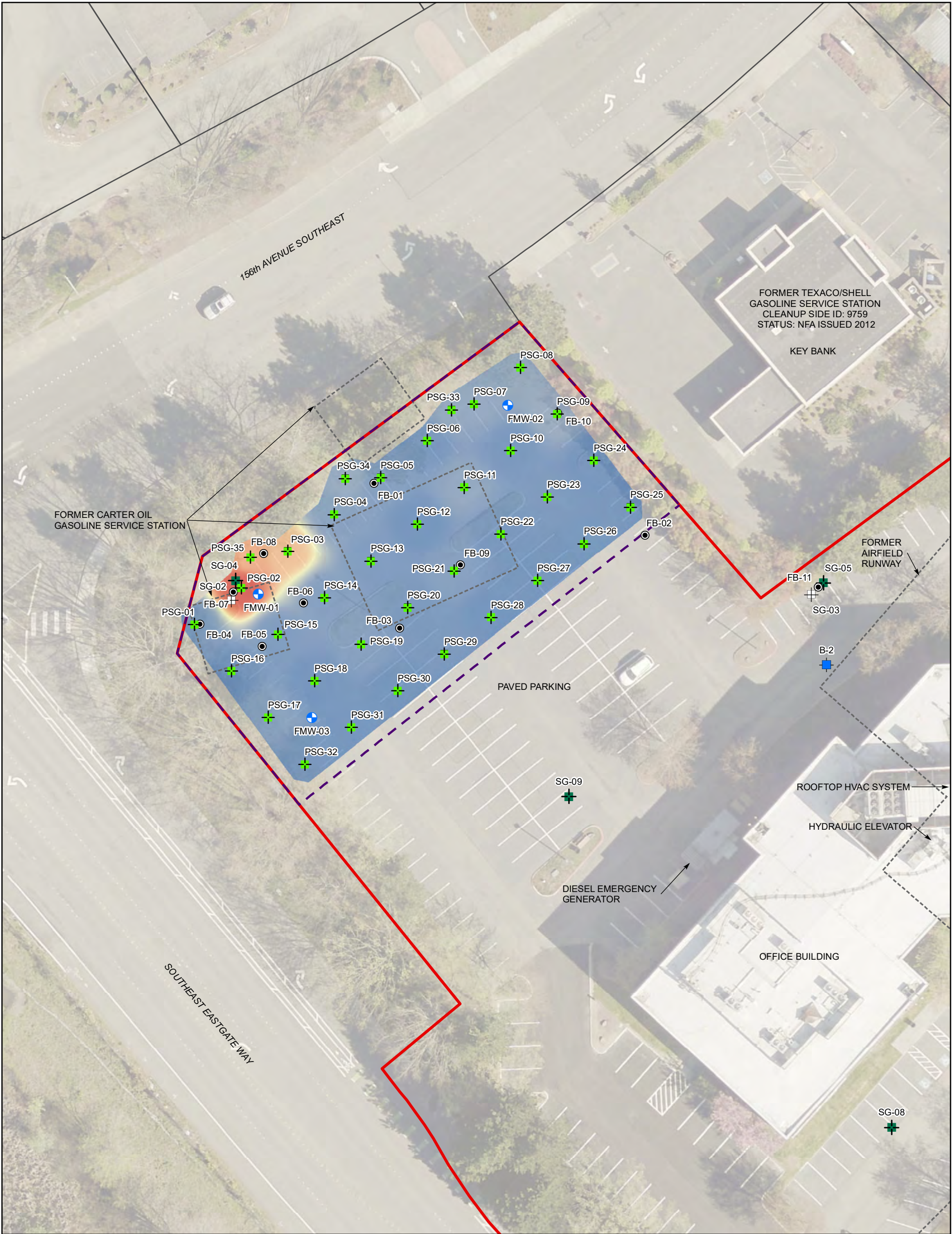
Washington  
Bellevue | Bellingham | Seattle  
  
Oregon  
Portland | Baker City  
  
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FIGURE 8

SOIL GAS ANALYTICAL RESULTS  
FOR PETROLEUM HYDROCARBONS  
3245 158th AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

FARALLON PN: 2403-008

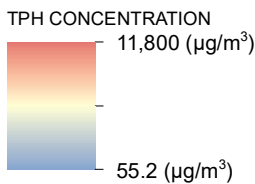




**LEGEND**

- PASSIVE SOIL GAS SAMPLE LOCATION (FARALLON, 2023)
- BORING (FARALLON, 2023)
- ⊕ MONITORING WELL (FARALLON, 2023)
- ⊕ GEOTECH MONITORING WELL (TERRA, 2023)
- ⊕ SOIL GAS SAMPLING LOCATION (FARALLON, 2023)
- ⊕ TEMPORARY SOIL GAS SAMPLING LOCATION (FARALLON, 2023)
- PROPOSED EXTENT OF PASSIVE SOIL GAS SURVEY
- - - FORMER PROPERTY FEATURE
- ▬ PROPERTY BOUNDARY
- ▬ KING COUNTY PARCEL BOUNDARY

NOTES:  
SOIL GAS ANALYTICAL RESULTS IN MICROGRAMS PER CUBIC METER ( $\mu\text{g}/\text{m}^3$ )  
TPH = TOTAL PETROLEUM HYDROCARBONS  
1. ALL LOCATIONS ARE APPROXIMATE.  
2. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.



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**FIGURE 9A**

PASSIVE SOIL GAS CONCENTRATIONS  
FOR TOTAL PETROLEUM HYDROCARBONS  
SOIL GAS SAMPLING LOCATIONS  
3245 158th AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

FARALLON PN: 2403-008

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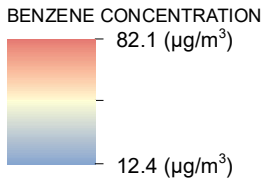




**LEGEND**

- PASSIVE SOIL GAS SAMPLE LOCATION (FARALLON, 2023)
- BORING (FARALLON, 2023)
- ⊕ MONITORING WELL (FARALLON, 2023)
- ⊕ GEOTECH MONITORING WELL (TERRA, 2023)
- ⊕ SOIL GAS SAMPLING LOCATION (FARALLON, 2023)
- ⊕ TEMPORARY SOIL GAS SAMPLING LOCATION (FARALLON, 2023)
- PROPOSED EXTENT OF PASSIVE SOIL GAS SURVEY
- - - FORMER PROPERTY FEATURE
- ▬ PROPERTY BOUNDARY
- ▬ KING COUNTY PARCEL BOUNDARY

NOTES:  
SOIL GAS ANALYTICAL RESULTS IN MICROGRAMS PER CUBIC METER ( $\mu\text{g}/\text{m}^3$ )  
1. ALL LOCATIONS ARE APPROXIMATE.  
2. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.



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**FIGURE 9B**

PASSIVE SOIL GAS CONCENTRATIONS  
FOR BENZENE  
SOIL GAS SAMPLING LOCATIONS  
3245 158th AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

FARALLON PN: 2403-008

Path: Q:\Projects\2403 Intracorp\008 3245 158th Ave SE\Mapfiles\007\Figure-09B\_PSG-Benzene.mxd

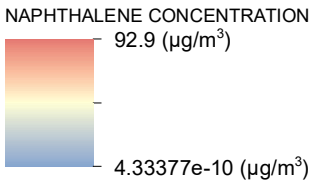




**LEGEND**

- PASSIVE SOIL GAS SAMPLE LOCATION (FARALLON, 2023)
- BORING (FARALLON, 2023)
- MONITORING WELL (FARALLON, 2023)
- GEOTECH MONITORING WELL (TERRA, 2023)
- SOIL GAS SAMPLING LOCATION (FARALLON, 2023)
- TEMPORARY SOIL GAS SAMPLING LOCATION (FARALLON, 2023)
- PROPOSED EXTENT OF PASSIVE SOIL GAS SURVEY
- FORMER PROPERTY FEATURE
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY

NOTES:  
SOIL GAS ANALYTICAL RESULTS IN MICROGRAMS PER CUBIC METER ( $\mu\text{g}/\text{m}^3$ )  
1. ALL LOCATIONS ARE APPROXIMATE.  
2. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.



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**FIGURE 9C**

PASSIVE SOIL GAS CONCENTRATIONS  
FOR NAPHTHALENES  
SOIL GAS SAMPLING LOCATIONS  
3245 158th AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

FARALLON PN: 2403-008

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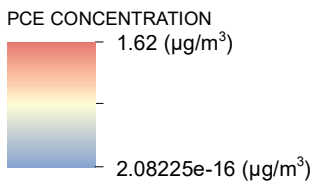




**LEGEND**

- PASSIVE SOIL GAS SAMPLE LOCATION (FARALLON, 2023)
- BORING (FARALLON, 2023)
- MONITORING WELL (FARALLON, 2023)
- GEOTECH MONITORING WELL (TERRA, 2023)
- SOIL GAS SAMPLING LOCATION (FARALLON, 2023)
- TEMPORARY SOIL GAS SAMPLING LOCATION (FARALLON, 2023)
- PROPOSED EXTENT OF PASSIVE SOIL GAS SURVEY
- FORMER PROPERTY FEATURE
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY

NOTES:  
SOIL GAS ANALYTICAL RESULTS IN MICROGRAMS PER CUBIC METER ( $\mu\text{g}/\text{m}^3$ )  
PCE = TETRACHLOROETHENE  
1. ALL LOCATIONS ARE APPROXIMATE.  
2. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.



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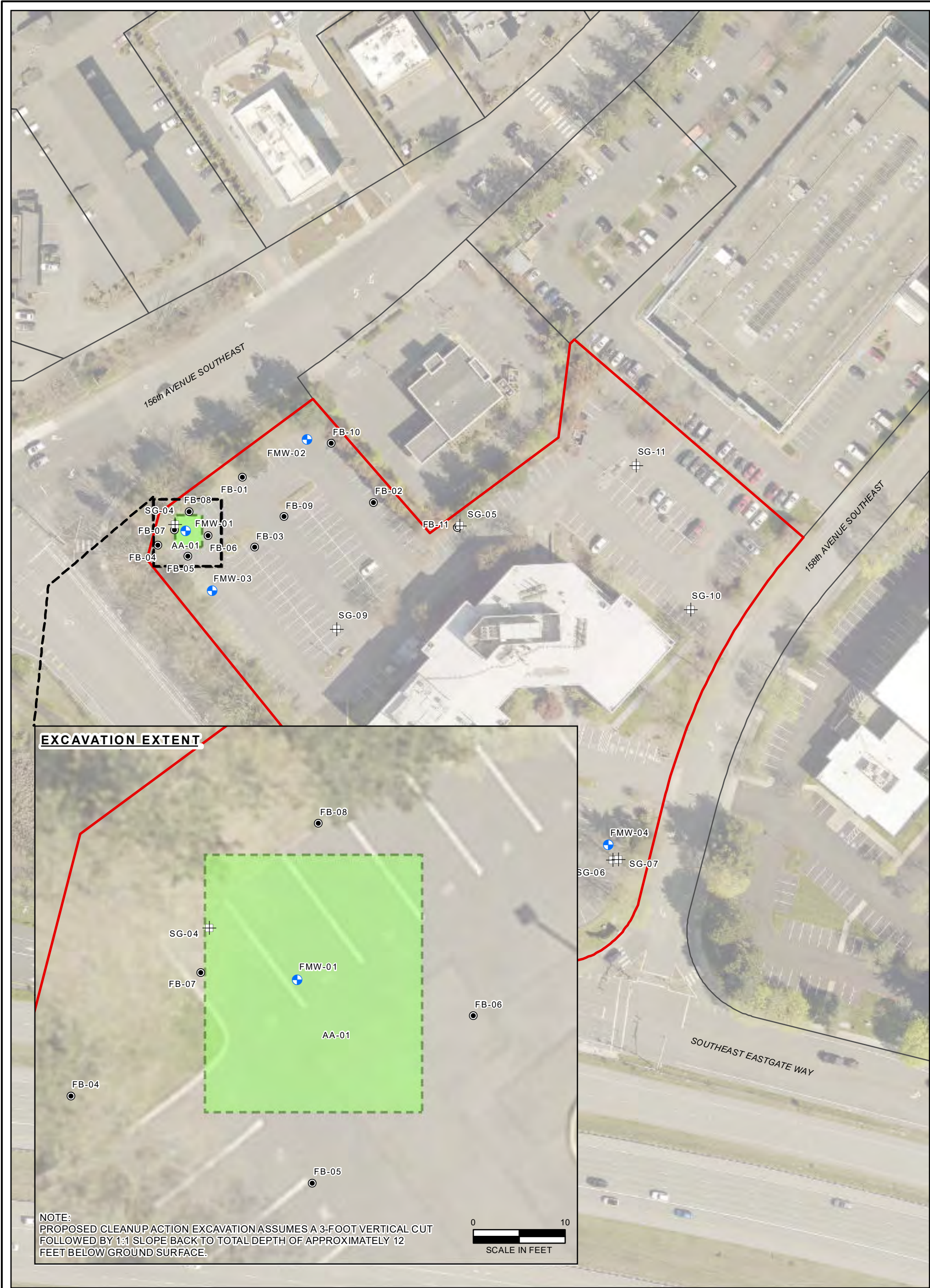
**FIGURE 9D**

PASSIVE SOIL GAS CONCENTRATIONS  
FOR PCE  
SOIL GAS SAMPLING LOCATIONS  
3245 158th AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

FARALLON PN: 2403-008

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**LEGEND**

BORING (FARALLON, 2024)

MONITORING WELL (FARALLON, 2023)

SOIL GAS SAMPLING LOCATION (FARALLON, 2024)

PROPOSED CLEANUP ACTION EXCAVATION AREA

PROPERTY BOUNDARY

KING COUNTY PARCEL BOUNDARY

N

0 80  
SCALE IN FEET

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**FIGURE 10**

PROPERTY PLAN  
WITH PROPOSED EXCAVATION AREA  
3245 158th AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

FARALLON PN: 2403-008

Drawn By: Imurock

Checked By: YP

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Disc Reference:

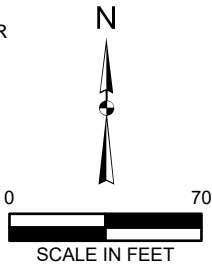
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LEGEND

- SOIL GAS PROBE (FARALLON, 2023)
- TEMPORARY SOIL GAS SAMPLING LOCATION (FARALLON, 2023)
- PROPOSED EXTENT OF VAPOR BARRIER
- PROPOSED CLEANUP ACTION EXCAVATION AREA
- PROPOSED STORMWATER DETENTION VAULT
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY



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



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FARALLON PN: 2403-008

Disc Reference:

Path: Q:\Projects\2403 Intracorp\008 3245 158th Ave SE\Mapfiles\007\Figure-11\_ProposedVaporBarrier\Figure-11\_ProposedVaporBarrier.aprx

FIGURE 11

PROPOSED DEVELOPMENT PLANS WITH  
ESTIMATED EXTENT OF VAPOR BARRIERS  
3245 158TH AVENUE SOUTHEAST  
BELLEVUE, WASHINGTON

## **TABLES**

REMEDIAL INVESTIGATION AND CLEANUP ACTION PLAN  
3245 158<sup>th</sup> Avenue Southeast  
Bellevue, Washington

Farallon PN: 2403-008

**Table 1**  
**Groundwater Elevations**  
**3245 158th Avenue Southeast**  
**Bellevue, Washington**  
**Farallon PN: 2403-008**

Location	Total Well Depth (feet bgs) <sup>1</sup>	Screened Interval (feet bgs) <sup>1</sup>	Top of Casing Elevation (feet NAVD88) <sup>2</sup>	Monitoring Date	Depth to Water (feet) <sup>3</sup>	Water Level Elevation (feet NAVD88) <sup>2</sup>
B-2	20.00	15 - 20	334.11	10/31/2023	19.22	314.89
				12/21/2023	17.60	316.51
				2/5/2024	14.48	319.63
				5/6/2024	15.16	318.95
FMW-01	37.00	22 - 37	334.21	10/31/2023	22.86	311.35
				12/21/2023	17.96	316.25
				2/5/2024	14.36	319.85
				5/6/2024	16.31	317.90
FMW-02	31.00	21 - 31	335.54	10/31/2023	24.51	311.03
				12/21/2023	21.02	314.52
				2/5/2024	17.69	317.85
				5/6/2024	19.06	316.48
FMW-03	27.00	17 - 27	333.67	10/31/2023	20.67	313.00
				12/21/2023	15.89	317.78
				2/5/2024	11.20	322.47
				5/6/2024	13.61	320.06
FMW-04	24.00	14 - 24	329.96	10/31/2023	DRY	NA
				12/21/2023	DRY	NA
				2/5/2024	23.40	306.56
				5/6/2024	23.42	306.54

**Notes:**

<sup>1</sup> In feet below ground surface.

<sup>2</sup> In feet above mean sea level.

<sup>3</sup> In feet below top of well casing.

bgs = below ground surface

NA = not applicable

NAVD88 = North American Vertical Datum of 1988

NS = not surveyed



**Table 2**  
**Soil Analytical Results for TPH and BTEX**  
**3245 158th Avenue Southeast**  
**Bellevue, Washington**  
**Farallon PN: 2403-008**

Sample Location	Sample Identification	Sample Depth (feet) <sup>1</sup>	Sample Date	Analytical Results (milligrams per kilogram)						
				DRO <sup>2</sup>	ORO <sup>2</sup>	GRO <sup>3</sup>	Benzene <sup>4</sup>	Toluene <sup>4</sup>	Ethylbenzene <sup>4</sup>	Xylenes <sup>4</sup>
FB-01	FB-01-3.5	3.5	10/23/2023	< 50	< 250	< 5	< 0.001	< 0.001	< 0.001	0.031
	FB-01-5.0	5.0	10/23/2023	< 50	< 250	< 5	< 0.001	< 0.001	< 0.001	< 0.003
FB-02	FB-02-5.0	5.0	10/24/2023	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
	FB-02-10.0	10.0	10/24/2023	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
FB-03	FB-03-5.0	5.0	10/24/2023	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
	FB-03-10.0	10.0	10/24/2023	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
FB-04	FB-04-5.0	5.0	2/19/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
	FB-04-10.0	10.0	2/19/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
FB-05	FB-05-5.0	5.0	2/19/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
	FB-05-10.0	10.0	2/19/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
FB-06	FB-06-5.0	5.0	2/19/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
	FB-06-10.0	10.0	2/19/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
FB-07	FB-07-5.0	5.0	2/19/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
	FB-07-10.0	10.0	2/19/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
FB-08	FB-08-5.0	5.0	2/19/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
	FB-08-10.0	10.0	2/19/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
FB-09	FB-09-5.0	5.0	2/19/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
	FB-09-10.0	10.0	2/19/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
FB-10	FB-10-5.0	5.0	2/20/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
	FB-10-10.0	10.0	2/20/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
FB-11	FB-11-5.0	5.0	2/20/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
	FB-11-10.0	10.0	2/20/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
FMW-01	FMW-01-5.0	5.0	10/23/2023	240 x	< 250	760	< 0.001	< 0.001	0.050	0.3558
	FMW-01-10.0	10.0	10/23/2023	< 50	< 250	200	< 0.001	< 0.001	0.0061	0.0294
	FMW-01-15.0	15.0	10/23/2023	< 50	< 250	< 5	< 0.001	< 0.001	< 0.001	< 0.003
FMW-02	FMW-02-5.0	5.0	10/23/2023	< 50	< 250	< 5	< 0.001	< 0.001	< 0.001	< 0.003
	FMW-02-10.0	10.0	10/23/2023	< 50	< 250	< 5	< 0.001	< 0.001	< 0.001	< 0.003
FMW-03	FMW-03-5.0	5.0	10/24/2023	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
	FMW-03-10.0	10.0	10/24/2023	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
FMW-04	FMW-04-5.0	5.0	10/24/2023	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
	FMW-04-10.0	10.0	10/24/2023	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
MTCA Method A Cleanup Levels for Soil <sup>5</sup>				2,000	2,000	30/100 <sup>6</sup>	0.03	7	6	9

Table 2  
Soil Analytical Results for TPH and BTEX  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Sample Location	Sample Identification	Sample Depth (feet) <sup>1</sup>	Sample Date	Analytical Results (milligrams per kilogram)						
				DRO <sup>2</sup>	ORO <sup>2</sup>	GRO <sup>3</sup>	Benzene <sup>4</sup>	Toluene <sup>4</sup>	Ethylbenzene <sup>4</sup>	Xylenes <sup>4</sup>
SG-07	SG-07-10.0	10.0	2/20/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
SG-08	SG-08-5.0	5.0	2/20/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
SG-09	SG-09-5.0	5.0	2/20/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
SG-10	SG-10-5.0	5.0	2/20/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
SG-11	SG-11-5.0	5.0	2/20/2024	< 50	< 250	< 5	< 0.03	< 0.05	< 0.05	< 0.15
MTCA Method A Cleanup Levels for Soil <sup>5</sup>				2,000	2,000	30/100 <sup>6</sup>	0.03	7	6	9

NOTES:

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

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

<sup>1</sup>Depth in feet below ground surface.

<sup>2</sup>Analyzed by Northwest Method NWTPH-Dx.

<sup>3</sup>Analyzed by Northwest Method NWTPH-Gx.

<sup>4</sup>Analyzed by U.S. Environmental Protection Agency Method 8260D.

<sup>5</sup>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.

<sup>6</sup>Cleanup level is 30 milligrams per kilogram if benzene is detected and 100 milligrams per kilogram if benzene is not detected.

BTEX = benzene, toluene, ethylbenzene and xylenes

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

GRO = TPH as gasoline-range organics

ORO = TPH as oil-range organics

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

Table 3  
Soil Analytical Results for Volatile Organic Compounds  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Sample Location	Sample Identification	Sample Depth (feet) <sup>1</sup>	Sample Date	Analytical Results (milligrams per kilogram) <sup>2</sup>					
				Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Naphthalene
FB-01	FB-01-3.5	3.5	10/23/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.01
	FB-01-5.0	5.0	10/23/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.01
FB-02	FB-02-5.0	5.0	10/24/2023	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
	FB-02-10.0	10.0	10/24/2023	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
FB-03	FB-03-5.0	5.0	10/24/2023	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
	FB-03-10.0	10.0	10/24/2023	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
FB-04	FB-04-5.0	5.0	2/19/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
	FB-04-10.0	10.0	2/19/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
FB-05	FB-05-5.0	5.0	2/19/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
	FB-05-10.0	10.0	2/19/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
FB-06	FB-06-5.0	5.0	2/19/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
	FB-06-10.0	10.0	2/19/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
FB-07	FB-07-5.0	5.0	2/19/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
	FB-07-10.0	10.0	2/19/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
FB-08	FB-08-5.0	5.0	2/19/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
	FB-08-10.0	10.0	2/19/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
FB-09	FB-09-5.0	5.0	2/19/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
	FB-09-10.0	10.0	2/19/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
FB-10	FB-10-5.0	5.0	2/20/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
	FB-10-10.0	10.0	2/20/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
FB-11	FB-11-5.0	5.0	2/20/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
	FB-11-10.0	10.0	2/20/2024	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
FMW-01	FMW-01-5.0	5.0	10/23/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.038
	FMW-01-10.0	10.0	10/23/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.027
	FMW-01-15.0	15.0	10/23/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.01
	FMW-01-20.0	20.0	10/23/2023	0.0086	< 0.002	< 0.002	< 0.002	< 0.002	---
FMW-02	FMW-02-5.0	5.0	10/23/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.01
	FMW-02-10.0	10.0	10/23/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.01
MTCA Cleanup Levels for Soil <sup>3</sup>				0.05	0.03	160 <sup>4</sup>	1,600 <sup>4</sup>	0.67 <sup>4</sup>	5.0
FMW-03	FMW-03-5.0	5.0	10/24/2023	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
	FMW-03-10.0	10.0	10/24/2023	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
FMW-04	FMW-04-5.0	5.0	10/24/2023	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
	FMW-04-10.0	10.0	10/24/2023	< 0.025	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05
MTCA Cleanup Levels for Soil <sup>3</sup>				0.05	0.03	160 <sup>4</sup>	1,600 <sup>4</sup>	0.67 <sup>4</sup>	5.0

NOTES:

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

<sup>1</sup>Depth in feet below ground surface.

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

<sup>3</sup>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.

<sup>4</sup>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>

Table 4  
Soil Analytical Results for Metals  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Sample Location	Sample Identification	Sample Depth (feet) <sup>1</sup>	Sample Date	Analytical Results (milligrams per kilogram) <sup>2</sup>							
				Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
FMW-01	FMW-01-5.0	5.0	10/23/2023	1.48	29.8	< 1	15.6	1.19	< 1	< 1	< 1
FMW-04	FMW-04-5.0	5.0	10/24/2023	1.14	17.8	< 1	9.78	1.00	< 1	< 1	< 1
MTCA Cleanup Levels for Soil <sup>3</sup>				20	16,000 <sup>4</sup>	2	2,000	250	2	400 <sup>4</sup>	400 <sup>4</sup>

NOTES:  
< denotes analyte not detected at or exceeding the laboratory reporting limit listed.  
<sup>1</sup>Depth in feet below ground surface.  
<sup>2</sup>Analyzed by U.S. Environmental Protection Agency Methods 6020B.  
<sup>3</sup>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.

Table 5  
Groundwater Analytical Results for TPH and BTEX  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Sample Location	Sample Date	Sample Identification	Analytical Results (micrograms per liter)						
			DRO <sup>1</sup>	ORO <sup>1</sup>	GRO <sup>2</sup>	Benzene <sup>3</sup>	Toluene <sup>3</sup>	Ethylbenzene <sup>3</sup>	Xylenes <sup>3</sup>
Monitoring Well Groundwater Samples									
B-2	10/31/2023	GEOTECH-1-103123	860 x	930 x	< 100	< 0.35	< 1	< 1	< 3
	12/21/2023	B-2-122123	< 50	< 250	< 100	< 0.35	< 1	< 1	< 3
	5/6/2024	B-2-050624	< 50	< 250	< 100	< 0.35	< 1	< 1	< 3
FMW-01	10/31/2023	FMW-01-103123	< 50	< 250	< 100	< 0.35	< 1	< 1	< 3
	12/21/2023	FMW-01-122123	< 50	< 250	< 100	< 0.35	< 1	< 1	< 3
	5/6/2024	FMW-01-050624	< 50	< 250	< 100	< 0.35	< 1	< 1	< 3
FMW-02	10/31/2023	FMW-02-103123	< 50	< 250	< 100	< 0.35	< 1	< 1	< 3
	5/6/2024	FMW-02-050624	< 50	< 250	< 100	< 0.35	< 1	< 1	< 3
FMW-03	10/31/2023	FMW-03-103123	< 50	< 250	< 100	< 0.35	< 1	< 1	< 3
	5/6/2024	FMW-03-050624	< 50	< 250	< 100	< 0.35	< 1	< 1	< 3
MTCA Method A Cleanup Level for Groundwater <sup>4</sup>			500	500	800/1,000 <sup>5</sup>	5	1,000	700	1,000

NOTES:

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

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

<sup>1</sup>Analyzed by Northwest Method NWTPH-Dx.

<sup>2</sup>Analyzed by Northwest Method NWTPH-Gx.

<sup>3</sup>Analyzed by U.S. Environmental Protection Agency Method 8260D.

<sup>4</sup>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.

<sup>5</sup>Cleanup level is 800 micrograms per liter if benzene is detected and 1,000 micrograms per liter if benzene is not detected.

BTEX = benzene, toluene, ethylbenzene, and xylenes

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

GRO = TPH as gasoline-range organics

ORO = TPH as oil-range organics

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

**Table 6**  
**Groundwater Analytical Results for Halogenated VOCs**  
**3245 158th Avenue Southeast**  
**Bellevue, Washington**  
**Farallon PN: 2403-008**

Sample Location	Sample Date	Sample Identification	Analytical Results (micrograms per liter) <sup>1</sup>				
			PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
Monitoring Well Groundwater Samples							
B-2	10/31/2023	GEOTECH-1-103123	< 1	< 0.5	< 1	< 1	< 0.02
	12/21/2023	B-2-122123	< 1	< 0.5	< 1	< 1	< 0.02
	5/6/2024	B-2-050624	< 1	< 0.5	< 1	< 1	< 0.02
FMW-01	10/31/2023	FMW-01-103123	6.4	0.65	< 1	< 1	< 0.02
	12/21/2023	FMW-01-122123	5.0	0.58	< 1	< 1	< 0.02
	2/5/2024	FMW-01-020524	3.6	< 0.5	< 1	< 1	< 0.02
	5/6/2024	FMW-01-050624	4.2	< 0.5	< 1	< 1	< 0.02
FMW-02	10/31/2023	FMW-02-103123	1.8	< 0.5	< 1	< 1	< 0.02
	5/6/2024	FMW-02-050624	1.7	< 0.5	< 1	< 1	< 0.02
FMW-03	10/31/2023	FMW-03-103123	< 1	< 0.5	< 1	< 1	< 0.02
	5/6/2024	FMW-03-050624	< 1	< 0.5	< 1	< 1	< 0.02
MTCA Cleanup Levels for Groundwater <sup>2</sup>			5	5	16 <sup>3</sup>	160 <sup>3</sup>	0.2

**NOTES:**

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

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

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

<sup>2</sup>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.

<sup>3</sup>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>

PCE = tetrachloroethene

TCE = trichloroethene

VOC = volatile organic compound

Table 7  
Soil Gas Analytical Results for Petroleum Hydrocarbons  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Sample Location	Sample Date	Sample Identification	Sample Depth <sup>1</sup>	Analytical Results (micrograms per cubic meter)								
				Non-carcinogenic Petroleum Compounds						Carcinogenic Petroleum Compounds		Total Petroleum Hydrocarbons <sup>4</sup>
				C5-C8 Aliphatics <sup>2</sup>	C9-C12 Aliphatics <sup>2</sup>	C9-C10 Aromatics <sup>2</sup>	Toluene <sup>3</sup>	Ethylbenzene <sup>3</sup>	Total Xylenes <sup>3</sup>	Benzene <sup>3</sup>	Naphthalene <sup>3</sup>	
SG-01	10/9/2023	SG-01-5.0	5.0	14,000	7,900	< 1,000	< 310	830	4,390 E	26	< 11	27,807
SG-02	10/9/2023	SG-02-5.0	5.0	290,000	580,000	19,000	< 310	110	2,100	31	< 11	891,411
SG-03	10/9/2023	SG-03-4.0	4.0	17,000	< 1,100	1,700 x	< 320	990	6,300 E	23	< 11	26,729
SG-04	12/21/2023	SG-04-122123	5.0	890,000	2,000,000	< 50,000	< 15,000	< 870	3,200	< 640	< 520	2,927,150
	2/28/2024	SG-04-022824	5.0	1,200,000	3,700,000	99,000	< 8,300	< 480	7,200	< 350	< 290	5,010,910
	7/10/2024	SG-04-071024	5.0	6,200,000	15,000,000	< 750,000	< 230,000	< 13,000	< 39,000	< 9,600	< 2,200	21,721,900
SG-05	12/21/2023	SG-05-122123	4.6	2,900	14,000	< 970	< 290	< 17	< 51	< 6.4 J	< 2 J	17,575
	2/28/2024	SG-05-022824	4.6	530	520	< 130	< 40	< 2.3	< 6.9	< 1.7	< 1.4	1,141
	4/4/2024	SG-05-040424	4.6	590	610	< 180	< 36	< 2.1	< 6.3	< 1.5	< 1.3	1,314
	7/10/2024	SG-05-071024	5.0	830	470	< 220	< 66	< 3.8	< 11.4	< 2.8	0.64	1,453
SG-06	2/28/2024	SG-06-022824	5.0	550	780	< 130	< 40	< 2.3	< 6.9	< 1.7	< 1.4	1,421
	7/10/2024	SG-06-071024	5.0	1,900	1,000	< 240	< 72	< 4.2	< 12.5	< 3.1	< 0.70	3,066
SG-08	2/28/2024	SG-08-022824	5.0	500	470	< 130	< 40	< 2.3	8.2	< 1.7	< 1.4	1,066
	7/9/2024	SG-08-070924	5.0	2,000	1,100	< 500	< 150	< 8.7	< 25.7	8.4	< 1.5	3,451
SG-09	2/28/2024	SG-09-022824	5.0	970	1,100	< 130	< 39	< 2.3	7.0	< 1.7	< 1.4	2,164
	4/4/2024	SG-09-040424	5.0	870	< 200	< 200	< 41	< 2.3	< 7.0	< 1.7	< 1.4	1,097
	7/9/2024	SG-09-070924	5.0	3,100	3,000	< 470	< 140	< 8.3	< 25.3	< 6.1	< 1.4	6,426
SG-10	2/28/2024	SG-10-022824	5.0	710	890	< 140	< 41	< 2.4	6.8	< 1.8	< 1.4	1,700
	4/4/2024	SG-10-040424	5.0	580	< 170	< 170	< 35	< 2	< 6	< 1.5	< 1.2	773
	7/9/2024	SG-10-070924	5.0	930	480	< 230	< 69	< 4	< 12	< 2.9	< 0.68	1,569
SG-11	2/28/2024	SG-11-022824	5.0	610	810	< 130	< 41	< 2.3	6.3	< 1.7	< 1.4	1,515
	4/4/2024	SG-11-040424	5.0	800	970	< 250	< 51	< 3	< 8.9	< 2.2	< 1.8	1,928
	7/10/2024	SG-11-071024	5.0	850	620	< 230	< 69	< 4	< 12	< 2.9	< 0.68	1,629
MTCA Method B Site-Specific Subslab Soil Gas Screening Level <sup>5</sup>										---	---	2,606
MTCA Method B Subslab Soil Gas Screening Level - Residential Exposure <sup>6</sup>										11	2.5	1,500
MTCA Method B Subslab Soil Gas Screening Level for a Commercial Worker <sup>6</sup>										50	11	13,000

NOTES:

Results in **bold** and highlighted in **yellow** denote concentrations exceeding the site-specific total petroleum hydrocarbon screening level or Method B standard screening levels for carcinogenic compounds.

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

<sup>1</sup>Depth in feet below ground surface.

<sup>2</sup>Analyzed by Massachusetts Department of Environmental Protection Method MA-APH.

<sup>3</sup>Analyzed by U.S. Environmental Protection Agency Method TO-15.

<sup>4</sup>Sum of all non-carcinogenic and carcinogenic petroleum compounds. Non-detected values summed at 1/2 the reporting limit.

<sup>5</sup>Calculation of a site-specific total petroleum hydrocarbon soil gas screening level conducted in accordance with the Washington State Department of Ecology's *Guidance for Evaluating Vapor Intrusion in Washington State*, Publication No. 09-09-047, Final March 2022.

<sup>6</sup>Washington State Model Toxics Control Act Cleanup Regulation Cleanup Levels and Risk Calculations, Standard Method B Values for Subslab Soil Gas Screening Level and Screening Level for Commercial Worker, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC>

E = result exceeded calibration range of instrument and is an estimate

J = concentration reported below standard reporting limit; result is an estimate

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

--- denotes not applicable

Table 8  
Soil Gas Analytical Results for Volatile Organic Compounds  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Sample Location	Sample Date	Sample Identification	Sample Depth (feet) <sup>1</sup>	Analytical Results (micrograms per cubic meter) <sup>2</sup>					Analytical Results (percent) <sup>3</sup>
				Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Helium
SG-01	10/9/2023	SG-01-5.0	5.0	< 280	< 4.4	< 16	< 16	< 10	---
SG-02	10/9/2023	SG-02-5.0	5.0	< 280	< 4.4	< 16	< 16	< 10	---
SG-03	10/9/2023	SG-03-4.0	4.0	< 290	< 4.6	< 17	< 17	< 11	---
SG-04	12/21/2023	SG-04-122123	5.0	< 14,000	< 210	< 790	< 790	< 510	---
	2/28/2024	SG-04-022824	5.0	< 7,500	< 120	< 440	< 440	< 280	< 0.6
	7/10/2024	SG-04-071024	5.0	< 200,000	< 3,200	< 12,000	< 12,000	< 7,700	
SG-05	12/21/2023	SG-05-122123	4.6	< 260	< 4.2	< 15	< 15	< 5.3 J	---
	2/28/2024	SG-05-022824	4.6	< 36	< 0.57	< 2.1	< 2.1	< 1.4	< 0.6
	4/4/2024	SG-05-040424	4.6	< 33	< 0.52	< 1.9	< 1.9	< 1.2	---
	7/10/2024	SG-05-071024	4.6	< 59	< 0.94	< 3.4	< 3.4	< 2.2	
SG-06	2/28/2024	SG-06-022824	5.0	< 36	< 0.57	< 2.1	< 2.1	< 1.4	< 0.6
	7/10/2024	SG-06-071024	5.0	< 65	< 1	< 3.8	< 3.8	< 2.5	
SG-08	2/28/2024	SG-08-022824	5.0	< 36	< 0.57	< 2.1	< 2.1	< 1.4	< 0.6
	7/9/2024	SG-08-070924	5.0	< 140	< 2.1	< 7.9	< 7.9	< 5.1	
SG-09	2/28/2024	SG-09-022824	5.0	< 35	< 0.56	< 2.1	< 2.1	< 1.3	< 0.6
	4/4/2024	SG-09-040424	5.0	< 37	< 0.58	< 2.1	< 2.1	< 1.4	---
	7/9/2024	SG-09-070924	5.0	< 130	< 2	< 7.5	< 7.5	< 4.9	
SG-10	2/28/2024	SG-10-022824	5.0	< 37	< 0.59	< 2.2	< 2.2	< 1.4	< 0.6
	4/4/2024	SG-10-040424	5.0	< 31	< 0.49	< 1.8	< 1.8	< 1.2	---
	7/9/2024	SG-10-070924	5.0	< 62	< 0.99	< 3.6	< 3.6	< 2.4	
SG-11	2/28/2024	SG-11-022824	5.0	< 37	< 0.58	< 2.1	< 2.1	< 1.4	< 0.6
	4/4/2024	SG-11-040424	5.0	< 46	< 0.73	< 2.7	< 2.7	< 1.7	---
	7/10/2024	SG-11-071024	5.0	< 62	< 0.99	< 3.6	< 3.6	< 2.4	
Method B Soil Gas Screening Level-Residential Exposure <sup>4</sup>				320	11	610	610	9.5	NE
Method B Soil Gas Screening Level for a Commercial Worker <sup>4</sup>				1,500	95	5,200	5,200	44	NE

NOTES:

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

NE = not established

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

<sup>1</sup>Depth in feet below surface.

<sup>2</sup>Analyzed by U.S. Environmental Protection Agency Method TO-15. Only detected analytes shown in table; see lab reports for full list of analytes.

<sup>3</sup>Analyzed by ASTM Method D1946.

<sup>4</sup>Washington State Model Toxics Control Act Cleanup Regulation Cleanup Levels and Risk Calculations, Standard Method B Values for Sub-Slab Soil Gas Screening Level, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC>



Table 9  
Air Analytical Results for Petroleum Hydrocarbons  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Sample Location	Sample Type	Sample Date	Sample Identification	Analytical Results (micrograms per cubic meter)								
				Non-carcinogenic Petroleum Compounds						Carcinogenic Petroleum Compounds		Total Petroleum Hydrocarbons <sup>3</sup>
				C5-C8 Aliphatics <sup>1</sup>	C9-C12 Aliphatics <sup>1</sup>	C9-C10 Aromatics <sup>1</sup>	Toluene <sup>2</sup>	Ethylbenzene <sup>2</sup>	Total Xylenes <sup>2</sup>	Benzene <sup>2</sup>	Naphthalene <sup>2</sup>	
AA-01	Outdoor Ambient Air	2/5/2024	AA-01-020524	74 J	< 2.5 J	< 2.5 J	< 7.5	< 0.43	< 1.3	0.51	0.089 J	82
MTCA Method B Indoor Air Cleanup Level - Residential Exposure <sup>4</sup>										0.32	0.0735	46
MTCA Method B Indoor Air Screening Level for a Commercial Worker <sup>4</sup>										1.5	0.344	390

NOTES:

Results in **bold** and highlighted **yellow** denote concentrations exceeding one or more cleanup/screening levels.

J = result is an estimate

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

<sup>1</sup>Analyzed by Massachusetts Department of Environmental Protection Method MA-APH.

<sup>2</sup>Analyzed by U.S. Environmental Protection Agency Method TO-15.

<sup>3</sup>Sum of all non-carcinogenic and carcinogenic petroleum compounds. Non-detected values summed at 1/2 the reporting limit.

<sup>4</sup>Washington State Model Toxics Control Act Cleanup Regulation Cleanup Levels and Risk Calculations, Standard Method B Values for Indoor Air and Screening Levels for Commercial Worker, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC>

Table 10  
Air Analytical Results for Volatile Organic Compounds  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Sample Location	Sample Type	Sample Identification	Sample Date	Analytical Results (micrograms per cubic meter) <sup>1</sup>				
				Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
AA-01	Outdoor Ambient Air	2/5/2024	AA-01-020524	< 6.8	< 0.11	< 0.4	< 0.4	< 0.26
Method B Indoor Air Cleanup Level - Residential Exposure <sup>2</sup>				9.62	0.334	18.3	18.3	0.284
Method B Indoor Air Screening Level for a Commercial Worker <sup>2</sup>				44.9	2.85	156	156	1.33

NOTES:

Results in **bold** and highlighted **yellow** denote concentrations exceeding one or more cleanup/screening levels.

J = result is an estimate

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

<sup>1</sup>Analyzed by U.S. Environmental Protection Agency Method TO-15. Only detected and select analytes shown in table; see lab report for full list of analytes.

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

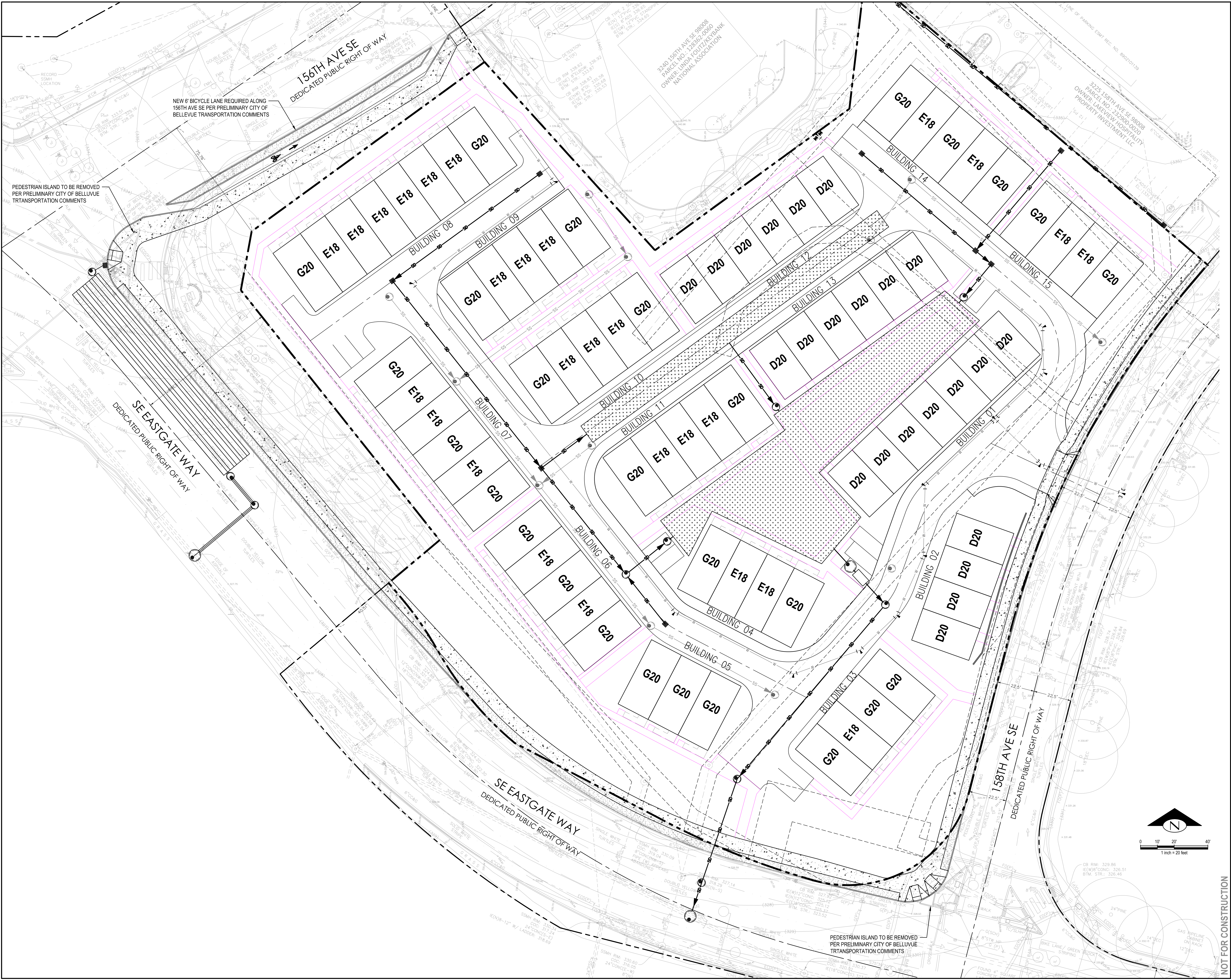
Values for Indoor Air and Screening Levels for Commercial Worker, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC>

**APPENDIX A  
PRELIMINARY DEVELOPMENT PLANS**

REMEDIAL INVESTIGATION AND CLEANUP ACTION PLAN  
3245 158<sup>th</sup> Avenue Southeast  
Bellevue, Washington

Farallon PN: 2403-008





kpff

1601 5th Avenue, Suite 1600  
Seattle, WA 98101  
206.622.5822  
www.kpff.com

PRELIMINARY

AIRFIELD TOWNHOMES  
BELLEVUE, WA

REVISIONS:

NO.	DATE	DESCRIPTION

PRELIMINARY

DATE:

JOB NO: 2300544

DESIGNED BY: TJP

DRAWN BY: KWP

CHECKED BY: JDE

APPROVED BY: JDE

PRELIMINARY  
SITE PLAN

C1.0

SCHEMATIC DESIGN



**APPENDIX B  
BORING LOGS**

REMEDIAL INVESTIGATION AND CLEANUP ACTION PLAN  
3245 158<sup>th</sup> Avenue Southeast  
Bellevue, Washington

Farallon PN: 2403-008



# Log of Boring: FB-01

Page 1 of 1

**Client:** IS Property Investments LLC  
**Project:** 3245 158th Ave SE  
**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 10/23/23 @ 1314  
**Date/Time Completed:** 10/23/23 @ 1402  
**Drilling Company:** AEC  
**Drilling Method:** Sonic  
**Drilling Equipment:** Terrasonic  
**Drilling Operator:** Cole Pickering  
**Sampler Type:** 5.0' PE  
**Depth to Water ATD (ft bgs):** NE  
**Boring Diameter (in):** 3.75  
**Total Boring Depth (ft bgs):** 20.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0-1.5': Poorly graded SAND (90% sand, 10% gravel), fine and medium sand, fine gravel, gray-brown, dry, no odor, no staining.	SP			100			
		1.5-3.0': Silty SAND (50% sand, 40% silt, 10% gravel), fine to coarse sand and gravel, dark brown, dry, slight sweet odor, no staining.	ML						
		3.0-7.0': Poorly graded SAND (90% sand, 10% gravel), fine and medium sand, fine gravel, gray-brown, dry, no odor, no staining.	SP			1.2		FB-01-3.5	X
5						100	0.0	FB-01-5.0	X
		7.0-15.0': Poorly graded SAND with gravel (75% sand, 20% gravel, 5% silt), fine and medium sand, fine gravel, gray, dry, no odor, no staining.	SP						
10						100	0.0	FB-01-10.0	
		15.0-20.0': Silty SAND with gravel (65% sand, 20% silt, 15% gravel), fine to coarse sand, fine gravel, gray-brown, dry, no odor, no staining.	ML			100	0.0	FB-01-15.0	
15									
20							0.2	FB-01-20.0	

## Completion Information

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



## Log of Boring: FB-02

Page 1 of 1

**Client:** IS Property Investments LLC  
**Project:** 3245 158th Ave SE  
**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 10/23/23 @ 1309  
**Date/Time Completed:** 10/24/23 @ 1210  
**Drilling Company:** AEC  
**Drilling Method:** Sonic  
**Drilling Equipment:** Terrasonic  
**Drilling Operator:** Cole Pickering  
**Sampler Type:** 5.0' PE

**Depth to Water ATD (ft bgs):** NE  
**Boring Diameter (in):** 3.75  
**Total Boring Depth (ft bgs):** 20.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0-5.0': Sandy SILT (50% silt, 40% sand, 10% gravel), fine sand and gravel, brown, moist, slight organic odor, no staining.	ML			100			
5		5.0-7.5': Poorly graded SAND with silt (80% sand, 10% silt, 10% gravel), fine sand and gravel, gray, dry, no odor, no staining.	SP-SM			100	0.0	FB-02-5.0	X
		7.5-10.0': Silty SAND (70% sand, 20% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM						
10		10.0-12.5': Silty SAND (70% sand, 20% silt, 10% gravel), fine and medium sand, fine gravel, gray-brown, dry, no odor, no staining.	SM			100	0.0	FB-02-10.0	X
		12.5-20.0': Poorly graded SAND with silt (80% sand, 10% silt, 10% gravel), medium sand, fine and coarse gravel, gray-brown, dry, no odor, no staining.	SP-SM			100	0.2	FB-02-15.0	
15									
20							0.3	FB-02-20.0	

### Completion Information

**Temporary Well Casing Diameter (in):** NA  
**Temporary Well Screened Interval (ft bgs):** NA  
**Boring Abandonment:** Bentonite

**Surface Seal:** Concrete  
**Ground Surface Elevation (ft):** NA  
**Surveyed Location:** X: NA Y: NA



## Log of Boring: FB-03

Page 1 of 1

**Client:** IS Property Investments LLC  
**Project:** 3245 158th Ave SE  
**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 10/23/23 @ 1036  
**Date/Time Completed:** 10/24/23 @ 1140  
**Drilling Company:** AEC  
**Drilling Method:** Sonic  
**Drilling Equipment:** Terrasonic  
**Drilling Operator:** Cole Pickering  
**Sampler Type:** 5.0' PE  
**Depth to Water ATD (ft bgs):** 17.0  
**Boring Diameter (in):** 3.75  
**Total Boring Depth (ft bgs):** 20.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0-5.0': Silty SAND (65% sand, 30% silt, 5% gravel), fine and medium sand, orange-brown, dry, no odor, no staining.	SM			100			
5		5.0-10.0': Silty SAND with gravel (45% sand, 35% silt, 20% gravel), fine sand, fine and coarse gravel, gray, dry, no odor, no staining.	SM			100	0.1	FB-03-5.0	X
10		10.0-12.5': Silty SAND with gravel (65% sand, 20% silt, 15% gravel) fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM			100	0.3	FB-03-10.0	X
		12.5-14.0': Poorly graded SAND with silt (80% sand, 10% silt, 10% gravel), fine and medium sand, fine and coarse gravel, brown, dry, no odor, no staining.	SP-SM						
15		14.0-17.0': Silty SAND (75% sand, 15% silt, 10% gravel), fine sand and gravel, light brown, dry, no odor, no staining.	SM			100	0.2	FB-03-15.0	
		17.0-20.0': Silty SAND (70% sand, 20% silt, 10% gravel), fine and medium sand, fine gravel, brown, wet, no odor, no staining.	SM						
20							0.8	FB-03-20.0	

### Completion Information

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





## Log of Boring: FB-04

Page 1 of 1

**Client:** IS Property Investments LLC  
**Project:** 3245 158th Ave SE  
**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 2/19/24 @ 0940

**Date/Time Completed:** 2/19/24 @ 1013

**Drilling Company:** AEC

**Drilling Method:** Sonic

**Drilling Equipment:** Terrasonic

**Drilling Operator:** Cole Pickering

**Sampler Type:** 5.0' PE

**Depth to Water ATD (ft bgs):** 15.0

**Boring Diameter (in):** 3.75

**Total Boring Depth (ft bgs):** 20.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0-0.3': Asphalt.	AC			100			
		0.3-5.0': Cleared for utilities. Soil not logged.							
5		5.0-6.0': Poorly graded SAND with silt (80% sand, 10% silt, 10% gravel), medium sand, fine gravel, light brown, dry, no odor, no staining.	SP-SM			100	0.0	FB-04-5.0	X
		6.0-9.5': Silty SAND (70% sand, 20% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM						
10		9.5-10.0': Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine and medium sand, fine and coarse gravel, brown, dry, no odor, no staining.	SM			100	0.3	FB-04-10.0	X
		10.0-14.0': Silty SAND (70% sand, 20% silt, 10% gravel), fine and medium sand, fine and coarse gravel, brown, dry, no odor, no staining.	SM						
15		14.0-15.0': Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM						
		15.0-17.5': Silty SAND with gravel (70% sand, 15% silt, 15% gravel), fine and medium sand, fine and coarse gravel, brown, moist, no odor, no staining.	SM			50	0.2	FB-04-15.0	
		17.5-20.0': No Recovery.					0.0	FB-04-17.5	
20									

### Completion Information

**Temporary Well Casing Diameter (in):** NA  
**Temporary Well Screened Interval (ft bgs):** NA  
**Boring Abandonment:** Bentonite

**Surface Seal:** Concrete  
**Ground Surface Elevation (ft):** NA  
**Surveyed Location:** X: NA Y: NA



## Log of Boring: FB-05

Page 1 of 1

**Client:** IS Property Investments LLC  
**Project:** 3245 158th Ave SE  
**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 2/19/24 @ 1037

**Date/Time Completed:** 2/19/24 @ 1115

**Drilling Company:** AEC

**Drilling Method:** Sonic

**Drilling Equipment:** Terrasonic

**Drilling Operator:** Cole Pickering

**Sampler Type:** 5.0' PE

**Depth to Water ATD (ft bgs):** 15.0

**Boring Diameter (in):** 3.75

**Total Boring Depth (ft bgs):** 20.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0-0.3': Asphalt.	AC			100			
		0.3-5.0': Cleared for utilities. Soil not logged.							
5		5.0-7.0': Silty SAND (70% sand, 20% silt, 10% gravel), fine and medium sand, fine gravel, gray-brown with orange mottling, dry, no odor, no staining.	SM			100	0.0	FB-05-5.0	X
		7.0-10.0': Poorly graded SAND with silt (80% sand, 10% silt, 10% gravel), fine and medium sand, fine and coarse gravel, brown, dry, no odor, no staining.	SP-SM						
10		10.0-15.0': Silty SAND (70% sand, 20% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM			100	0.0	FB-05-10.0	X
15		15.0-17.5': Silty SAND (60% sand, 30% silt, 10% gravel), fine and medium sand, fine and coarse gravel, brown, moist, no odor, no staining.	SM			100	0.0	FB-05-15.0	
		17.5-20.0': Well-graded SAND with silt (80% sand, 10% silt, 10% gravel), fine to coarse sand, fine gravel, brown, moist, no odor, no staining.	SW-SM						
20							0.0	FB-05-20.0	

### Completion Information

**Temporary Well Casing Diameter (in):** NA  
**Temporary Well Screened Interval (ft bgs):** NA  
**Boring Abandonment:** Bentonite

**Surface Seal:** Concrete  
**Ground Surface Elevation (ft):** NA  
**Surveyed Location:** X: NA Y: NA



# Log of Boring: FB-06

Page 1 of 1

**Client:** IS Property Investments LLC  
**Project:** 3245 158th Ave SE  
**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 2/19/24 @ 1157  
**Date/Time Completed:** 2/19/24 @ 1230  
**Drilling Company:** AEC  
**Drilling Method:** Sonic  
**Drilling Equipment:** Terrasonic  
**Drilling Operator:** Cole Pickering  
**Sampler Type:** 5.0' PE

**Depth to Water ATD (ft bgs):** 17.0  
**Boring Diameter (in):** 3.75  
**Total Boring Depth (ft bgs):** 20.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0-0.3': Asphalt.	AC			100			
		0.3-4.0': Cleared for utilities. Soil not logged.							
5		4.0-6.0': Silty SAND (80% sand, 10% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM			100	0.0	FB-06-5.0	X
		6.0-17.0': Silty SAND (70% sand, 20% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM			100	0.0	FB-06-10.0	X
15						100	0.0	FB-06-15.0	
		17.0-20.0': Silty SAND (70% sand, 20% silt, 10% gravel), fine to coarse sand, fine gravel, brown, wet, no odor, no staining.	SM				0.0	FB-06-16.5	
20							0.0	FB-06-20.0	

## Completion Information

**Temporary Well Casing Diameter (in):** NA  
**Temporary Well Screened Interval (ft bgs):** NA  
**Boring Abandonment:** Bentonite

**Surface Seal:** Concrete  
**Ground Surface Elevation (ft):** NA  
**Surveyed Location:** X: NA Y: NA



# Log of Boring: FB-07

Page 1 of 1

**Client:** IS Property Investments LLC  
**Project:** 3245 158th Ave SE  
**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 2/19/24 @ 1338  
**Date/Time Completed:** 2/19/24 @ 1410  
**Drilling Company:** AEC  
**Drilling Method:** Sonic  
**Drilling Equipment:** Terrasonic  
**Drilling Operator:** Cole Pickering  
**Sampler Type:** 5.0' PE

**Depth to Water ATD (ft bgs):** 14.5  
**Boring Diameter (in):** 3.75  
**Total Boring Depth (ft bgs):** 20.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0-5.0': Cleared to 5.0' bgs for utilities. Soil not logged.				100			
5		5.0-14.5': Silty SAND with gravel (65% sand, 20% gravel, 15% silt), fine and medium sand, fine and coarse gravel, brown, dry, moist at 10.0' bgs, no odor, no staining.	SM			100	0.0	FB-07-5.0	X
10						100	0.0	FB-07-10.0	X
15		14.5-15.0': Silty SAND with gravel (65% sand, 20% gravel, 15% silt), fine to coarse sand and gravel, brown, wet, no odor, no staining.	SM				0.0	FB-07-14.0	
		15.0-18.0': Silty SAND (55% sand, 35% silt, 10% gravel), fine and medium sand, fine and coarse gravel, brown, wet, no odor, no staining.	SM			100	0.0	FB-07-15.0	
		18.0-20.0': Silty SAND with gravel (65% sand, 20% gravel, 15% silt), fine and medium sand, fine and coarse gravel, brown, moist, no odor, no staining.	SM						
20							0.6	FB-07-20.0	

## Completion Information

**Temporary Well Casing Diameter (in):** NA  
**Temporary Well Screened Interval (ft bgs):** NA  
**Boring Abandonment:** Bentonite

**Surface Seal:** Concrete  
**Ground Surface Elevation (ft):** NA  
**Surveyed Location:** X: NA Y: NA



# Log of Boring: FB-08

Page 1 of 1

**Client:** IS Property Investments LLC  
**Project:** 3245 158th Ave SE  
**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 2/19/24 @ 1427  
**Date/Time Completed:** 2/19/24 @ 1501  
**Drilling Company:** AEC  
**Drilling Method:** Sonic  
**Drilling Equipment:** Terrasonic  
**Drilling Operator:** Cole Pickering  
**Sampler Type:** 5.0' PE  
**Depth to Water ATD (ft bgs):** 13.0  
**Boring Diameter (in):** 3.75  
**Total Boring Depth (ft bgs):** 20.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0-5.0': Cleared to 5.0' bgs for utilities. Soil not logged.				100			
5		5.0-13.0': Silty SAND (65% sand, 25% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM			100	0.1	FB-08-5.0	X
10						100	0.0	FB-08-10.0	X
15		13.0- 15.0': Well-graded SAND with silt (80% sand, 10% silt, 10% gravel), fine and coarse sand, fine gravel, brown, moist, no odor, no staining.	SW-SM						
15		15.0-20.0': Silty SAND (65% sand, 25% silt, 10% gravel), fine and medium sand, fine gravel, brown, moist, no odor, no staining.	SM			100	0.0	FB-08-15.0	
20							0.0	FB-08-20.0	

## Completion Information

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



# Log of Boring: FB-09

Page 1 of 1

**Client:** IS Property Investments LLC  
**Project:** 3245 158th Ave SE  
**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 2/19/24 @ 1547  
**Date/Time Completed:** 2/19/24 @ 1613  
**Drilling Company:** AEC  
**Drilling Method:** Sonic  
**Drilling Equipment:** Terrasonic  
**Drilling Operator:** Cole Pickering  
**Sampler Type:** 5.0' PE  
**Depth to Water ATD (ft bgs):** 20.0  
**Boring Diameter (in):** 3.75  
**Total Boring Depth (ft bgs):** 20.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0-0.3': Asphalt.	AC			100			
		0.3-4.3': Cleared to 4.3' bgs for utilities. Soil not logged.							
5		4.3-8.0': Silty SAND (70% sand, 20% silt, 10% gravel), fine and medium sand, fine and coarse gravel, brown, dry, no odor, no staining.	SM			100	0.0	FB-09-5.0	X
		8.0-10.0': Poorly graded SAND with silt (85% sand, 10% gravel, 5% silt), fine and medium sand, fine and coarse gravel, gray-brown, dry, no odor, no staining.	SP-SM						
10		10.0-19.5': Silty SAND (60% sand, 30% silt, 10% gravel), fine and medium sand, fine and coarse gravel, brown, dry, no odor, no staining.	SM			100	0.0	FB-09-10.0	X
15						100	0.0	FB-09-15.0	
20		19.5-20.0': Poorly graded SAND (90% sand, 10% gravel), medium and coarse sand, brown, dry, moist, no odor, no staining.	SP				0.0	FB-09-20.0	

## Completion Information

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



# Log of Boring: FB-10

Page 1 of 1

**Client:** IS Property Investments LLC  
**Project:** 3245 158th Ave SE  
**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 2/20/24 @ 0904  
**Date/Time Completed:** 2/20/24 @ 0929  
**Drilling Company:** AEC  
**Drilling Method:** Sonic  
**Drilling Equipment:** Terrasonic  
**Drilling Operator:** Cole Pickering  
**Sampler Type:** 5.0' PE  
**Depth to Water ATD (ft bgs):** 15.5  
**Boring Diameter (in):** 3.75  
**Total Boring Depth (ft bgs):** 20.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0-0.3': Asphalt.	AC			100			
		0.3-5.0': Cleared to 5.0' bgs for utilities. Soil not logged.							
5		5.0-6.5': Silty SAND (50% sand, 40% silt, 10% gravel), fine and medium sand, fine gravel, brown, moist, slight organic odor, no staining.	SM			100	0.0	FB-10-5.0	X
		6.5-8.0': Silty SAND (60% sand, 30% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM						
		8.0-10.0': Silty SAND (70% sand, 20% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM						
10		10.0-15.0': Silty SAND (70% sand, 25% silt, 5% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM			100	0.1	FB-10-10.0	X
15		15.0-20.0': Silty SAND (50% sand, 40% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, moist at 15.5' bgs, no odor, no staining.	SM			100	0.1	FB-10-15.0	
20							0.0	FB-10-20.0	

## Completion Information

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



## Log of Boring: FB-11

Page 1 of 1

**Client:** IS Property Investments LLC  
**Project:** 3245 158th Ave SE  
**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 2/20/24 @ 1034

**Date/Time Completed:** 2/20/24 @ 1116

**Drilling Company:** AEC

**Drilling Method:** Sonic

**Drilling Equipment:** Terrasonic

**Drilling Operator:** Cole Pickering

**Sampler Type:** 5.0' PE

**Depth to Water ATD (ft bgs):** 17.5

**Boring Diameter (in):** 3.75

**Total Boring Depth (ft bgs):** 20.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0-0.3': Asphalt.	AC			100			
		0.3-4.0': Cleared to 5.0' bgs for utilities. Soil not logged.							
5		4.0-5.5': Silty SAND (75% sand, 15% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM			100	0.0	FB-11-5.0	X
		5.5-7.5': Silty SAND (65% sand, 25% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM						
		7.5-9.0': Silty SAND (75% sand, 15% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM						
10		9.0-10.0': Silty SAND (65% sand, 25% silt, 10% gravel), fine and medium sand, fine gravel, red-brown, dry, no odor, no staining.	SM			100	0.0	FB-11-10.0	X
		10.0-11.5': Silty SAND (75% sand, 15% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SM						
		11.5-15.0': Silty SAND (50% sand, 40% silt, 10% gravel), fine and medium sand, fine and coarse gravel, gray-brown, dry, no odor, no staining.	SM						
15		15.0-17.5': Silty SAND (75% sand, 15% silt, 10% gravel), fine and medium sand, fine gravel, brown, moist, no odor, no staining.	SM			100			
		17.5-20.0': Well-graded SAND with silt (80% sand, 10% silt, 10% gravel), fine to coarse sand, fine and coarse gravel, brown, wet, no odor, no staining.	SW-SM				0.0	FB-11-17.0	
20							0.0	FB-11-20.0	

### Completion Information

**Temporary Well Casing Diameter (in):** NA

**Temporary Well Screened Interval (ft bgs):** NA

**Boring Abandonment:** Bentonite

**Surface Seal:** Concrete

**Ground Surface Elevation (ft):** NA

**Surveyed Location:** X: NA Y: NA





# Log of Boring: FMW-01

Page 1 of 1

**Client:** IS Property Investments LLC

**Project:** 3245 158th Ave SE

**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 10/23/23 @ 0852

**Date/Time Completed:** 10/23/23 @ 1150

**Drilling Company:** AEC

**Drilling Method:** Sonic

**Drilling Equipment:** Terra Sonic

**Drilling Operator:** Cole Pickering

**Sampler Type:** 5.0' PE

**Depth to Water ATD (ft bgs):** 22.0

**Boring Diameter (in):** 3.75

**Total Boring Depth (ft bgs):** 40.0

**Constructed Well Depth (ft bgs):** 37.0

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

0	0.0-0.3': Asphalt. Airknife to 4.5' bgs for utilities.	AC		100					
5	0.3-5.0': Silty SAND with gravel (50% sand, 30% silt, 20% gravel), fine sand, fine and coarse gravel, gray, dry, strong petroleum odor, no staining.	SM		100	1171.2	FMW-01-5.0	X		Concrete
10	5.0-13.0': Silty SAND with gravel (50% sand, 30% silt, 20% gravel), fine to coarse sand, fine gravel, gray, dry, strong petroleum odor, no staining.	SM		100	1763.3	FMW-01-10.0	X		Bentonite
15	13.0-16.5': Well-graded SAND with silt and gravel (65% sand, 25% gravel, 10% silt), fine to coarse sand, fine gravel, gray, petroleum odor, no staining.	SW-SM		100	1.9	FMW-01-15.0	X		
20	16.5-20.0': Silty SAND with gravel (65% sand, 20% silt, 15% gravel), fine to coarse sand, fine gravel, gray-brown, moist, no odor, no staining.	SM		100	0.6	FMW-01-20.0			
25	20.0-22.0': Silty SAND (60% sand, 30% silt, 10% gravel), fine and medium sand, fine gravel, gray-brown, moist, no odor, no staining.	SM		100	0.0	FMW-01-25.0			Water Level
30	22.0-25.0': Silty SAND (55% sand, 35% silt, 10% gravel), fine to coarse sand, brown, moist, no odor, no staining.	SW		100	0.0	FMW-01-30.0			Sandpack
35	25.0-26.0': Well-graded SAND with gravel (60% sand, 40% gravel), fine to coarse sand, fine gravel, gray-brown, dry, no odor, no staining.	SM		100	0.0	FMW-01-35.0			Screen
40	26.0-33.0': Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine to coarse sand and gravel, brown, dry, no odor, no staining.	SP		100	0.0	FMW-01-40.0			Bentonite
	33.0-36.0': Poorly graded SAND with gravel (80% sand, 15% gravel, 5% silt), fine and medium sand, fine gravel, brown, dry, moist at 35.0' bgs, no odor, no staining.	SM							
	36.0-40.0': Silty SAND with gravel (70% sand, 15% silt, 15% gravel), fine and medium sand, fine gravel, brown, moist, dry at 37.5' bgs, no odor, no staining.								

## Well Construction Information

**Monument Type:** Flush

**Casing Diameter (in):** 2.0

**Screen Slot Size (in):** 0.010

**Screened Interval (ft bgs):** 22.0-37.0

**Filter Pack:** Sand

**Surface Seal:** Concrete

**Annular Seal:** Bentonite

**Boring Abandonment:** NA

**Ground Surface Elevation (ft):** 334.66

**Top of Casing Elevation (ft):** 334.21

**Surveyed Location: X:** 1318811.89 **Y:** 214401.03

**Unique Well ID:** NA



# Log of Boring: FMW-02

Page 1 of 1

**Client:** IS Property Investments LLC

**Project:** 3245 158th Ave SE

**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 10/23/23 @ 1402

**Date/Time Completed:** 10/23/23 @ 1529

**Drilling Company:** AEC

**Drilling Method:** Sonic

**Drilling Equipment:** Terra Sonic

**Drilling Operator:** Cole Pickering

**Sampler Type:** 5.0' PE

**Depth to Water ATD (ft bgs):** 26.0

**Boring Diameter (in):** 3.75

**Total Boring Depth (ft bgs):** 35.0

**Constructed Well Depth (ft bgs):** 31.0

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

0		0.0-5.0': Silty SAND (60% sand, 30% silt, 10% gravel), fine to coarse sand, fine gravel, dark brown, dry, no odor, no staining.	SM		100					Concrete
5		5.0-10.0': Silty SAND (60% sand, 30% silt, 10% gravel), fine and medium sand, fine gravel, gray, dry, petroleum odor from 5.0-6.0' bgs, no staining.	SM		100	0.2	FMW-02-5.0	X		
10		10.0-14.0': Silty SAND (70% sand, 20% silt, 10% gravel), fine and medium sand, fine and coarse gravel, gray, dry, no odor, no staining.	SM		100	0.0	FMW-02-10.0	X		Bentonite
15		14.0-15.0': Poorly graded SAND (90% sand, 10% gravel), fine sand, gray, dry, no odor, no staining.	SP		100	0.0	FMW-02-15.0			
		15.0-20.0': Silty SAND (70% sand, 20% silt, 10% gravel), fine and medium sand, fine and coarse gravel, gray, dry, no odor, no staining.	SM		100	0.0				
20		20.0-25.0': Poorly graded SAND (85% sand, 10% gravel, 5% silt), fine and medium sand, fine gravel, gray-brown, moist, no odor, no staining.	SP		100	0.0	FMW-02-20.0			Sandpack
										Screen
25		25.0-26.0': Poorly graded SAND (95% sand, 5% gravel), medium and coarse sand, fine and coarse gravel, brown, wet, no odor, no staining.	SP		100	0.0	FMW-02-25.0			
		26.0-31.0': Silty SAND (55% sand, 40% silt, 5% gravel), fine and medium sand, fine gravel, gray-brown, wet, no odor, no staining.	SP							Water Level
30					100	0.0	FMW-02-30.0			
		31.0-35.0': Silty SAND (70% sand, 20% silt, 10% gravel), fine and medium sand, fine and coarse gravel, brown, moist, no odor, no staining.	SM							Bentonite
35						0.0	FMW-02-35.0			

## Well Construction Information

**Monument Type:** Flush

**Casing Diameter (in):** 2.0

**Screen Slot Size (in):** 0.010

**Screened Interval (ft bgs):** 21.0-31.0

**Filter Pack:** Sand

**Surface Seal:** Concrete

**Annular Seal:** Bentonite

**Boring Abandonment:** NA

**Ground Surface Elevation (ft):** 336.05

**Top of Casing Elevation (ft):** 335.54

**Surveyed Location: X:** 1318917.13 **Y:** 214480.56

**Unique Well ID:** NA



# Log of Boring: FMW-03

Page 1 of 1

**Client:** IS Property Investments LLC

**Project:** 3245 158th Ave SE

**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 10/23/23 @ 1245

**Date/Time Completed:** 10/24/23 @ 1004

**Drilling Company:** AEC

**Drilling Method:** Sonic

**Drilling Equipment:** Terra Sonic

**Drilling Operator:** Cole Pickering

**Sampler Type:** 5.0' PE

**Depth to Water ATD (ft bgs):** 20.0

**Boring Diameter (in):** 3.75

**Total Boring Depth (ft bgs):** 30.0

**Constructed Well Depth (ft bgs):** 27.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-4.0': Silty SAND (50% sand, 40% silt, 10% gravel), fine and medium sand, fine gravel, brown, dry, slight organic odor, no staining.	SM		100				
						0.0			Concrete
5		4.0-6.5': Poorly graded SAND with silt and gravel (70% sand, 20% gravel, 10% silt), fine sand and gravel, light brown, dry, no odor, no staining.	SP-SM		100	1.3	FMW-03-5.0	X	
		6.5-8.0': Poorly graded SAND with gravel (85% sand, 15% gravel), medium sand, fine and coarse gravel, brown, dry, no odor, no staining.	SP						
		8.0-9.0': Poorly graded SAND with silt and gravel (70% sand, 20% gravel, 10% silt), fine sand and gravel, light brown, dry, no odor, no staining.	SP-SM						
10		9.0-10.0': Silty SAND (75% sand, 15% silt, 10% gravel), fine sand and gravel, brown, dry, no odor, no staining.	SM		20	0.1	FMW-03-10.0	X	
		10.0-14.0': No Recovery.							Bentonite
15		14.0-16.5': Poorly graded SAND with gravel (85% sand, 15% gravel), fine and medium sand, fine gravel, brown, dry, no odor, no staining.	SP		100	0.5	FMW-03-15.0		
		16.5-19.0': Poorly graded SAND (85% sand, 10% gravel, 5% silt), fine sand, fine and coarse gravel, brown, dry, no odor, no staining.	SP						Sandpack Screen
20		19.0-20.0': Silty SAND (60% sand, 30% silt, 10% gravel), fine to coarse sand, fine gravel, brown, wet, no odor, no staining.	SM			0.1	FMW-03-19.0		
		20.0-25.0': Sandy SILT with gravel (55% silt, 30% sand, 15% gravel), fine sand, fine and coarse gravel, brown, moist, no odor, no staining.	ML		100	1.0	FMW-03-20.0		Water Level
25		25.0-30.0': Silty SAND with gravel (45% sand, 40% silt, 15% gravel), fine and medium sand, fine gravel, brown, moist, no odor, no staining.	SM		100	0.5	FMW-03-25.0		
30						0.0	FMW-03-30.0		Bentonite

## Well Construction Information

**Monument Type:** Flush

**Casing Diameter (in):** 2.0

**Screen Slot Size (in):** 0.010

**Screened Interval (ft bgs):** 17.0-27.0

**Filter Pack:** Sand

**Surface Seal:** Concrete

**Annular Seal:** Bentonite

**Boring Abandonment:** NA

**Ground Surface Elevation (ft):** 334.19

**Top of Casing Elevation (ft):** 333.67

**Surveyed Location: X:** 1318834.46 **Y:** 214348.93

**Unique Well ID:** NA



# Log of Boring: FMW-04

Page 1 of 1

**Client:** IS Property Investments LLC

**Project:** 3245 158th Ave SE

**Location:** Bellevue, WA

**Farallon PN:** 2403-008

**Logged By:** A. Osman

**Reviewed By:** Y. Pehlivan

**Date/Time Started:** 10/23/23 @ 1158

**Date/Time Completed:** 10/24/23 @ 1431

**Drilling Company:** AEC

**Drilling Method:** Sonic

**Drilling Equipment:** Terra Sonic

**Drilling Operator:** Cole Pickering

**Sampler Type:** 5.0' PE

**Depth to Water ATD (ft bgs):** 16.0

**Boring Diameter (in):** 3.75

**Total Boring Depth (ft bgs):** 30.0

**Constructed Well Depth (ft bgs):** 24.0

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

0		0.0-2.0': Sandy SILT (60% silt, 35% sand, 5% gravel), fine sand and gravel, brown, dry, organic odor, no staining.	ML		100				
		2.0-10.0': Silty SAND (60% sand, 30% silt, 10% gravel), fine to coarse sand, fine gravel, light brown, dry, no odor, no staining.	SM			0.0			Concrete
5					100	0.6	FMW-04-5.0	X	
									Bentonite
10		10.0-17.0': Silty SAND (50% sand, 45% silt, 5% gravel), fine to coarse sand and gravel, brown, dry, wet at 16.0', no odor, no staining.	SM		100	0.1	FMW-04-10.0	X	
									Sandpack Screen
15					100	0.0	FMW-04-15.0		
		17.0-17.5': Poorly graded SAND (100% sand), medium and coarse sand, brown, wet, no odor, no staining.	SP						Water Level
		17.5-23.5': SILT (100% silt), gray-brown, orange mottling at 21.0' bgs, gray at 22.0' bgs, wet, no odor, no staining.	ML						
20					100	0.1	FMW-04-20.0		
		23.5-27.0': Well-graded SAND with silt and gravel (75% sand, 15% gravel, 10% silt), fine to coarse sand, fine gravel, brown, moist, no odor, no staining.	SW-SM			0.0	FMW-04-25.0		
25					100				Bentonite
		27.0-30.0': Silty SAND with gravel (65% sand, 20% silt, 15% gravel), fine to coarse sand, fine gravel, brown, moist, no odor, no staining.	SM						
30						0.1	FMW-04-30.0		

## Well Construction Information

**Monument Type:** Flush

**Casing Diameter (in):** 2.0

**Screen Slot Size (in):** 0.010

**Screened Interval (ft bgs):** 14.0-24.0

**Filter Pack:** Sand

**Surface Seal:** Concrete

**Annular Seal:** Bentonite

**Boring Abandonment:** NA

**Ground Surface Elevation (ft):** 330.45

**Top of Casing Elevation (ft):** 329.96

**Surveyed Location: X:** 1319179.91 **Y:** 214127.44

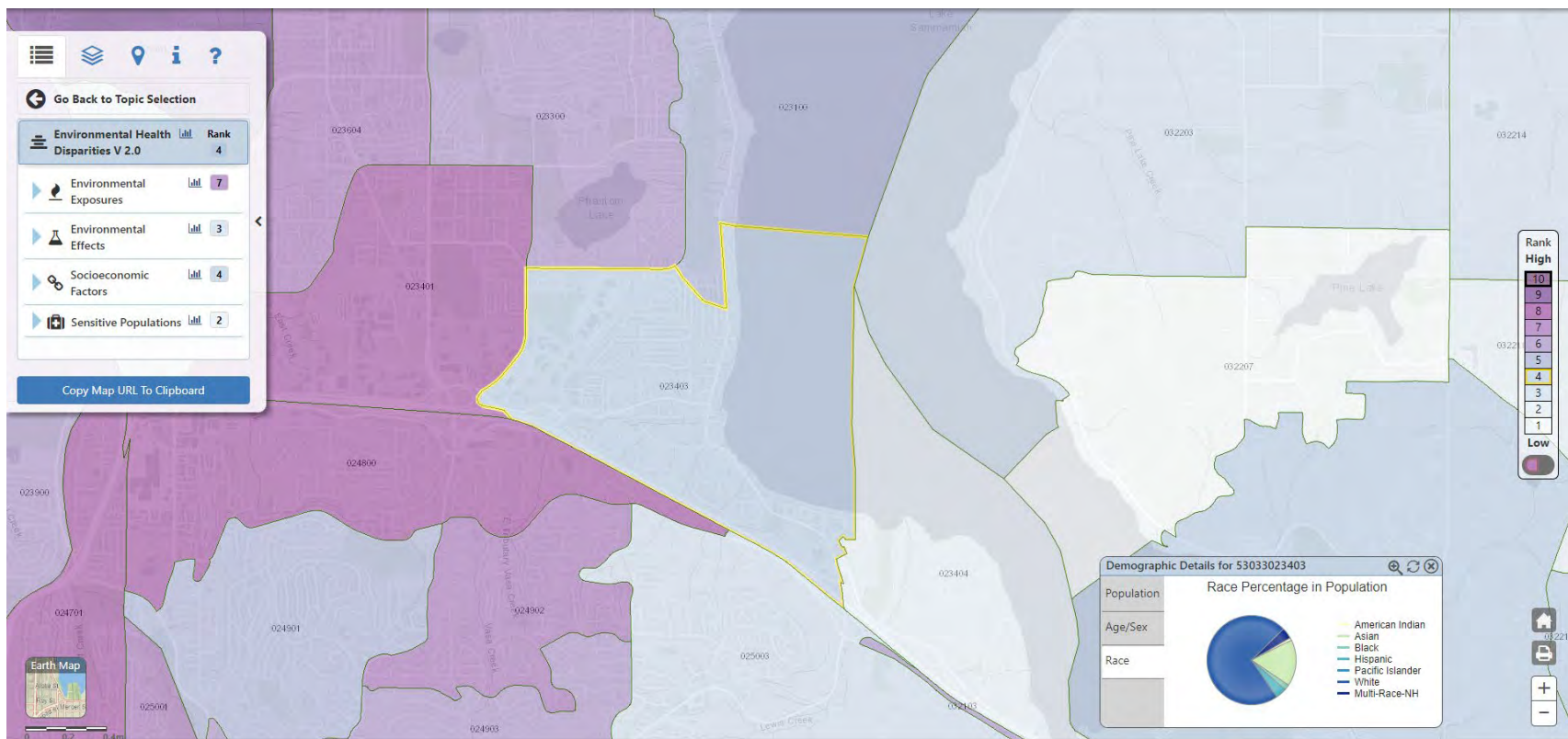
**Unique Well ID:** NA

**APPENDIX C**  
**EJ SCREENING TOOL AND EHD MAP COMMUNITY REPORTS**

REMEDIAL INVESTIGATION AND CLEANUP ACTION PLAN  
3245 158<sup>th</sup> Avenue Southeast  
Bellevue, Washington

Farallon PN: 2403-008







# Bellevue, WA

**Area in square miles: 2.05**



LANGUAGE	PERCENT
English	69%
Spanish	5%
French, Haitian, or Cajun	2%
German or other West Germanic	1%
Russian, Polish, or Other Slavic	3%
Other Indo-European	6%
Korean	1%
Chinese (including Mandarin, Cantonese)	6%
Tagalog (including Filipino)	1%
Other Asian and Pacific Island	5%
Total Non-English	31%

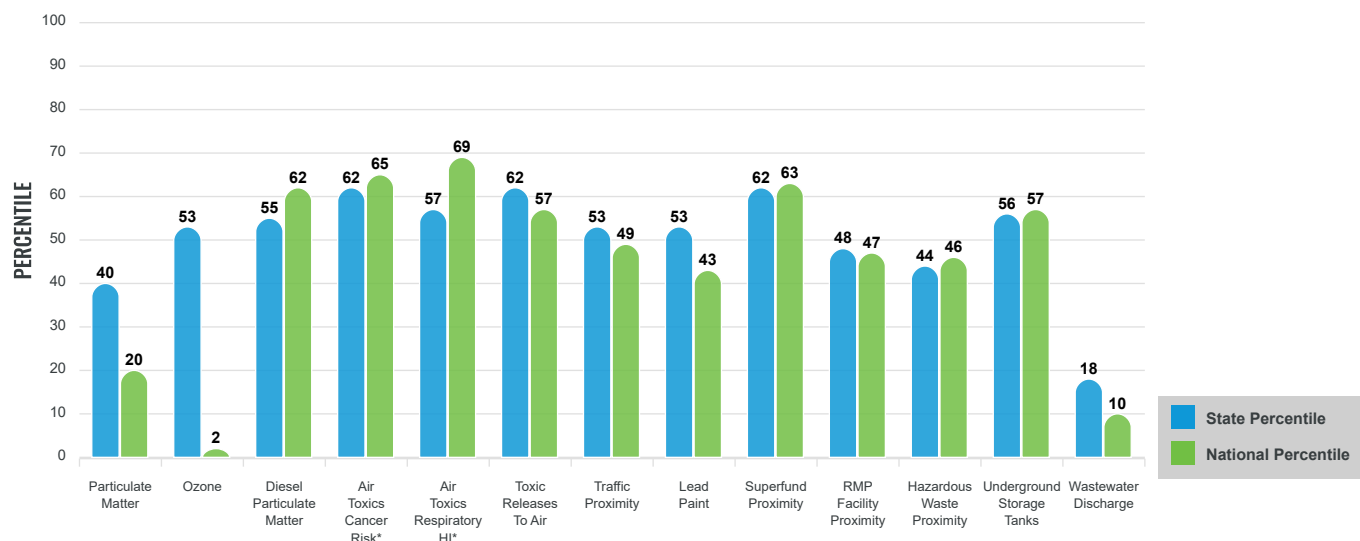
## Environmental Justice & Supplemental Indexes

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.

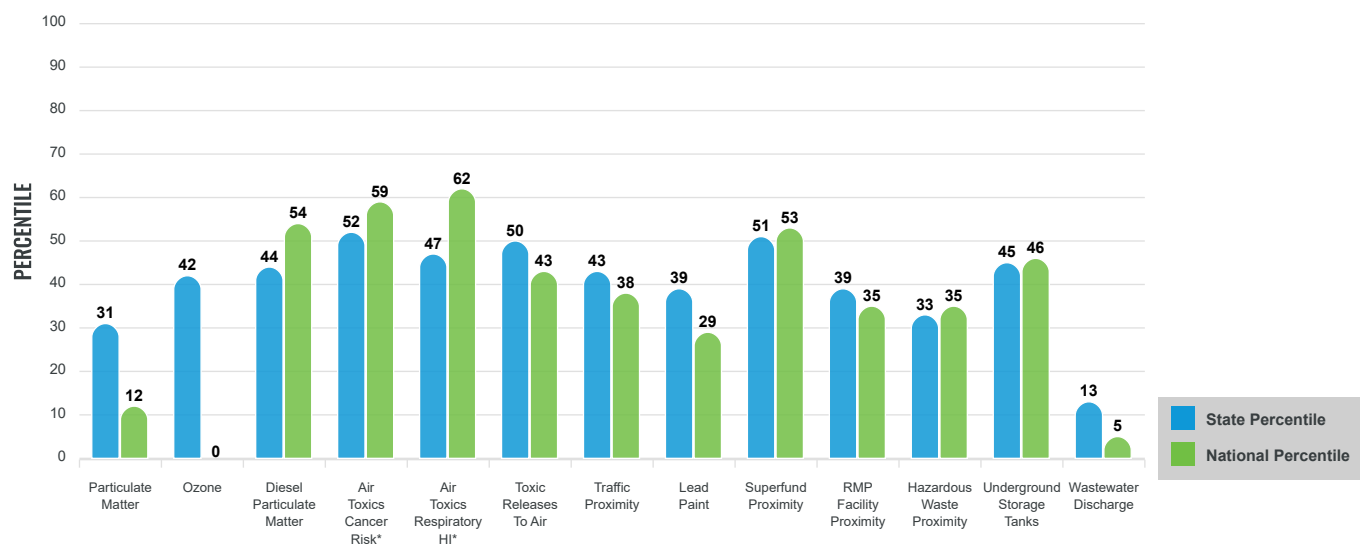
#### EJ INDEXES FOR THE SELECTED LOCATION



### 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: 53033023403

# EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
<b>POLLUTION AND SOURCES</b>					
Particulate Matter ( $\mu\text{g}/\text{m}^3$ )	6.74	7.02	36	8.08	15
Ozone (ppb)	49.4	49.8	50	61.6	1
Diesel Particulate Matter ( $\mu\text{g}/\text{m}^3$ )	0.336	0.355	52	0.261	75
Air Toxics Cancer Risk* (lifetime risk per million)	30	27	37	25	52
Air Toxics Respiratory HI*	0.4	0.39	39	0.31	70
Toxic Releases to Air	1,000	1,800	59	4,600	60
Traffic Proximity (daily traffic count/distance to road)	160	190	69	210	69
Lead Paint (% Pre-1960 Housing)	0.15	0.23	52	0.3	42
Superfund Proximity (site count/km distance)	0.12	0.18	59	0.13	73
RMP Facility Proximity (facility count/km distance)	0.15	0.4	44	0.43	45
Hazardous Waste Proximity (facility count/km distance)	0.34	1.6	39	1.9	44
Underground Storage Tanks (count/km <sup>2</sup> )	4.3	6.3	65	3.9	74
Wastewater Discharge (toxicity-weighted concentration/m distance)	6.8E-07	0.024	15	22	7
<b>SOCIOECONOMIC INDICATORS</b>					
Demographic Index	24%	28%	47	35%	41
Supplemental Demographic Index	7%	12%	25	14%	19
People of Color	39%	32%	67	39%	57
Low Income	10%	24%	22	31%	17
Unemployment Rate	6%	5%	64	6%	62
Limited English Speaking Households	4%	4%	71	5%	72
Less Than High School Education	3%	8%	29	12%	22
Under Age 5	6%	6%	56	6%	56
Over Age 64	15%	16%	50	17%	47
Low Life Expectancy	15%	18%	16	20%	11

\*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 .....	11
Air Pollution .....	0
Brownfields .....	0
Toxic Release Inventory .....	0

## Other community features within defined area:

Schools .....	2
Hospitals .....	0
Places of Worship .....	1

## Other environmental data:

Air Non-attainment .....	No
Impaired Waters .....	Yes

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

Report for Tract: 53033023403

## EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	15%	18%	16	20%	11
Heart Disease	4.7	5.3	34	6.1	22
Asthma	8.6	10.5	4	10	15
Cancer	7.4	6.3	79	6.1	78
Persons with Disabilities	11.7%	13.1%	44	13.4%	44

CLIMATE INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	5%	11%	46	12%	39
Wildfire Risk	0%	12%	0	14%	0

CRITICAL SERVICE GAPS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	1%	9%	17	14%	12
Lack of Health Insurance	5%	6%	49	9%	39
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	No	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for Tract: 53033023403



**APPENDIX D**  
**LABORATORY ANALYTICAL REPORTS**

REMEDIAL INVESTIGATION AND CLEANUP ACTION PLAN  
3245 158<sup>th</sup> Avenue Southeast  
Bellevue, Washington

Farallon PN: 2403-008

FRIEDMAN & BRUYA, INC.

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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

June 5, 2024

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the amended results from the testing of material submitted on March 1, 2024 from the 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024 project. The case narrative was expanded.

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  
FLN0314R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
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www.friedmanandbruya.com

March 14, 2024

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on March 1, 2024 from the 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024 project. There are 25 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  
FLN0314R.DOC



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on March 1, 2024 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
403024 -01	SG-04-022824
403024 -02	SG-09-022824
403024 -03	SG-05-022824
403024 -04	SG-11-022824
403024 -05	SG-10-022824
403024 -06	SG-08-022824
403024 -07	SG-06-022824

Non-petroleum compounds identified in the air phase hydrocarbon (APH) ranges were subtracted per the MA-APH method.

The MA-APH concentrations in samples F&B 403204-02 through -07 were qualified due to contamination. The samples were pressurized and screened in order after receipt by the laboratory. Carryover from the source level concentrations observed in sample 403024-01 likely affected the remaining samples in the data set and the affected concentrations were qualified accordingly.

The TO-15 calibration standard for ethanol exceeded the acceptance criteria. The compound was not detected, therefore this did not represent an out of control condition, and were qualified with a "k" qualifier.

All quality control requirements were acceptable.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-04-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-01 1/1100
Date Analyzed:	03/06/24	Data File:	030521.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	100	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	1,200,000
APH EC9-12 aliphatics	3,700,000
APH EC9-10 aromatics	99,000

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-09-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-02 1/5.2
Date Analyzed:	03/14/24	Data File:	031317.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	96	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	970 lc
APH EC9-12 aliphatics	1,100 lc
APH EC9-10 aromatics	<130



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-05-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-03 1/5.3
Date Analyzed:	03/05/24	Data File:	030519.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	99	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	530 lc
APH EC9-12 aliphatics	520 lc
APH EC9-10 aromatics	<130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-11-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-04 1/5.4
Date Analyzed:	03/05/24	Data File:	030518.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	610 lc
APH EC9-12 aliphatics	810 lc
APH EC9-10 aromatics	<130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-10-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-05 1/5.5
Date Analyzed:	03/05/24	Data File:	030517.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	96	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	710 lc
APH EC9-12 aliphatics	890 lc
APH EC9-10 aromatics	<140



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-08-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-06 1/5.3
Date Analyzed:	03/05/24	Data File:	030516.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	98	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	500 lc
APH EC9-12 aliphatics	470 lc
APH EC9-10 aromatics	<130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-06-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-07 1/5.3
Date Analyzed:	03/05/24	Data File:	030515.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	99	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	550 lc
APH EC9-12 aliphatics	780 lc
APH EC9-10 aromatics	<130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	Not Applicable	Lab ID:	04-0498 mb
Date Analyzed:	03/05/24	Data File:	030511.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	96	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	<75
APH EC9-12 aliphatics	<25
APH EC9-10 aromatics	<25



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SG-04-022824	Client: Farallon Consulting, LLC
Date Received: 03/01/24	Project: 3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected: 02/28/24	Lab ID: 403024-01 1/1100
Date Analyzed: 03/06/24	Data File: 030521.D
Matrix: Air	Instrument: GCMS8
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	100	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<1,300	<770	1,2-Dichloropropane	<250	<55
Dichlorodifluoromethane	<1,100	<220	1,4-Dioxane	<400	<110
Chloromethane	<4,100	<2,000	2,2,4-Trimethylpentane	37,000	7,900
F-114	<2,300	<330	Methyl methacrylate	<4,500	<1,100
Vinyl chloride	<280	<110	Heptane	<4,500	<1,100
1,3-Butadiene	<49	<22	Bromodichloromethane	<74	<11
Butane	<5,200	<2,200	Trichloroethene	<120	<22
Bromomethane	<4,300	<1,100	cis-1,3-Dichloropropene	<1,000	<220
Chloroethane	<2,900	<1,100	4-Methyl-2-pentanone	<9,000	<2,200
Vinyl bromide	<480	<110	trans-1,3-Dichloropropene	<500	<110
Ethanol	<8,300 k	<4,400 k	Toluene	<8,300	<2,200
Acrolein	<130	<55	1,1,2-Trichloroethane	<60	<11
Pentane	<6,500	<2,200	2-Hexanone	<4,500	<1,100
Trichlorofluoromethane	<2,500	<440	Tetrachloroethene	<7,500	<1,100
Acetone	<5,200	<2,200	Dibromochloromethane	<94	<11
2-Propanol	<9,500	<3,800	1,2-Dibromoethane (EDB)	<85	<11
1,1-Dichloroethene	<440	<110	Chlorobenzene	<510	<110
trans-1,2-Dichloroethene	<440	<110	Ethylbenzene	<480	<110
Methylene chloride	<38,000	<11,000	1,1,2,2-Tetrachloroethane	<150	<22
t-Butyl alcohol (TBA)	<13,000	<4,400	Nonane	<5,800	<1,100
3-Chloropropene	<3,400	<1,100	Isopropylbenzene	<11,000	<2,200
CFC-113	<1,700	<220	2-Chlorotoluene	<5,700	<1,100
Carbon disulfide	<6,900	<2,200	Propylbenzene	6,400	1,300
Methyl t-butyl ether (MTBE)	<7,900	<2,200	4-Ethyltoluene	11,000	2,300
Vinyl acetate	<7,700	<2,200	m,p-Xylene	7,200	1,600
1,1-Dichloroethane	<450	<110	o-Xylene	<480	<110
cis-1,2-Dichloroethene	<440	<110	Styrene	<940	<220
Hexane	<3,900	<1,100	Bromoform	<2,300	<220
Chloroform	<54	<11	Benzyl chloride	<57	<11
Ethyl acetate	<7,900	<2,200	1,3,5-Trimethylbenzene	<5,400	<1,100
Tetrahydrofuran	<650	<220	1,2,4-Trimethylbenzene	29,000	5,900
2-Butanone (MEK)	<6,500	<2,200	1,3-Dichlorobenzene	<660	<110
1,2-Dichloroethane (EDC)	<45	<11	1,4-Dichlorobenzene	<250	<42
1,1,1-Trichloroethane	<600	<110	1,2-Dichlorobenzene	<660	<110
Carbon tetrachloride	<350	<55	1,2,4-Trichlorobenzene	<820	<110
Benzene	<350	<110	Naphthalene	<290	<55
Cyclohexane	<7,600	<2,200	Hexachlorobutadiene	<230	<22

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-09-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-02 1/5.2
Date Analyzed:	03/14/24	Data File:	031317.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	99	70	130

Compounds:	Concentration		Compounds:	Concentration	
	ug/m3	ppbv		ug/m3	ppbv
Propene	<6.3	<3.6	1,2-Dichloropropane	<1.2	<0.26
Dichlorodifluoromethane	<5.1	<1	1,4-Dioxane	<1.9	<0.52
Chloromethane	<19	<9.4	2,2,4-Trimethylpentane	27	5.8
F-114	<11	<1.6	Methyl methacrylate	<21	<5.2
Vinyl chloride	<1.3	<0.52	Heptane	<21	<5.2
1,3-Butadiene	<0.23	<0.1	Bromodichloromethane	2.8	0.42
Butane	28	12	Trichloroethene	<0.56	<0.1
Bromomethane	<20	<5.2	cis-1,3-Dichloropropene	<4.7	<1
Chloroethane	<14	<5.2	4-Methyl-2-pentanone	<43	<10
Vinyl bromide	<2.3	<0.52	trans-1,3-Dichloropropene	<2.4	<0.52
Ethanol	<39	<21	Toluene	<39	<10
Acrolein	<0.6	<0.26	1,1,2-Trichloroethane	<0.28	<0.052
Pentane	<31	<10	2-Hexanone	<21	<5.2
Trichlorofluoromethane	<12	<2.1	Tetrachloroethene	<35	<5.2
Acetone	<25	<10	Dibromochloromethane	0.93	0.11
2-Propanol	<45	<18	1,2-Dibromoethane (EDB)	<0.4	<0.052
1,1-Dichloroethene	<2.1	<0.52	Chlorobenzene	<2.4	<0.52
trans-1,2-Dichloroethene	<2.1	<0.52	Ethylbenzene	<2.3	<0.52
Methylene chloride	<180	<52	1,1,2,2-Tetrachloroethane	<0.71	<0.1
t-Butyl alcohol (TBA)	<63	<21	Nonane	<27	<5.2
3-Chloropropene	<16	<5.2	Isopropylbenzene	<51	<10
CFC-113	<8	<1	2-Chlorotoluene	<27	<5.2
Carbon disulfide	<32	<10	Propylbenzene	<26	<5.2
Methyl t-butyl ether (MTBE)	<37	<10	4-Ethyltoluene	<26	<5.2
Vinyl acetate	<37	<10	m,p-Xylene	7.0	1.6
1,1-Dichloroethane	<2.1	<0.52	o-Xylene	<2.3	<0.52
cis-1,2-Dichloroethene	<2.1	<0.52	Styrene	<4.4	<1
Hexane	<18	<5.2	Bromoform	<11	<1
Chloroform	12	2.4	Benzyl chloride	<0.27 k	<0.052 k
Ethyl acetate	<37	<10	1,3,5-Trimethylbenzene	<26	<5.2
Tetrahydrofuran	<3.1	<1	1,2,4-Trimethylbenzene	<26	<5.2
2-Butanone (MEK)	<31	<10	1,3-Dichlorobenzene	<3.1	<0.52
1,2-Dichloroethane (EDC)	<0.21	<0.052	1,4-Dichlorobenzene	<1.2	<0.2
1,1,1-Trichloroethane	<2.8	<0.52	1,2-Dichlorobenzene	<3.1	<0.52
Carbon tetrachloride	<1.6	<0.26	1,2,4-Trichlorobenzene	<3.9	<0.52
Benzene	<1.7	<0.52	Naphthalene	<1.4	<0.26
Cyclohexane	<36	<10	Hexachlorobutadiene	<1.1	<0.1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-05-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-03 1/5.3
Date Analyzed:	03/05/24	Data File:	030519.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	99	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<6.4	<3.7	1,2-Dichloropropane	<1.2	<0.26
Dichlorodifluoromethane	<5.2	<1.1	1,4-Dioxane	<1.9	<0.53
Chloromethane	<20	<9.5	2,2,4-Trimethylpentane	<25	<5.3
F-114	<11	<1.6	Methyl methacrylate	<22	<5.3
Vinyl chloride	<1.4	<0.53	Heptane	<22	<5.3
1,3-Butadiene	<0.23	<0.11	Bromodichloromethane	<0.36	<0.053
Butane	<25	<11	Trichloroethene	<0.57	<0.11
Bromomethane	<21	<5.3	cis-1,3-Dichloropropene	<4.8	<1.1
Chloroethane	<14	<5.3	4-Methyl-2-pentanone	<43	<11
Vinyl bromide	<2.3	<0.53	trans-1,3-Dichloropropene	<2.4	<0.53
Ethanol	<40 k	<21 k	Toluene	<40	<11
Acrolein	<0.61	<0.26	1,1,2-Trichloroethane	<0.29	<0.053
Pentane	<31	<11	2-Hexanone	<22	<5.3
Trichlorofluoromethane	<12	<2.1	Tetrachloroethene	<36	<5.3
Acetone	<25	<11	Dibromochloromethane	<0.45	<0.053
2-Propanol	<46	<19	1,2-Dibromoethane (EDB)	<0.41	<0.053
1,1-Dichloroethene	<2.1	<0.53	Chlorobenzene	<2.4	<0.53
trans-1,2-Dichloroethene	<2.1	<0.53	Ethylbenzene	<2.3	<0.53
Methylene chloride	<180	<53	1,1,2,2-Tetrachloroethane	<0.73	<0.11
t-Butyl alcohol (TBA)	<64	<21	Nonane	<28	<5.3
3-Chloropropene	<17	<5.3	Isopropylbenzene	<52	<11
CFC-113	<8.1	<1.1	2-Chlorotoluene	<27	<5.3
Carbon disulfide	<33	<11	Propylbenzene	<26	<5.3
Methyl t-butyl ether (MTBE)	<38	<11	4-Ethyltoluene	<26	<5.3
Vinyl acetate	<37	<11	m,p-Xylene	<4.6	<1.1
1,1-Dichloroethane	<2.1	<0.53	o-Xylene	<2.3	<0.53
cis-1,2-Dichloroethene	<2.1	<0.53	Styrene	<4.5	<1.1
Hexane	<19	<5.3	Bromoform	<11	<1.1
Chloroform	0.28	0.058	Benzyl chloride	<0.27	<0.053
Ethyl acetate	<38	<11	1,3,5-Trimethylbenzene	<26	<5.3
Tetrahydrofuran	3.5	1.2	1,2,4-Trimethylbenzene	<26	<5.3
2-Butanone (MEK)	<31	<11	1,3-Dichlorobenzene	<3.2	<0.53
1,2-Dichloroethane (EDC)	<0.21	<0.053	1,4-Dichlorobenzene	<1.2	<0.2
1,1,1-Trichloroethane	<2.9	<0.53	1,2-Dichlorobenzene	<3.2	<0.53
Carbon tetrachloride	<1.7	<0.26	1,2,4-Trichlorobenzene	<3.9	<0.53
Benzene	<1.7	<0.53	Naphthalene	<1.4	<0.26
Cyclohexane	<36	<11	Hexachlorobutadiene	<1.1	<0.11



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-11-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-04 1/5.4
Date Analyzed:	03/05/24	Data File:	030518.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<6.5	<3.8	1,2-Dichloropropane	<1.2	<0.27
Dichlorodifluoromethane	<5.3	<1.1	1,4-Dioxane	<1.9	<0.54
Chloromethane	<20	<9.7	2,2,4-Trimethylpentane	<25	<5.4
F-114	<11	<1.6	Methyl methacrylate	<22	<5.4
Vinyl chloride	<1.4	<0.54	Heptane	<22	<5.4
1,3-Butadiene	<0.24	<0.11	Bromodichloromethane	1.6	0.24
Butane	<26	<11	Trichloroethene	<0.58	<0.11
Bromomethane	<21	<5.4	cis-1,3-Dichloropropene	<4.9	<1.1
Chloroethane	<14	<5.4	4-Methyl-2-pentanone	<44	<11
Vinyl bromide	<2.4	<0.54	trans-1,3-Dichloropropene	<2.5	<0.54
Ethanol	<41 k	<22 k	Toluene	<41	<11
Acrolein	<0.62	<0.27	1,1,2-Trichloroethane	<0.29	<0.054
Pentane	<32	<11	2-Hexanone	<22	<5.4
Trichlorofluoromethane	<12	<2.2	Tetrachloroethene	<37	<5.4
Acetone	<26	<11	Dibromochloromethane	0.60	0.070
2-Propanol	<46	<19	1,2-Dibromoethane (EDB)	<0.41	<0.054
1,1-Dichloroethene	<2.1	<0.54	Chlorobenzene	<2.5	<0.54
trans-1,2-Dichloroethene	<2.1	<0.54	Ethylbenzene	<2.3	<0.54
Methylene chloride	<190	<54	1,1,2,2-Tetrachloroethane	<0.74	<0.11
t-Butyl alcohol (TBA)	<65	<22	Nonane	<28	<5.4
3-Chloropropene	<17	<5.4	Isopropylbenzene	<53	<11
CFC-113	<8.3	<1.1	2-Chlorotoluene	<28	<5.4
Carbon disulfide	<34	<11	Propylbenzene	<27	<5.4
Methyl t-butyl ether (MTBE)	<39	<11	4-Ethyltoluene	<27	<5.4
Vinyl acetate	<38	<11	m,p-Xylene	6.3	1.5
1,1-Dichloroethane	<2.2	<0.54	o-Xylene	<2.3	<0.54
cis-1,2-Dichloroethene	<2.1	<0.54	Styrene	<4.6	<1.1
Hexane	<19	<5.4	Bromoform	<11	<1.1
Chloroform	6.4	1.3	Benzyl chloride	<0.28	<0.054
Ethyl acetate	<39	<11	1,3,5-Trimethylbenzene	<27	<5.4
Tetrahydrofuran	<3.2	<1.1	1,2,4-Trimethylbenzene	<27	<5.4
2-Butanone (MEK)	<32	<11	1,3-Dichlorobenzene	<3.2	<0.54
1,2-Dichloroethane (EDC)	<0.22	<0.054	1,4-Dichlorobenzene	<1.2	<0.21
1,1,1-Trichloroethane	<2.9	<0.54	1,2-Dichlorobenzene	<3.2	<0.54
Carbon tetrachloride	<1.7	<0.27	1,2,4-Trichlorobenzene	<4	<0.54
Benzene	<1.7	<0.54	Naphthalene	<1.4	<0.27
Cyclohexane	<37	<11	Hexachlorobutadiene	<1.2	<0.11

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SG-10-022824	Client: Farallon Consulting, LLC
Date Received: 03/01/24	Project: 3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected: 02/28/24	Lab ID: 403024-05 1/5.5
Date Analyzed: 03/05/24	Data File: 030517.D
Matrix: Air	Instrument: GCMS8
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	7.9	4.6	1,2-Dichloropropane	<1.3	<0.28
Dichlorodifluoromethane	<5.4	<1.1	1,4-Dioxane	<2	<0.55
Chloromethane	<20	<9.9	2,2,4-Trimethylpentane	<26	<5.5
F-114	<12	<1.6	Methyl methacrylate	<23	<5.5
Vinyl chloride	<1.4	<0.55	Heptane	<23	<5.5
1,3-Butadiene	<0.24	<0.11	Bromodichloromethane	2.8	0.42
Butane	<26	<11	Trichloroethene	<0.59	<0.11
Bromomethane	<21	<5.5	cis-1,3-Dichloropropene	<5	<1.1
Chloroethane	<15	<5.5	4-Methyl-2-pentanone	<45	<11
Vinyl bromide	<2.4	<0.55	trans-1,3-Dichloropropene	<2.5	<0.55
Ethanol	<41 k	<22 k	Toluene	<41	<11
Acrolein	<0.63	<0.28	1,1,2-Trichloroethane	<0.3	<0.055
Pentane	<32	<11	2-Hexanone	<23	<5.5
Trichlorofluoromethane	<12	<2.2	Tetrachloroethene	<37	<5.5
Acetone	<26	<11	Dibromochloromethane	1.5	0.18
2-Propanol	<47	<19	1,2-Dibromoethane (EDB)	<0.42	<0.055
1,1-Dichloroethene	<2.2	<0.55	Chlorobenzene	<2.5	<0.55
trans-1,2-Dichloroethene	<2.2	<0.55	Ethylbenzene	<2.4	<0.55
Methylene chloride	<190	<55	1,1,2,2-Tetrachloroethane	<0.76	<0.11
t-Butyl alcohol (TBA)	<67	<22	Nonane	<29	<5.5
3-Chloropropene	<17	<5.5	Isopropylbenzene	<54	<11
CFC-113	<8.4	<1.1	2-Chlorotoluene	<28	<5.5
Carbon disulfide	<34	<11	Propylbenzene	<27	<5.5
Methyl t-butyl ether (MTBE)	<40	<11	4-Ethyltoluene	<27	<5.5
Vinyl acetate	<39	<11	m,p-Xylene	6.8	1.6
1,1-Dichloroethane	<2.2	<0.55	o-Xylene	<2.4	<0.55
cis-1,2-Dichloroethene	<2.2	<0.55	Styrene	<4.7	<1.1
Hexane	<19	<5.5	Bromoform	<11	<1.1
Chloroform	9.9	2.0	Benzyl chloride	<0.28	<0.055
Ethyl acetate	<40	<11	1,3,5-Trimethylbenzene	<27	<5.5
Tetrahydrofuran	<3.2	<1.1	1,2,4-Trimethylbenzene	<27	<5.5
2-Butanone (MEK)	<32	<11	1,3-Dichlorobenzene	<3.3	<0.55
1,2-Dichloroethane (EDC)	<0.22	<0.055	1,4-Dichlorobenzene	<1.3	<0.21
1,1,1-Trichloroethane	<3	<0.55	1,2-Dichlorobenzene	<3.3	<0.55
Carbon tetrachloride	<1.7	<0.28	1,2,4-Trichlorobenzene	<4.1	<0.55
Benzene	<1.8	<0.55	Naphthalene	<1.4	<0.28
Cyclohexane	<38	<11	Hexachlorobutadiene	<1.2	<0.11

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SG-08-022824	Client: Farallon Consulting, LLC
Date Received: 03/01/24	Project: 3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected: 02/28/24	Lab ID: 403024-06 1/5.3
Date Analyzed: 03/05/24	Data File: 030516.D
Matrix: Air	Instrument: GCMS8
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<6.4	<3.7	1,2-Dichloropropane	<1.2	<0.26
Dichlorodifluoromethane	<5.2	<1.1	1,4-Dioxane	<1.9	<0.53
Chloromethane	<20	<9.5	2,2,4-Trimethylpentane	<25	<5.3
F-114	<11	<1.6	Methyl methacrylate	<22	<5.3
Vinyl chloride	<1.4	<0.53	Heptane	<22	<5.3
1,3-Butadiene	<0.23	<0.11	Bromodichloromethane	4.0	0.60
Butane	<25	<11	Trichloroethene	<0.57	<0.11
Bromomethane	<21	<5.3	cis-1,3-Dichloropropene	<4.8	<1.1
Chloroethane	<14	<5.3	4-Methyl-2-pentanone	<43	<11
Vinyl bromide	<2.3	<0.53	trans-1,3-Dichloropropene	<2.4	<0.53
Ethanol	68 ca	36 ca	Toluene	<40	<11
Acrolein	<0.61	<0.26	1,1,2-Trichloroethane	<0.29	<0.053
Pentane	<31	<11	2-Hexanone	<22	<5.3
Trichlorofluoromethane	<12	<2.1	Tetrachloroethene	<36	<5.3
Acetone	<25	<11	Dibromochloromethane	2.3	0.26
2-Propanol	<46	<19	1,2-Dibromoethane (EDB)	<0.41	<0.053
1,1-Dichloroethene	<2.1	<0.53	Chlorobenzene	<2.4	<0.53
trans-1,2-Dichloroethene	<2.1	<0.53	Ethylbenzene	<2.3	<0.53
Methylene chloride	<180	<53	1,1,2,2-Tetrachloroethane	<0.73	<0.11
t-Butyl alcohol (TBA)	<64	<21	Nonane	<28	<5.3
3-Chloropropene	<17	<5.3	Isopropylbenzene	<52	<11
CFC-113	<8.1	<1.1	2-Chlorotoluene	<27	<5.3
Carbon disulfide	<33	<11	Propylbenzene	<26	<5.3
Methyl t-butyl ether (MTBE)	<38	<11	4-Ethyltoluene	<26	<5.3
Vinyl acetate	<37	<11	m,p-Xylene	5.7	1.3
1,1-Dichloroethane	<2.1	<0.53	o-Xylene	2.5	0.58
cis-1,2-Dichloroethene	<2.1	<0.53	Styrene	<4.5	<1.1
Hexane	<19	<5.3	Bromoform	<11	<1.1
Chloroform	14	2.9	Benzyl chloride	<0.27	<0.053
Ethyl acetate	<38	<11	1,3,5-Trimethylbenzene	<26	<5.3
Tetrahydrofuran	<3.1	<1.1	1,2,4-Trimethylbenzene	<26	<5.3
2-Butanone (MEK)	<31	<11	1,3-Dichlorobenzene	<3.2	<0.53
1,2-Dichloroethane (EDC)	<0.21	<0.053	1,4-Dichlorobenzene	<1.2	<0.2
1,1,1-Trichloroethane	<2.9	<0.53	1,2-Dichlorobenzene	<3.2	<0.53
Carbon tetrachloride	<1.7	<0.26	1,2,4-Trichlorobenzene	<3.9	<0.53
Benzene	<1.7	<0.53	Naphthalene	<1.4	<0.26
Cyclohexane	<36	<11	Hexachlorobutadiene	<1.1	<0.11

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-06-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-07 1/5.3
Date Analyzed:	03/05/24	Data File:	030515.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	98	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<6.4	<3.7	1,2-Dichloropropane	<1.2	<0.26
Dichlorodifluoromethane	<5.2	<1.1	1,4-Dioxane	<1.9	<0.53
Chloromethane	<20	<9.5	2,2,4-Trimethylpentane	<25	<5.3
F-114	<11	<1.6	Methyl methacrylate	<22	<5.3
Vinyl chloride	<1.4	<0.53	Heptane	<22	<5.3
1,3-Butadiene	<0.23	<0.11	Bromodichloromethane	<0.36	<0.053
Butane	<25	<11	Trichloroethene	<0.57	<0.11
Bromomethane	<21	<5.3	cis-1,3-Dichloropropene	<4.8	<1.1
Chloroethane	<14	<5.3	4-Methyl-2-pentanone	<43	<11
Vinyl bromide	<2.3	<0.53	trans-1,3-Dichloropropene	<2.4	<0.53
Ethanol	<40 k	<21 k	Toluene	<40	<11
Acrolein	<0.61	<0.26	1,1,2-Trichloroethane	<0.29	<0.053
Pentane	<31	<11	2-Hexanone	<22	<5.3
Trichlorofluoromethane	<12	<2.1	Tetrachloroethene	<36	<5.3
Acetone	<25	<11	Dibromochloromethane	<0.45	<0.053
2-Propanol	<46	<19	1,2-Dibromoethane (EDB)	<0.41	<0.053
1,1-Dichloroethene	<2.1	<0.53	Chlorobenzene	<2.4	<0.53
trans-1,2-Dichloroethene	<2.1	<0.53	Ethylbenzene	<2.3	<0.53
Methylene chloride	<180	<53	1,1,2,2-Tetrachloroethane	<0.73	<0.11
t-Butyl alcohol (TBA)	<64	<21	Nonane	<28	<5.3
3-Chloropropene	<17	<5.3	Isopropylbenzene	<52	<11
CFC-113	<8.1	<1.1	2-Chlorotoluene	<27	<5.3
Carbon disulfide	<33	<11	Propylbenzene	<26	<5.3
Methyl t-butyl ether (MTBE)	<38	<11	4-Ethyltoluene	<26	<5.3
Vinyl acetate	<37	<11	m,p-Xylene	<4.6	<1.1
1,1-Dichloroethane	<2.1	<0.53	o-Xylene	<2.3	<0.53
cis-1,2-Dichloroethene	<2.1	<0.53	Styrene	<4.5	<1.1
Hexane	<19	<5.3	Bromoform	<11	<1.1
Chloroform	<0.26	<0.053	Benzyl chloride	<0.27	<0.053
Ethyl acetate	<38	<11	1,3,5-Trimethylbenzene	<26	<5.3
Tetrahydrofuran	3.8	1.3	1,2,4-Trimethylbenzene	<26	<5.3
2-Butanone (MEK)	<31	<11	1,3-Dichlorobenzene	<3.2	<0.53
1,2-Dichloroethane (EDC)	<0.21	<0.053	1,4-Dichlorobenzene	<1.2	<0.2
1,1,1-Trichloroethane	<2.9	<0.53	1,2-Dichlorobenzene	<3.2	<0.53
Carbon tetrachloride	<1.7	<0.26	1,2,4-Trichlorobenzene	<3.9	<0.53
Benzene	<1.7	<0.53	Naphthalene	<1.4	<0.26
Cyclohexane	<36	<11	Hexachlorobutadiene	<1.1	<0.11



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	Not Applicable	Lab ID:	04-0498 mb
Date Analyzed:	03/05/24	Data File:	030511.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	96	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<1.2	<0.7	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.99	<0.2	1,4-Dioxane	<0.36	<0.1
Chloromethane	<3.7	<1.8	2,2,4-Trimethylpentane	<4.7	<1
F-114	<2.1	<0.3	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	<0.044	<0.02	Bromodichloromethane	<0.067	<0.01
Butane	<4.8	<2	Trichloroethene	<0.11	<0.02
Bromomethane	<3.9	<1	cis-1,3-Dichloropropene	<0.91	<0.2
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<8.2	<2
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5 k	<4 k	Toluene	<7.5	<2
Acrolein	<0.11	<0.05	1,1,2-Trichloroethane	<0.055	<0.01
Pentane	<5.9	<2	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<35	<10	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<3.1	<1	Isopropylbenzene	<9.8	<2
CFC-113	<1.5	<0.2	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<4.9	<1
Methyl t-butyl ether (MTBE)	<7.2	<2	4-Ethyltoluene	<4.9	<1
Vinyl acetate	<7	<2	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1	<0.2
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052	<0.01
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<4.9	<1
Tetrahydrofuran	<0.59	<0.2	1,2,4-Trimethylbenzene	<4.9	<1
2-Butanone (MEK)	<5.9	<2	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.23	<0.038
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.31	<0.05	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.32	<0.1	Naphthalene	<0.13 j	<0.025 j
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

Date Extracted: 03/14/24

Date Analyzed: 03/14/24

**RESULTS FROM THE ANALYSIS OF AIR SAMPLES  
FOR HELIUM USING METHOD ASTM D1946**

Results Reported as % Helium

<u>Sample ID</u> Laboratory ID	<u>Helium</u>
SG-04-022824 403024-01	<0.6
SG-09-022824 403024-02	<0.6
SG-05-022824 403024-03	<0.6
SG-11-022824 403024-04	<0.6
SG-10-022824 403024-05	<0.6
SG-08-022824 403024-06	<0.6
SG-06-022824 403024-07	<0.6
Method Blank 04-0526 MB	<0.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 403045-01 1/5.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	2,900	3,000	3
APH EC9-12 aliphatics	ug/m3	610	580	5
APH EC9-10 aromatics	ug/m3	<140	<140	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	81	70-130
APH EC9-12 aliphatics	ug/m3	67	111	70-130
APH EC9-10 aromatics	ug/m3	67	102	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 403045-01 1/5.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Propene	ug/m3	190	190	0
Dichlorodifluoromethane	ug/m3	<5.6	<5.6	nm
Chloromethane	ug/m3	<21	<21	nm
F-114	ug/m3	<12	<12	nm
Vinyl chloride	ug/m3	1.7	1.7	0
1,3-Butadiene	ug/m3	34	34	0
Butane	ug/m3	140	130	7
Bromomethane	ug/m3	<22	<22	nm
Chloroethane	ug/m3	<15	<15	nm
Vinyl bromide	ug/m3	<2.5	<2.5	nm
Ethanol	ug/m3	<43	<43	nm
Acrolein	ug/m3	0.85	0.91	7
Pentane	ug/m3	78	81	4
Trichlorofluoromethane	ug/m3	22	19	15
Acetone	ug/m3	57	59	3
2-Propanol	ug/m3	<49	<49	nm
1,1-Dichloroethene	ug/m3	<2.3	<2.3	nm
trans-1,2-Dichloroethene	ug/m3	<2.3	<2.3	nm
Methylene chloride	ug/m3	<200	<200	nm
t-Butyl alcohol (TBA)	ug/m3	<69	<69	nm
3-Chloropropene	ug/m3	<18	<18	nm
CFC-113	ug/m3	<8.7	<8.7	nm
Carbon disulfide	ug/m3	<36	<36	nm
Methyl t-butyl ether (MTBE)	ug/m3	<41	<41	nm
Vinyl acetate	ug/m3	<40	<40	nm
1,1-Dichloroethane	ug/m3	<2.3	<2.3	nm
cis-1,2-Dichloroethene	ug/m3	<2.3	<2.3	nm
Hexane	ug/m3	50	48	4
Chloroform	ug/m3	1.3	1.3	0
Ethyl acetate	ug/m3	<41	<41	nm
Tetrahydrofuran	ug/m3	<3.4	<3.4	nm
2-Butanone (MEK)	ug/m3	<34	<34	nm
1,2-Dichloroethane (EDC)	ug/m3	<0.23	<0.23	nm
1,1,1-Trichloroethane	ug/m3	6.2	5.9	5
Carbon tetrachloride	ug/m3	<1.8	<1.8	nm
Benzene	ug/m3	25	25	0
Cyclohexane	ug/m3	<39	<39	nm
1,2-Dichloropropane	ug/m3	<1.3	<1.3	nm
1,4-Dioxane	ug/m3	<2.1	<2.1	nm
2,2,4-Trimethylpentane	ug/m3	350	350	0



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 403045-01 1/5.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl methacrylate	ug/m3	<23	<23	nm
Heptane	ug/m3	28	28	0
Bromodichloromethane	ug/m3	<0.38	<0.38	nm
Trichloroethene	ug/m3	0.67	0.67	0
cis-1,3-Dichloropropene	ug/m3	<5.2	<5.2	nm
4-Methyl-2-pentanone	ug/m3	<47	<47	nm
trans-1,3-Dichloropropene	ug/m3	<2.6	<2.6	nm
Toluene	ug/m3	63	63	0
1,1,2-Trichloroethane	ug/m3	<0.31	<0.31	nm
2-Hexanone	ug/m3	<23	<23	nm
Tetrachloroethene	ug/m3	<39	<39	nm
Dibromochloromethane	ug/m3	<0.49	<0.49	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.44	<0.44	nm
Chlorobenzene	ug/m3	<2.6	<2.6	nm
Ethylbenzene	ug/m3	2.5	2.5	0
1,1,2,2-Tetrachloroethane	ug/m3	<0.78	<0.78	nm
Nonane	ug/m3	<30	<30	nm
Isopropylbenzene	ug/m3	<56	<56	nm
2-Chlorotoluene	ug/m3	<30	<30	nm
Propylbenzene	ug/m3	<28	<28	nm
4-Ethyltoluene	ug/m3	<28	<28	nm
m,p-Xylene	ug/m3	<5	<5	nm
o-Xylene	ug/m3	<2.5	<2.5	nm
Styrene	ug/m3	<4.9	<4.9	nm
Bromoform	ug/m3	<12	<12	nm
Benzyl chloride	ug/m3	<0.3	<0.3	nm
1,3,5-Trimethylbenzene	ug/m3	<28	<28	nm
1,2,4-Trimethylbenzene	ug/m3	<28	<28	nm
1,3-Dichlorobenzene	ug/m3	<3.4	<3.4	nm
1,4-Dichlorobenzene	ug/m3	<1.3	<1.3	nm
1,2-Dichlorobenzene	ug/m3	<3.4	<3.4	nm
1,2,4-Trichlorobenzene	ug/m3	<4.2	<4.2	nm
Naphthalene	ug/m3	<1.5	<1.5	nm
Hexachlorobutadiene	ug/m3	<1.2	<1.2	nm

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Propene	ug/m3	23	111	70-130
Dichlorodifluoromethane	ug/m3	67	117	70-130
Chloromethane	ug/m3	28	91	70-130
F-114	ug/m3	94	106	70-130
Vinyl chloride	ug/m3	35	101	70-130
1,3-Butadiene	ug/m3	30	105	70-130
Butane	ug/m3	32	102	70-130
Bromomethane	ug/m3	52	103	70-130
Chloroethane	ug/m3	36	103	70-130
Vinyl bromide	ug/m3	59	116	70-130
Ethanol	ug/m3	25	140 vo	70-130
Acrolein	ug/m3	31	113	70-130
Pentane	ug/m3	40	103	70-130
Trichlorofluoromethane	ug/m3	76	105	70-130
Acetone	ug/m3	32	116	70-130
2-Propanol	ug/m3	33	115	70-130
1,1-Dichloroethene	ug/m3	54	110	70-130
trans-1,2-Dichloroethene	ug/m3	54	110	70-130
Methylene chloride	ug/m3	94	104	70-130
t-Butyl alcohol (TBA)	ug/m3	41	103	70-130
3-Chloropropene	ug/m3	42	100	70-130
CFC-113	ug/m3	100	112	70-130
Carbon disulfide	ug/m3	42	107	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	100	70-130
Vinyl acetate	ug/m3	48	99	70-130
1,1-Dichloroethane	ug/m3	55	110	70-130
cis-1,2-Dichloroethene	ug/m3	54	107	70-130
Hexane	ug/m3	48	98	70-130
Chloroform	ug/m3	66	111	70-130
Ethyl acetate	ug/m3	49	99	70-130
Tetrahydrofuran	ug/m3	40	97	70-130
2-Butanone (MEK)	ug/m3	40	105	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	114	70-130
1,1,1-Trichloroethane	ug/m3	74	112	70-130
Carbon tetrachloride	ug/m3	85	113	70-130
Benzene	ug/m3	43	104	70-130
Cyclohexane	ug/m3	46	108	70-130
1,2-Dichloropropane	ug/m3	62	111	70-130
1,4-Dioxane	ug/m3	49	112	70-130
2,2,4-Trimethylpentane	ug/m3	63	105	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Methyl methacrylate	ug/m3	55	108	70-130
Heptane	ug/m3	55	101	70-130
Bromodichloromethane	ug/m3	90	115	70-130
Trichloroethene	ug/m3	73	112	70-130
cis-1,3-Dichloropropene	ug/m3	61	107	70-130
4-Methyl-2-pentanone	ug/m3	55	100	70-130
trans-1,3-Dichloropropene	ug/m3	61	113	70-130
Toluene	ug/m3	51	109	70-130
1,1,2-Trichloroethane	ug/m3	74	115	70-130
2-Hexanone	ug/m3	55	106	70-130
Tetrachloroethene	ug/m3	92	113	70-130
Dibromochloromethane	ug/m3	120	113	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	114	70-130
Chlorobenzene	ug/m3	62	108	70-130
Ethylbenzene	ug/m3	59	111	70-130
1,1,2,2-Tetrachloroethane	ug/m3	93	115	70-130
Nonane	ug/m3	71	112	70-130
Isopropylbenzene	ug/m3	66	113	70-130
2-Chlorotoluene	ug/m3	70	118	70-130
Propylbenzene	ug/m3	66	111	70-130
4-Ethyltoluene	ug/m3	66	109	70-130
m,p-Xylene	ug/m3	120	113	70-130
o-Xylene	ug/m3	59	116	70-130
Styrene	ug/m3	58	102	70-130
Bromoform	ug/m3	140	109	70-130
Benzyl chloride	ug/m3	70	128	70-130
1,3,5-Trimethylbenzene	ug/m3	66	111	70-130
1,2,4-Trimethylbenzene	ug/m3	66	107	70-130
1,3-Dichlorobenzene	ug/m3	81	113	70-130
1,4-Dichlorobenzene	ug/m3	81	111	70-130
1,2-Dichlorobenzene	ug/m3	81	111	70-130
1,2,4-Trichlorobenzene	ug/m3	100	104	70-130
Naphthalene	ug/m3	71	111	70-130
Hexachlorobutadiene	ug/m3	140	111	70-130

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR HELIUM  
USING METHOD ASTM D1946**

Laboratory Code: 403024-07 (Duplicate)

Analyte	Sample Result (%)	Duplicate Result (%)	Relative Percent Difference	Acceptance Criteria
Helium	0	0	nm	0-20



**Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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.

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Michael Erdahl, B.S.  
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October 17, 2023

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on October 9, 2023 from the 3245 158th Ave SE 2403-008, F&BI 310136 project. There are 15 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  
FLN1017R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 9, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 310136 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
310136 -01	SG-01-5.0
310136 -02	SG-02-5.0
310136 -03	SG-03-4.0

Non-petroleum compounds identified in the air phase hydrocarbon (APH) ranges were subtracted per the MA-APH method.

The concentration of several analytes exceeded the calibration range of the instrument. The data were flagged accordingly.

All other quality control requirements were acceptable.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-01-5.0	Client:	Farallon Consulting, LLC
Date Received:	10/09/23	Project:	3245 158th Ave SE 2403-008
Date Collected:	10/09/23	Lab ID:	310136-01 1/41
Date Analyzed:	10/14/23	Data File:	101323.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	94	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	14,000
APH EC9-12 aliphatics	7,900
APH EC9-10 aromatics	<1,000



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-02-5.0	Client:	Farallon Consulting, LLC
Date Received:	10/09/23	Project:	3245 158th Ave SE 2403-008
Date Collected:	10/09/23	Lab ID:	310136-02 1/41
Date Analyzed:	10/14/23	Data File:	101325.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration
	ug/m3

APH EC5-8 aliphatics	290,000
APH EC9-12 aliphatics	580,000
APH EC9-10 aromatics	19,000

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-03-4.0	Client:	Farallon Consulting, LLC
Date Received:	10/09/23	Project:	3245 158th Ave SE 2403-008
Date Collected:	10/09/23	Lab ID:	310136-03 1/43
Date Analyzed:	10/14/23	Data File:	101324.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	94	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	17,000
APH EC9-12 aliphatics	<1,100
APH EC9-10 aromatics	1,700 x

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Collected:	Not Applicable	Lab ID:	03-2332 MB
Date Analyzed:	10/13/23	Data File:	101312.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	86	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	<75
APH EC9-12 aliphatics	<25
APH EC9-10 aromatics	<25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SG-01-5.0	Client: Farallon Consulting, LLC
Date Received: 10/09/23	Project: 3245 158th Ave SE 2403-008
Date Collected: 10/09/23	Lab ID: 310136-01 1/41
Date Analyzed: 10/14/23	Data File: 101323.D
Matrix: Air	Instrument: GCMS7
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	94	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	880	510	1,2-Dichloropropane	<9.5	<2
Dichlorodifluoromethane	<41	<8.2	1,4-Dioxane	<15	<4.1
Chloromethane	<150	<74	2,2,4-Trimethylpentane	<190	<41
F-114	<86	<12	Methyl methacrylate	<170	<41
Vinyl chloride	<10	<4.1	Heptane	<170	<41
1,3-Butadiene	<1.8	<0.82	Bromodichloromethane	<2.7	<0.41
Butane	520	220	Trichloroethene	<4.4	<0.82
Bromomethane	<160	<41	cis-1,3-Dichloropropene	<37	<8.2
Chloroethane	<110	<41	4-Methyl-2-pentanone	<340	<82
Vinyl bromide	<18	<4.1	trans-1,3-Dichloropropene	<19	<4.1
Ethanol	<310	<160	Toluene	<310	<82
Acrolein	<4.7	<2	1,1,2-Trichloroethane	<2.2	<0.41
Pentane	<240	<82	2-Hexanone	<170	<41
Trichlorofluoromethane	<92	<16	Tetrachloroethene	<280	<41
Acetone	390	170	Dibromochloromethane	<3.5	<0.41
2-Propanol	<350	<140	1,2-Dibromoethane (EDB)	<3.2	<0.41
1,1-Dichloroethene	<16	<4.1	Chlorobenzene	<19	<4.1
trans-1,2-Dichloroethene	<16	<4.1	Ethylbenzene	830	190
Methylene chloride	<1,400	<410	1,1,2,2-Tetrachloroethane	<5.6	<0.82
t-Butyl alcohol (TBA)	<500	<160	Nonane	880	170
3-Chloropropene	<130	<41	Isopropylbenzene	<400	<82
CFC-113	<63	<8.2	2-Chlorotoluene	<210	<41
Carbon disulfide	340	110	Propylbenzene	<200	<41
Methyl t-butyl ether (MTBE)	<300	<82	4-Ethyltoluene	<200	<41
Vinyl acetate	<290	<82	m,p-Xylene	3,500 ve	810 ve
1,1-Dichloroethane	<17	<4.1	o-Xylene	890	200
cis-1,2-Dichloroethene	<16	<4.1	Styrene	<35	<8.2
Hexane	<140	<41	Bromoform	<85	<8.2
Chloroform	<2	<0.41	Benzyl chloride	<2.1	<0.41
Ethyl acetate	<300	<82	1,3,5-Trimethylbenzene	<200	<41
Tetrahydrofuran	<24	<8.2	1,2,4-Trimethylbenzene	<200	<41
2-Butanone (MEK)	<240	<82	1,3-Dichlorobenzene	<25	<4.1
1,2-Dichloroethane (EDC)	<1.7	<0.41	1,4-Dichlorobenzene	<9.4	<1.6
1,1,1-Trichloroethane	<22	<4.1	1,2-Dichlorobenzene	<25	<4.1
Carbon tetrachloride	<13	<2	1,2,4-Trichlorobenzene	<30	<4.1
Benzene	26	8.1	Naphthalene	<11	<2
Cyclohexane	<280	<82	Hexachlorobutadiene	<8.7	<0.82



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SG-02-5.0	Client: Farallon Consulting, LLC
Date Received: 10/09/23	Project: 3245 158th Ave SE 2403-008
Date Collected: 10/09/23	Lab ID: 310136-02 1/41
Date Analyzed: 10/14/23	Data File: 101325.D
Matrix: Air	Instrument: GCMS7
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	410	240	1,2-Dichloropropane	<9.5	<2
Dichlorodifluoromethane	<41	<8.2	1,4-Dioxane	<15	<4.1
Chloromethane	<150	<74	2,2,4-Trimethylpentane	12,000 ve	2,700 ve
F-114	<86	<12	Methyl methacrylate	<170	<41
Vinyl chloride	<10	<4.1	Heptane	<170	<41
1,3-Butadiene	<1.8	<0.82	Bromodichloromethane	<2.7	<0.41
Butane	<190	<82	Trichloroethene	<4.4	<0.82
Bromomethane	<160	<41	cis-1,3-Dichloropropene	<37	<8.2
Chloroethane	<110	<41	4-Methyl-2-pentanone	<340	<82
Vinyl bromide	<18	<4.1	trans-1,3-Dichloropropene	<19	<4.1
Ethanol	<310	<160	Toluene	<310	<82
Acrolein	<4.7	<2	1,1,2-Trichloroethane	<2.2	<0.41
Pentane	<240	<82	2-Hexanone	<170	<41
Trichlorofluoromethane	<92	<16	Tetrachloroethene	<280	<41
Acetone	450	190	Dibromochloromethane	<3.5	<0.41
2-Propanol	<350	<140	1,2-Dibromoethane (EDB)	<3.2	<0.41
1,1-Dichloroethene	<16	<4.1	Chlorobenzene	<19	<4.1
trans-1,2-Dichloroethene	<16	<4.1	Ethylbenzene	110	26
Methylene chloride	<1,400	<410	1,1,2,2-Tetrachloroethane	<5.6	<0.82
t-Butyl alcohol (TBA)	<500	<160	Nonane	<220	<41
3-Chloropropene	<130	<41	Isopropylbenzene	1,300	260
CFC-113	<63	<8.2	2-Chlorotoluene	<210	<41
Carbon disulfide	<260	<82	Propylbenzene	1,300	270
Methyl t-butyl ether (MTBE)	<300	<82	4-Ethyltoluene	2,800	570
Vinyl acetate	<290	<82	m,p-Xylene	2,100	480
1,1-Dichloroethane	<17	<4.1	o-Xylene	<18	<4.1
cis-1,2-Dichloroethene	<16	<4.1	Styrene	<35	<8.2
Hexane	<140	<41	Bromoform	<85	<8.2
Chloroform	<2	<0.41	Benzyl chloride	<2.1	<0.41
Ethyl acetate	<300	<82	1,3,5-Trimethylbenzene	<200	<41
Tetrahydrofuran	<24	<8.2	1,2,4-Trimethylbenzene	8,500 ve	1,700 ve
2-Butanone (MEK)	<240	<82	1,3-Dichlorobenzene	<25	<4.1
1,2-Dichloroethane (EDC)	<1.7	<0.41	1,4-Dichlorobenzene	<9.4	<1.6
1,1,1-Trichloroethane	<22	<4.1	1,2-Dichlorobenzene	<25	<4.1
Carbon tetrachloride	<13	<2	1,2,4-Trichlorobenzene	<30	<4.1
Benzene	31	9.8	Naphthalene	<11	<2
Cyclohexane	<280	<82	Hexachlorobutadiene	<8.7	<0.82

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-03-4.0	Client:	Farallon Consulting, LLC
Date Received:	10/09/23	Project:	3245 158th Ave SE 2403-008
Date Collected:	10/09/23	Lab ID:	310136-03 1/43
Date Analyzed:	10/14/23	Data File:	101324.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates:			
4-Bromofluorobenzene	93	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	260	150	1,2-Dichloropropane	<9.9	<2.1
Dichlorodifluoromethane	<43	<8.6	1,4-Dioxane	<15	<4.3
Chloromethane	<160	<77	2,2,4-Trimethylpentane	<200	<43
F-114	<90	<13	Methyl methacrylate	<180	<43
Vinyl chloride	<11	<4.3	Heptane	<180	<43
1,3-Butadiene	<1.9	<0.86	Bromodichloromethane	<2.9	<0.43
Butane	420	180	Trichloroethene	<4.6	<0.86
Bromomethane	<170	<43	cis-1,3-Dichloropropene	<39	<8.6
Chloroethane	<110	<43	4-Methyl-2-pentanone	<350	<86
Vinyl bromide	<19	<4.3	trans-1,3-Dichloropropene	<20	<4.3
Ethanol	<320	<170	Toluene	<320	<86
Acrolein	6.1 ca	2.7 ca	1,1,2-Trichloroethane	<2.3	<0.43
Pentane	<250	<86	2-Hexanone	<180	<43
Trichlorofluoromethane	<97	<17	Tetrachloroethene	<290	<43
Acetone	280	120	Dibromochloromethane	<3.7	<0.43
2-Propanol	<370	<150	1,2-Dibromoethane (EDB)	<3.3	<0.43
1,1-Dichloroethene	<17	<4.3	Chlorobenzene	<20	<4.3
trans-1,2-Dichloroethene	<17	<4.3	Ethylbenzene	990	230
Methylene chloride	<1,500	<430	1,1,2,2-Tetrachloroethane	<5.9	<0.86
t-Butyl alcohol (TBA)	<520	<170	Nonane	720	140
3-Chloropropene	<130	<43	Isopropylbenzene	<420	<86
CFC-113	<66	<8.6	2-Chlorotoluene	<220	<43
Carbon disulfide	<270	<86	Propylbenzene	<210	<43
Methyl t-butyl ether (MTBE)	<310	<86	4-Ethyltoluene	<210	<43
Vinyl acetate	<300	<86	m,p-Xylene	4,700 ve	1,100 ve
1,1-Dichloroethane	<17	<4.3	o-Xylene	1,600	370
cis-1,2-Dichloroethene	<17	<4.3	Styrene	<37	<8.6
Hexane	<150	<43	Bromoform	<89	<8.6
Chloroform	<2.1	<0.43	Benzyl chloride	<2.2	<0.43
Ethyl acetate	<310	<86	1,3,5-Trimethylbenzene	<210	<43
Tetrahydrofuran	<25	<8.6	1,2,4-Trimethylbenzene	<210	<43
2-Butanone (MEK)	<250	<86	1,3-Dichlorobenzene	<26	<4.3
1,2-Dichloroethane (EDC)	<1.7	<0.43	1,4-Dichlorobenzene	<9.8	<1.6
1,1,1-Trichloroethane	<23	<4.3	1,2-Dichlorobenzene	<26	<4.3
Carbon tetrachloride	<14	<2.1	1,2,4-Trichlorobenzene	<32	<4.3
Benzene	23	7.3	Naphthalene	<11	<2.1
Cyclohexane	<300	<86	Hexachlorobutadiene	<9.2	<0.86

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Collected:	Not Applicable	Lab ID:	03-2332 MB
Date Analyzed:	10/13/23	Data File:	101312.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	86	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<1.2	<0.7	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.99	<0.2	1,4-Dioxane	<0.36	<0.1
Chloromethane	<3.7	<1.8	2,2,4-Trimethylpentane	<4.7	<1
F-114	<2.1	<0.3	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	<0.044	<0.02	Bromodichloromethane	<0.067	<0.01
Butane	<4.8	<2	Trichloroethene	<0.11	<0.02
Bromomethane	<3.9	<1	cis-1,3-Dichloropropene	<0.91	<0.2
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<8.2	<2
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5	<4	Toluene	<7.5	<2
Acrolein	<0.11	<0.05	1,1,2-Trichloroethane	<0.055	<0.01
Pentane	<5.9	<2	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<35	<10	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<3.1	<1	Isopropylbenzene	<9.8	<2
CFC-113	<1.5	<0.2	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<4.9	<1
Methyl t-butyl ether (MTBE)	<7.2	<2	4-Ethyltoluene	<4.9	<1
Vinyl acetate	<7	<2	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1	<0.2
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052	<0.01
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<4.9	<1
Tetrahydrofuran	<0.59	<0.2	1,2,4-Trimethylbenzene	<4.9	<1
2-Butanone (MEK)	<5.9	<2	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.23	<0.038
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.31	<0.05	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.32	<0.1	Naphthalene	<0.26	<0.05
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/17/23

Date Received: 10/09/23

Project: 3245 158th Ave SE 2403-008, F&BI 310136

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 310259-01 1/5.0 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	<370	<370	nm
APH EC9-12 aliphatics	ug/m3	<120	<120	nm
APH EC9-10 aromatics	ug/m3	<120	<120	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	74	70-130
APH EC9-12 aliphatics	ug/m3	67	117	70-130
APH EC9-10 aromatics	ug/m3	67	99	70-130



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/17/23

Date Received: 10/09/23

Project: 3245 158th Ave SE 2403-008, F&BI 310136

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 310259-01 1/5.0 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Propene	ug/m3	<6	<6	nm
Dichlorodifluoromethane	ug/m3	<4.9	<4.9	nm
Chloromethane	ug/m3	<19	<19	nm
F-114	ug/m3	<10	<10	nm
Vinyl chloride	ug/m3	<1.3	<1.3	nm
1,3-Butadiene	ug/m3	<0.22	<0.22	nm
Butane	ug/m3	<24	<24	nm
Bromomethane	ug/m3	<19	<19	nm
Chloroethane	ug/m3	<13	<13	nm
Vinyl bromide	ug/m3	<2.2	<2.2	nm
Ethanol	ug/m3	1,400	1,400	0
Acrolein	ug/m3	<0.57	<0.57	nm
Pentane	ug/m3	<30	<30	nm
Trichlorofluoromethane	ug/m3	<11	<11	nm
Acetone	ug/m3	63	61	3
2-Propanol	ug/m3	<43	<43	nm
1,1-Dichloroethene	ug/m3	<2	<2	nm
trans-1,2-Dichloroethene	ug/m3	<2	<2	nm
Methylene chloride	ug/m3	<170	<170	nm
t-Butyl alcohol (TBA)	ug/m3	<61	<61	nm
3-Chloropropene	ug/m3	<16	<16	nm
CFC-113	ug/m3	<7.7	<7.7	nm
Carbon disulfide	ug/m3	<31	<31	nm
Methyl t-butyl ether (MTBE)	ug/m3	<36	<36	nm
Vinyl acetate	ug/m3	<35	<35	nm
1,1-Dichloroethane	ug/m3	<2	<2	nm
cis-1,2-Dichloroethene	ug/m3	<2	<2	nm
Hexane	ug/m3	<18	<18	nm
Chloroform	ug/m3	<0.24	<0.24	nm
Ethyl acetate	ug/m3	<36	<36	nm
Tetrahydrofuran	ug/m3	<2.9	<2.9	nm
2-Butanone (MEK)	ug/m3	<29	<29	nm
1,2-Dichloroethane (EDC)	ug/m3	<0.2	<0.2	nm
1,1,1-Trichloroethane	ug/m3	<2.7	<2.7	nm
Carbon tetrachloride	ug/m3	<1.6	<1.6	nm
Benzene	ug/m3	<1.6	<1.6	nm
Cyclohexane	ug/m3	<34	<34	nm
1,2-Dichloropropane	ug/m3	<1.2	<1.2	nm
1,4-Dioxane	ug/m3	<1.8	<1.8	nm
2,2,4-Trimethylpentane	ug/m3	<23	<23	nm

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 10/17/23

Date Received: 10/09/23

Project: 3245 158th Ave SE 2403-008, F&BI 310136

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: 310259-01 1/5.0 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl methacrylate	ug/m3	<20	<20	nm
Heptane	ug/m3	<20	<20	nm
Bromodichloromethane	ug/m3	<0.34	<0.34	nm
Trichloroethene	ug/m3	<0.54	<0.54	nm
cis-1,3-Dichloropropene	ug/m3	<4.5	<4.5	nm
4-Methyl-2-pentanone	ug/m3	<41	<41	nm
trans-1,3-Dichloropropene	ug/m3	<2.3	<2.3	nm
Toluene	ug/m3	<38	<38	nm
1,1,2-Trichloroethane	ug/m3	<0.27	<0.27	nm
2-Hexanone	ug/m3	<20	<20	nm
Tetrachloroethene	ug/m3	<34	<34	nm
Dibromochloromethane	ug/m3	<0.43	<0.43	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.38	<0.38	nm
Chlorobenzene	ug/m3	<2.3	<2.3	nm
Ethylbenzene	ug/m3	<2.2	<2.2	nm
1,1,2,2-Tetrachloroethane	ug/m3	<0.69	<0.69	nm
Nonane	ug/m3	<26	<26	nm
Isopropylbenzene	ug/m3	<49	<49	nm
2-Chlorotoluene	ug/m3	<26	<26	nm
Propylbenzene	ug/m3	<25	<25	nm
4-Ethyltoluene	ug/m3	<25	<25	nm
m,p-Xylene	ug/m3	5.5	5.6	2
o-Xylene	ug/m3	<2.2	<2.2	nm
Styrene	ug/m3	<4.3	<4.3	nm
Bromoform	ug/m3	<10	<10	nm
Benzyl chloride	ug/m3	<0.26	<0.26	nm
1,3,5-Trimethylbenzene	ug/m3	<25	<25	nm
1,2,4-Trimethylbenzene	ug/m3	<25	<25	nm
1,3-Dichlorobenzene	ug/m3	<3	<3	nm
1,4-Dichlorobenzene	ug/m3	<1.1	<1.1	nm
1,2-Dichlorobenzene	ug/m3	<3	<3	nm
1,2,4-Trichlorobenzene	ug/m3	<3.7	<3.7	nm
Naphthalene	ug/m3	<1.3	<1.3	nm
Hexachlorobutadiene	ug/m3	<1.1	<1.1	nm

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 10/17/23

Date Received: 10/09/23

Project: 3245 158th Ave SE 2403-008, F&BI 310136

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Propene	ug/m3	23	105	70-130
Dichlorodifluoromethane	ug/m3	67	113	70-130
Chloromethane	ug/m3	28	99	70-130
F-114	ug/m3	94	111	70-130
Vinyl chloride	ug/m3	35	105	70-130
1,3-Butadiene	ug/m3	30	96	70-130
Butane	ug/m3	32	97	70-130
Bromomethane	ug/m3	52	114	70-130
Chloroethane	ug/m3	36	108	70-130
Vinyl bromide	ug/m3	59	124	70-130
Ethanol	ug/m3	25	106	70-130
Acrolein	ug/m3	31	101	70-130
Pentane	ug/m3	40	94	70-130
Trichlorofluoromethane	ug/m3	76	112	70-130
Acetone	ug/m3	32	103	70-130
2-Propanol	ug/m3	33	92	70-130
1,1-Dichloroethene	ug/m3	54	106	70-130
trans-1,2-Dichloroethene	ug/m3	54	101	70-130
Methylene chloride	ug/m3	94	113	70-130
t-Butyl alcohol (TBA)	ug/m3	41	86	70-130
3-Chloropropene	ug/m3	42	93	70-130
CFC-113	ug/m3	100	116	70-130
Carbon disulfide	ug/m3	42	110	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	87	70-130
Vinyl acetate	ug/m3	48	87	70-130
1,1-Dichloroethane	ug/m3	55	101	70-130
cis-1,2-Dichloroethene	ug/m3	54	98	70-130
Hexane	ug/m3	48	90	70-130
Chloroform	ug/m3	66	102	70-130
Ethyl acetate	ug/m3	49	92	70-130
Tetrahydrofuran	ug/m3	40	97	70-130
2-Butanone (MEK)	ug/m3	40	89	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	99	70-130
1,1,1-Trichloroethane	ug/m3	74	101	70-130
Carbon tetrachloride	ug/m3	85	107	70-130
Benzene	ug/m3	43	97	70-130
Cyclohexane	ug/m3	46	87	70-130
1,2-Dichloropropane	ug/m3	62	105	70-130
1,4-Dioxane	ug/m3	49	101	70-130
2,2,4-Trimethylpentane	ug/m3	63	102	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 10/17/23

Date Received: 10/09/23

Project: 3245 158th Ave SE 2403-008, F&BI 310136

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Methyl methacrylate	ug/m3	55	98	70-130
Heptane	ug/m3	55	98	70-130
Bromodichloromethane	ug/m3	90	108	70-130
Trichloroethene	ug/m3	73	105	70-130
cis-1,3-Dichloropropene	ug/m3	61	108	70-130
4-Methyl-2-pentanone	ug/m3	55	105	70-130
trans-1,3-Dichloropropene	ug/m3	61	98	70-130
Toluene	ug/m3	51	102	70-130
1,1,2-Trichloroethane	ug/m3	74	115	70-130
2-Hexanone	ug/m3	55	97	70-130
Tetrachloroethene	ug/m3	92	120	70-130
Dibromochloromethane	ug/m3	120	114	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	106	70-130
Chlorobenzene	ug/m3	62	111	70-130
Ethylbenzene	ug/m3	59	96	70-130
1,1,2,2-Tetrachloroethane	ug/m3	93	110	70-130
Nonane	ug/m3	71	112	70-130
Isopropylbenzene	ug/m3	66	111	70-130
2-Chlorotoluene	ug/m3	70	113	70-130
Propylbenzene	ug/m3	66	111	70-130
4-Ethyltoluene	ug/m3	66	104	70-130
m,p-Xylene	ug/m3	120	101	70-130
o-Xylene	ug/m3	59	108	70-130
Styrene	ug/m3	58	105	70-130
Bromoform	ug/m3	140	120	70-130
Benzyl chloride	ug/m3	70	98	70-130
1,3,5-Trimethylbenzene	ug/m3	66	112	70-130
1,2,4-Trimethylbenzene	ug/m3	66	102	70-130
1,3-Dichlorobenzene	ug/m3	81	119	70-130
1,4-Dichlorobenzene	ug/m3	81	114	70-130
1,2-Dichlorobenzene	ug/m3	81	119	70-130
1,2,4-Trichlorobenzene	ug/m3	100	94	70-130
Naphthalene	ug/m3	71	98	70-130
Hexachlorobutadiene	ug/m3	140	111	70-130



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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

10/09/23

310136

Report To MUSUP Rehlman

Company Farellon

Address 975 5th Ave NW

City, State, ZIP Issaquah, WA 98027

Phone (425) 295 0800 Email gphillips@farellonconsulting.com

SAMPLERS (signature) [Signature]

PROJECT NAME & ADDRESS

3845 158th Ave SE

PO #

2403-008

NOTES:

INVOICE TO

AP

Page #

1

of

1

TURNAROUND TIME

Standard

RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

Default: Clean following

final report delivery

Hold (Fee may apply):

## SAMPLE INFORMATION

Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. ("Hg)	Field Initial Time	Final Vac. ("Hg)	Field Final Time	TO15 Full Scan	TO15 BTEXN	TO15 VOCs	APH	Helium	Notes
SG-01-5.0	01	4177	204	IA / (SG)	10-9-23	-27.0	1010	-3.0	1020	X	X	X	X		
SG-02-5.0	02	2433	222	IA / (SG)	1	-27.0	1122	-5.0	1129	X	X	X	X		
SG-03-4.0	03	9893	225	IA / (SG)	1	-30.0	1240	-5.0	1247	X	X	X	X		
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											

## ANALYSIS REQUESTED

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

[Signature]

Annie Brown

Farellon

10-9-23

1:35

Received by:

[Signature]

ANH PHAN

F80

10/09/23

13:55

Relinquished by:

Received by:

Friedman & Bruga, Inc.  
5500 4th Avenue South  
Seattle, WA 98108  
Ph. (206) 285-8282  
Fax (206) 283-5044

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

November 13, 2023

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the additional results from the testing of material submitted on October 23, 2023 from the 3245 158th Ave SE 2403-008, F&BI 310418 project. There are 5 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  
FLN1113R.DOC

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on October 23, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 310418 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
310418 -01	FMW-01-5.0
310418 -02	FMW-01-10.0
310418 -03	FMW-01-15.0
310418 -04	FMW-01-20.0
310418 -05	FMW-01-25.0
310418 -06	FMW-01-30.0
310418 -07	FMW-01-35.0
310418 -08	FMW-01-40.0
310418 -09	FB-01-3.5
310418 -10	FB-01-5.0
310418 -11	FB-01-10.0
310418 -12	FB-01-15.0
310418 -13	FB-01-20.0
310418 -14	FMW-02-5.0
310418 -15	FMW-02-10.0
310418 -16	FMW-02-15.0
310418 -17	FMW-02-20.0
310418 -18	FMW-02-25.0
310418 -19	FMW-02-30.0
310418 -20	FMW-02-35.0

All quality control requirements were acceptable.



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FMW-01-20.0	Client:	Farallon Consulting, LLC
Date Received:	10/23/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	11/09/23	Lab ID:	310418-04 1/0.5
Date Analyzed:	11/09/23	Data File:	110908.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	84	120
Toluene-d8	97	73	128
4-Bromofluorobenzene	104	57	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.002
Chloroethane	<0.1
1,1-Dichloroethene	<0.002
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.002
1,1-Dichloroethane	<0.002
cis-1,2-Dichloroethene	<0.002
1,2-Dichloroethane (EDC)	<0.002
1,1,1-Trichloroethane	<0.002
Trichloroethene	<0.002
Tetrachloroethene	0.0086

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### 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:	3245 158th Ave SE 2403-008
Date Extracted:	11/08/23	Lab ID:	03-2626 mb 1/0.5
Date Analyzed:	11/08/23	Data File:	110815.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	84	120
Toluene-d8	99	73	128
4-Bromofluorobenzene	102	57	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.002
Chloroethane	<0.1
1,1-Dichloroethene	<0.002
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.002
1,1-Dichloroethane	<0.002
cis-1,2-Dichloroethene	<0.002
1,2-Dichloroethane (EDC)	<0.002
1,1,1-Trichloroethane	<0.002
Trichloroethene	<0.002
Tetrachloroethene	<0.002

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/13/23

Date Received: 10/23/23

Project: 3245 158th Ave SE 2403-008, F&BI 310418

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

Laboratory Code: 311102-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2	<0.05	80	76	10-138	5
Chloroethane	mg/kg (ppm)	2	<0.5	80	75	10-176	6
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	82	88	10-160	7
Methylene chloride	mg/kg (ppm)	2	<0.5	83	85	10-156	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	93	93	14-137	0
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	91	92	19-140	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	94	96	25-135	2
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	85	91	12-160	7
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	97	102	10-156	5
Trichloroethene	mg/kg (ppm)	2	0.13	93	93	21-139	0
Tetrachloroethene	mg/kg (ppm)	2	0.024	89	89	20-133	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2	85	22-139
Chloroethane	mg/kg (ppm)	2	86	10-163
1,1-Dichloroethene	mg/kg (ppm)	2	87	47-128
Methylene chloride	mg/kg (ppm)	2	87	10-184
trans-1,2-Dichloroethene	mg/kg (ppm)	2	99	64-132
1,1-Dichloroethane	mg/kg (ppm)	2	96	64-135
cis-1,2-Dichloroethene	mg/kg (ppm)	2	100	64-135
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	91	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	107	62-131
Trichloroethene	mg/kg (ppm)	2	99	63-139
Tetrachloroethene	mg/kg (ppm)	2	92	68-128

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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.



310418

SAMPLE CHAIN OF CUSTODY

10/23/23

02/10/24

Report To ~~Friedman~~ Yusuf Friedman

Company Farallon

Address 975 5th Ave NW

City, State, ZIP Issaquah, WA 98027

Phone (425) 295 0600 Email yfriedman@farallonconsulting.com

SAMPLERS (signature)

PROJECT NAME

2445 158th Ave SE

PO #

2403-008

REMARKS

INVOICE TO

Project specific RLS? - Yes / No

AP

Page # 1 of 2

TURNAROUND TIME

☒ Standard turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples

☐ Other

Default: Dispose after 30 days

ANALYSES REQUESTED

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 Metals	cVOCs			
FMW-01-5.0	01 A-E	10/23/23	0952	Soil	5	x	x			x			x				
FMW-01-10.0	02		1004			x	x			x							
FMW-01-15.0	03		1024			x	x				x						
FMW-01-20.0	04		1027														
FMW-01-25.0	05		1110														
FMW-01-30.0	06		1115														
FMW-01-35.0	07		1117														
FMW-01-40.0	08		1208														
FB-01-3.5	09		1335			x	x			x							
FB-01-5.0	10		1330			x	x			x							

X-per YP  
Notes  
A-per YP  
11/07/23  
ME  
HOLD. Contact  
for analysis

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

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by:		Angie Bernan		Farallon		10/23/23	1732
Received by:		VINH		FB		10-23-23	1732
Relinquished by:							
Received by:							

310418

Report To: Yusuf Rehlman

Company: Farallon

Address: 975 5th Ave NW

City, State, ZIP: Issaquah WA 98027

Phone: (425) 295 0800 Email: yrehlman@farallon.com

SAMPLE CHAIN OF CUSTODY

10/23/23

82/42 2 of 2

SAMPLES (signature) <i>Yusuf Rehlman</i>	
PROJECT NAME 3245 156th Ave SE	PO # 2403-008
REMARKS	INVOICE TO AP
Project specific RI.s? - Yes / No	

TURNAROUND TIME <input checked="" type="checkbox"/> Standard turnaround <input type="checkbox"/> RUSH Rush charges authorized by: _____	SAMPLE DISPOSAL <input type="checkbox"/> Archive samples <input type="checkbox"/> Other _____ Default: Dispose after 30 days
--	---

						ANALYSES REQUESTED								
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	Notes	
FB-01-10.0	11 A-E	10/23/23	1337	Soil	5								Held. Contact PA for analysis	
FB-01-15.0	12	1355	<del>1337</del>										PA for analysis	
FB-01-20.0	13	1358	<del>1337</del>											
FMW-02-5.0	14	1423	<del>1337</del>			x	x		x					
FMW-02-10.0	15	1423	<del>1337</del>			x	x		x					
FMW-02-15.0	16		1456											
FMW-02-20.0	17		1513											
FMW-02-25.0	18		1527											
FMW-02-30.0	19		1528											
FMW-02-35.0	20		1530											

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

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
<i>Sarah Katz</i>		Sarah Katz		Farallon		10/23/23		1732	
Received by:		v / N H		FB1		10-23-23		1732	
Relinquished by:									
Received by:				Samples received at		5		°C	

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

October 30, 2023

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on October 23, 2023 from the 3245 158th Ave SE 2403-008, F&BI 310418 project. There are 19 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  
FLN1030R.DOC

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on October 23, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 310418 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
310418 -01	FMW-01-5.0
310418 -02	FMW-01-10.0
310418 -03	FMW-01-15.0
310418 -04	FMW-01-20.0
310418 -05	FMW-01-25.0
310418 -06	FMW-01-30.0
310418 -07	FMW-01-35.0
310418 -08	FMW-01-40.0
310418 -09	FB-01-3.5
310418 -10	FB-01-5.0
310418 -11	FB-01-10.0
310418 -12	FB-01-15.0
310418 -13	FB-01-20.0
310418 -14	FMW-02-5.0
310418 -15	FMW-02-10.0
310418 -16	FMW-02-15.0
310418 -17	FMW-02-20.0
310418 -18	FMW-02-25.0
310418 -19	FMW-02-30.0
310418 -20	FMW-02-35.0

The 8260D calibration standard failed the acceptance criteria for several analytes. The data were flagged accordingly.

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

The 8260D 2,2-dichloropropane calibration standard exceeded the acceptance criteria. The compound was not detected, therefore this did not represent an out of control condition.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/30/23

Date Received: 10/23/23

Project: 3245 158th Ave SE 2403-008, F&BI 310418

Date Extracted: 10/25/23

Date Analyzed: 10/25/23

**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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
FMW-01-5.0 310418-01 1/10	760	ip
FMW-01-10.0 310418-02 1/5	200	121
FMW-01-15.0 310418-03	<5	90
FB-01-3.5 310418-09	<5	92
FB-01-5.0 310418-10	<5	90
FMW-02-5.0 310418-14	<5	93
FMW-02-10.0 310418-15	<5	91
Method Blank 03-2475 MB	<5	98



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/30/23

Date Received: 10/23/23

Project: 3245 158th Ave SE 2403-008, F&BI 310418

Date Extracted: 10/24/23

Date Analyzed: 10/24/23 and 10/25/23

**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)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
FMW-01-5.0 310418-01	240 x	<250	84
FMW-01-10.0 310418-02	<50	<250	85
FMW-01-15.0 310418-03	<50	<250	92
FB-01-3.5 310418-09	<50	<250	84
FB-01-5.0 310418-10	<50	<250	84
FMW-02-5.0 310418-14	<50	<250	83
FMW-02-10.0 310418-15	<50	<250	84
Method Blank 03-2542 MB	<50	<250	82

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-01-5.0	Client:	Farallon Consulting, LLC
Date Received:	10/23/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/25/23	Lab ID:	310418-01
Date Analyzed:	10/25/23	Data File:	310418-01.140
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	1.48
Barium	29.8
Cadmium	<1
Chromium	15.6
Lead	1.19
Mercury	<1
Selenium	<1
Silver	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	NA	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/25/23	Lab ID:	I3-848 mb
Date Analyzed:	10/25/23	Data File:	I3-848 mb.051
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

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID: FMW-01-5.0	Client: Farallon Consulting, LLC
Date Received: 10/23/23	Project: 3245 158th Ave SE 2403-008
Date Extracted: 10/24/23	Lab ID: 310418-01 1/0.5
Date Analyzed: 10/24/23	Data File: 102415.D
Matrix: Soil	Instrument: GCMS13
Units: mg/kg (ppm) Dry Weight	Operator: MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	84	120
Toluene-d8	107	73	128
4-Bromofluorobenzene	70	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	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	0.050
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.35
Hexane	<0.25	o-Xylene	0.0058
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	0.44
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	1.2
2,2-Dichloropropane	<0.05 k	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	0.058
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	7.2
Benzene	<0.001	sec-Butylbenzene	0.79
Trichloroethene	<0.002	p-Isopropyltoluene	1.5
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	<0.001	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	0.038
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FMW-01-10.0	Client:	Farallon Consulting, LLC
Date Received:	10/23/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/24/23	Lab ID:	310418-02 1/0.5
Date Analyzed:	10/24/23	Data File:	102409.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	84	120
Toluene-d8	102	73	128
4-Bromofluorobenzene	123	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	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	0.0061
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.025
Hexane	<0.25	o-Xylene	0.0044
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	0.083
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	0.25
2,2-Dichloropropane	<0.05 k	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	0.40
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	1.4
Benzene	<0.001	sec-Butylbenzene	0.22
Trichloroethene	<0.002	p-Isopropyltoluene	0.18
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	<0.001	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	0.027
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FMW-01-15.0	Client:	Farallon Consulting, LLC
Date Received:	10/23/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/24/23	Lab ID:	310418-03 1/0.5
Date Analyzed:	10/24/23	Data File:	102410.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	99	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	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 k	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	<0.001	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		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FB-01-3.5	Client:	Farallon Consulting, LLC
Date Received:	10/23/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/24/23	Lab ID:	310418-09 1/0.5
Date Analyzed:	10/24/23	Data File:	102411.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	84	120
Toluene-d8	104	73	128
4-Bromofluorobenzene	100	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	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	0.031
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	0.059
2,2-Dichloropropane	<0.05 k	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	0.25
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	<0.001	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		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FB-01-5.0	Client:	Farallon Consulting, LLC
Date Received:	10/23/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/24/23	Lab ID:	310418-10 1/0.5
Date Analyzed:	10/24/23	Data File:	102412.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	84	120
Toluene-d8	103	73	128
4-Bromofluorobenzene	102	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	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 k	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	<0.001	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		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FMW-02-5.0	Client:	Farallon Consulting, LLC
Date Received:	10/23/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/24/23	Lab ID:	310418-14 1/0.5
Date Analyzed:	10/24/23	Data File:	102413.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	108	84	120
Toluene-d8	103	73	128
4-Bromofluorobenzene	100	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	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 k	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	<0.001	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		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FMW-02-10.0	Client:	Farallon Consulting, LLC
Date Received:	10/23/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/24/23	Lab ID:	310418-15 1/0.5
Date Analyzed:	10/24/23	Data File:	102414a.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	84	120
Toluene-d8	95	73	128
4-Bromofluorobenzene	97	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	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 k	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	<0.001	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		



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### 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:	3245 158th Ave SE 2403-008
Date Extracted:	10/24/23	Lab ID:	03-2433 mb 1/0.5
Date Analyzed:	10/24/23	Data File:	102409.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	79	128
Toluene-d8	94	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	<0.001
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 k	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	<0.001	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		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/30/23

Date Received: 10/23/23

Project: 3245 158th Ave SE 2403-008, F&BI 310418

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TPH AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**

Laboratory Code: 310395-01 (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	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/30/23

Date Received: 10/23/23

Project: 3245 158th Ave SE 2403-008, F&BI 310418

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-D<sub>x</sub>**

Laboratory Code: 310418-01 (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	390	98	102	53-141	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	98	71-126

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 10/30/23

Date Received: 10/23/23

Project: 3245 158th Ave SE 2403-008, F&BI 310418

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

Laboratory Code: 310442-01 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	92	90	75-125	2
Barium	mg/kg (ppm)	50	19.7	92 b	90 b	75-125	2 b
Cadmium	mg/kg (ppm)	10	<5	96	95	75-125	1
Chromium	mg/kg (ppm)	50	8.45	93	96	75-125	3
Lead	mg/kg (ppm)	50	<5	95	93	75-125	2
Mercury	mg/kg (ppm)	5	<5	96	94	75-125	2
Selenium	mg/kg (ppm)	5	<5	98	91	75-125	7
Silver	mg/kg (ppm)	10	<5	89	90	75-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	88	80-120
Barium	mg/kg (ppm)	50	95	80-120
Cadmium	mg/kg (ppm)	10	97	80-120
Chromium	mg/kg (ppm)	50	106	80-120
Lead	mg/kg (ppm)	50	93	80-120
Mercury	mg/kg (ppm)	5	92	80-120
Selenium	mg/kg (ppm)	5	93	80-120
Silver	mg/kg (ppm)	10	90	80-120

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 10/30/23

Date Received: 10/23/23

Project: 3245 158th Ave SE 2403-008, F&BI 310418

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

Laboratory Code: 310418-03 (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	72	68	10-142	6
Chloromethane	mg/kg (ppm)	2	<0.5	93	93	10-126	0
Vinyl chloride	mg/kg (ppm)	2	<0.05	94	95	10-138	1
Bromomethane	mg/kg (ppm)	2	<0.5	87	51	10-163	52 vo
Chloroethane	mg/kg (ppm)	2	<0.5	90	53	10-176	52 vo
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	102	117	10-176	14
Acetone	mg/kg (ppm)	10	<5	79	116	10-163	38 vo
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	93	98	10-160	5
Hexane	mg/kg (ppm)	2	<0.25	106	103	10-137	3
Methylene chloride	mg/kg (ppm)	2	<0.5	91	87	10-156	4
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	104	102	21-145	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	104	105	14-137	1
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	104	100	19-140	4
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	112	110	10-158	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	108	104	25-135	4
Chloroform	mg/kg (ppm)	2	<0.05	98	95	21-145	3
2-Butanone (MEK)	mg/kg (ppm)	10	<1	103	103	19-147	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	99	95	12-160	4
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	110	108	10-156	2
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	101	96	17-140	5
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	123	117	9-164	5
Benzene	mg/kg (ppm)	2	<0.03	103	99	29-129	4
Trichloroethene	mg/kg (ppm)	2	<0.02	103	97	21-139	6
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	103	100	30-135	3
Bromodichloromethane	mg/kg (ppm)	2	<0.05	100	96	23-155	4
Dibromomethane	mg/kg (ppm)	2	<0.05	111	110	23-145	1
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	105	105	24-155	0
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	109	106	28-144	3
Toluene	mg/kg (ppm)	2	<0.05	98	93	35-130	5
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	99	94	26-149	5
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	96	91	10-205	5
2-Hexanone	mg/kg (ppm)	10	<5	90	83	15-166	8
1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	101	92	31-137	9
Tetrachloroethene	mg/kg (ppm)	2	<0.025	99	95	20-133	4
Dibromochloromethane	mg/kg (ppm)	2	<0.05	102	93	28-150	9
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	99	89	28-142	11
Chlorobenzene	mg/kg (ppm)	2	<0.05	100	92	32-129	8
Ethylbenzene	mg/kg (ppm)	2	<0.05	99	92	32-137	7
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	99	96	31-143	3
m,p-Xylene	mg/kg (ppm)	4	<0.1	100	94	34-136	6
o-Xylene	mg/kg (ppm)	2	<0.05	100	92	33-134	8
Styrene	mg/kg (ppm)	2	<0.05	98	92	35-137	6
Isopropylbenzene	mg/kg (ppm)	2	<0.05	100	93	31-142	7
Bromoform	mg/kg (ppm)	2	<0.05	93	90	21-156	3
n-Propylbenzene	mg/kg (ppm)	2	<0.05	100	88	23-146	13
Bromobenzene	mg/kg (ppm)	2	<0.05	99	88	34-130	12
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	101	90	18-149	12
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	106	93	28-140	13
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	96	87	25-144	10
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	101	91	31-134	10
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	97	87	31-136	11
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	104	93	30-137	11
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	98	87	10-182	12
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	100	91	23-145	9
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	103	95	21-149	8
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	99	90	30-131	10
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	99	90	29-129	10
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	102	91	31-132	11
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	100	91	11-161	9
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	104	98	22-142	6
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	99	101	10-142	2
Naphthalene	mg/kg (ppm)	2	<0.05	99	93	14-157	6
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	105	98	20-144	7



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 10/30/23

Date Received: 10/23/23

Project: 3245 158th Ave SE 2403-008, F&BI 310418

### 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	67	10-146
Chloromethane	mg/kg (ppm)	2	90	27-133
Vinyl chloride	mg/kg (ppm)	2	91	22-139
Bromomethane	mg/kg (ppm)	2	82	10-201
Chloroethane	mg/kg (ppm)	2	86	10-163
Trichlorofluoromethane	mg/kg (ppm)	2	100	10-196
Acetone	mg/kg (ppm)	10	84	52-141
1,1-Dichloroethene	mg/kg (ppm)	2	93	47-128
Hexane	mg/kg (ppm)	2	103	43-142
Methylene chloride	mg/kg (ppm)	2	93	10-184
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	101	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2	101	64-132
1,1-Dichloroethane	mg/kg (ppm)	2	101	64-135
2,2-Dichloropropane	mg/kg (ppm)	2	110	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2	106	64-135
Chloroform	mg/kg (ppm)	2	97	61-139
2-Butanone (MEK)	mg/kg (ppm)	10	90	30-197
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	97	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	103	62-131
1,1-Dichloropropene	mg/kg (ppm)	2	97	64-136
Carbon tetrachloride	mg/kg (ppm)	2	120	60-139
Benzene	mg/kg (ppm)	2	97	65-136
Trichloroethene	mg/kg (ppm)	2	96	63-139
1,2-Dichloropropane	mg/kg (ppm)	2	104	61-145
Bromodichloromethane	mg/kg (ppm)	2	96	57-126
Dibromomethane	mg/kg (ppm)	2	106	62-123
4-Methyl-2-pentanone	mg/kg (ppm)	10	102	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2	103	65-143
Toluene	mg/kg (ppm)	2	96	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2	95	65-131
1,1,2-Trichloroethane	mg/kg (ppm)	2	93	62-131
2-Hexanone	mg/kg (ppm)	10	83	33-152
1,3-Dichloropropane	mg/kg (ppm)	2	97	67-128
Tetrachloroethene	mg/kg (ppm)	2	96	68-128
Dibromochloromethane	mg/kg (ppm)	2	100	55-121
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	94	66-129
Chlorobenzene	mg/kg (ppm)	2	94	67-128
Ethylbenzene	mg/kg (ppm)	2	93	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	98	64-121
m,p-Xylene	mg/kg (ppm)	4	93	68-128
o-Xylene	mg/kg (ppm)	2	96	67-129
Styrene	mg/kg (ppm)	2	94	67-129
Isopropylbenzene	mg/kg (ppm)	2	97	68-128
Bromoform	mg/kg (ppm)	2	96	56-132
n-Propylbenzene	mg/kg (ppm)	2	91	68-129
Bromobenzene	mg/kg (ppm)	2	91	69-128
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	91	69-129
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	93	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2	90	61-137
2-Chlorotoluene	mg/kg (ppm)	2	92	69-128
4-Chlorotoluene	mg/kg (ppm)	2	87	67-127
tert-Butylbenzene	mg/kg (ppm)	2	96	69-129
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	89	69-128
sec-Butylbenzene	mg/kg (ppm)	2	92	69-130
p-Isopropyltoluene	mg/kg (ppm)	2	94	69-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	90	69-127
1,4-Dichlorobenzene	mg/kg (ppm)	2	90	68-126
1,2-Dichlorobenzene	mg/kg (ppm)	2	93	69-127
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	94	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	95	64-135
Hexachlorobutadiene	mg/kg (ppm)	2	93	50-153
Naphthalene	mg/kg (ppm)	2	93	62-128
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	96	61-126

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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.

310418

## SAMPLE CHAIN OF CUSTODY

10/23/23

02/11/24

Report To ~~Friedman~~ Yusuf Friedman

Company Farallon

Address 975 5th Ave NW

City, State, ZIP Issaquah, WA 98027

Phone (425) 295 0600 Email yfriedman@farallonconsulting.com

SAMPLERS (signature)

PROJECT NAME

2445 158th Ave SE

PO #

2403-008

REMARKS

INVOICE TO

Project specific RLS? - Yes / No

AP

Page #

1

of

2

TURNAROUND TIME

☒ Standard turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples☐ Other

Default: Dispose after 30 days

## ANALYSES REQUESTED

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 Metals	X-per YP 10/24/23 me Notes
FMW-01-5.0	01 A-E	10/23/23	0952	Soil	5	x	x		x			x		HOLD. Contact for analysis
FMW-01-10.0	02		1004			x	x			x				
FMW-01-15.0	03		1024			x	x			x				
FMW-01-20.0	04		1027											
FMW-01-25.0	05		1110											
FMW-01-30.0	06		1115											
FMW-01-35.0	07		1117											
FMW-01-40.0	08		1208											
FB-01-3.5	09		1335			x	x			x				
FB-01-5.0	10		1330			x	x			x				

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

Angie Bernan

VINH

COMPANY

Farallon

FB1

DATE

10/23/23

10-23-23

TIME

1732

1732

5

°C

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

310418

Report To: Yusuf Rehman

Company: Farallon

Address: 975 5th Ave NW

City, State, ZIP: Issaquah WA 98027

Phone: (425) 295 0800 Email: yrehman@farallon.com

SAMPLE CHAIN OF CUSTODY

10/23/23

82/42 2 of 2

SAMPLES (signature)

PROJECT NAME

3245 156th Ave SE

PO #

2403-008

REMARKS

Project specific RI.s? - Yes / No

INVOICE TO

AP

TURNAROUND TIME

X Standard turnaround  
RUSH  
Rush charges authorized by:

SAMPLE DISPOSAL

Archive samples  
Other  
Default: Dispose after 30 days

						ANALYSES REQUESTED								
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	Notes	
FB-01-10.0	11 A-E	10/23/23	1337	Soil	5								Held. Contact	
FB-01-15.0	12	1355	<del>1355</del>										PA for analysis	
FB-01-20.0	13	1358	<del>1358</del>											
FMW-02-5.0	14	1423	<del>1423</del>			X	X		X					
FMW-02-10.0	15	1423	<del>1423</del>			X	X		X					
FMW-02-15.0	16		1456											
FMW-02-20.0	17		1513											
FMW-02-25.0	18		1527											
FMW-02-30.0	19		1528											
FMW-02-35.0	20		1530											

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

Ph. (206) 285-8282

Relinquished by:

[Signature]

Sarah Katz

Farallon

10/23/23

1732

Received by:

[Signature]

VINHA

FB1

10-23-23 1732

Relinquished by:

Received by:

Samples received at 5 °C

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  
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fbi@isomedia.com  
www.friedmanandbruya.com

November 1, 2023

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on October 25, 2023 from the 3245 158th Ave SE 2403-008, F&BI 310446 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  
FLN1101R.DOC



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on October 25, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 310446 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
310446 -01	FMW-03-5.0
310446 -02	FMW-03-10.0
310446 -03	FMW-03-15.0
310446 -04	FMW-03-19.0
310446 -05	FMW-03-20.0
310446 -06	FMW-03-25.0
310446 -07	FMW-03-30.0
310446 -08	FB-03-5.0
310446 -09	FB-03-10.0
310446 -10	FB-03-15.0
310446 -11	FB-03-20.0
310446 -12	FB-02-5.0
310446 -13	FB-02-10.0
310446 -14	FB-02-15.0
310446 -15	FB-02-20.0
310446 -16	FMW-04-5.0
310446 -17	FMW-04-10.0
310446 -18	FMW-04-15.0
310446 -19	FMW-04-20.0
310446 -20	FMW-04-25.0
310446 -21	FMW-04-30.0

The 8260D carbon tetrachloride calibration standard exceeded the acceptance criteria. The compound was not detected, therefore this did not represent an out of control condition.

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

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/01/23

Date Received: 10/25/23

Project: 3245 158th Ave SE 2403-008, F&BI 310446

Date Extracted: 10/26/23

Date Analyzed: 10/27/23

**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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
FMW-03-5.0 310446-01	<5	80
FMW-03-10.0 310446-02	<5	83
FB-03-5.0 310446-08	<5	82
FB-03-10.0 310446-09	<5	81
FB-02-5.0 310446-12	<5	80
FB-02-10.0 310446-13	<5	80
FMW-04-5.0 310446-16	<5	79
FMW-04-10.0 310446-17	<5	81
Method Blank 03-2477 MB2	<5	84

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/01/23

Date Received: 10/25/23

Project: 3245 158th Ave SE 2403-008, F&BI 310446

Date Extracted: 10/27/23

Date Analyzed: 10/27/23

**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)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
FMW-03-5.0 310446-01	<50	<250	87
FMW-03-10.0 310446-02	<50	<250	89
FB-03-5.0 310446-08	<50	<250	87
FB-03-10.0 310446-09	<50	<250	88
FB-02-5.0 310446-12	<50	<250	87
FB-02-10.0 310446-13	<50	<250	88
FMW-04-5.0 310446-16	<50	<250	87
FMW-04-10.0 310446-17	<50	<250	85
Method Blank 03-2583 MB	<50	<250	82

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	FMW-04-5.0	Client:	Farallon Consulting, LLC
Date Received:	10/25/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/26/23	Lab ID:	310446-16
Date Analyzed:	10/26/23	Data File:	310446-16.126
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	1.14
Barium	17.8
Cadmium	<1
Chromium	9.78
Lead	1.00
Mercury	<1
Selenium	<1
Silver	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	NA	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/26/23	Lab ID:	I3-853 mb
Date Analyzed:	10/26/23	Data File:	I3-853 mb.070
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FMW-03-5.0	Client:	Farallon Consulting, LLC
Date Received:	10/25/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/30/23	Lab ID:	310446-01
Date Analyzed:	10/30/23	Data File:	103013.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	109
Toluene-d8	98	86	115
4-Bromofluorobenzene	96	84	115

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FMW-03-10.0	Client:	Farallon Consulting, LLC
Date Received:	10/25/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/26/23	Lab ID:	310446-02
Date Analyzed:	10/26/23	Data File:	102607.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	90	109
Toluene-d8	99	86	115
4-Bromofluorobenzene	94	84	115

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-03-5.0	Client:	Farallon Consulting, LLC
Date Received:	10/25/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/26/23	Lab ID:	310446-08
Date Analyzed:	10/26/23	Data File:	102613.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	90	109
Toluene-d8	101	86	115
4-Bromofluorobenzene	97	84	115

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-03-10.0	Client:	Farallon Consulting, LLC
Date Received:	10/25/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/26/23	Lab ID:	310446-09
Date Analyzed:	10/26/23	Data File:	102614.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	109
Toluene-d8	100	86	115
4-Bromofluorobenzene	100	84	115

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-02-5.0	Client:	Farallon Consulting, LLC
Date Received:	10/25/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/26/23	Lab ID:	310446-12
Date Analyzed:	10/26/23	Data File:	102615.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	109
Toluene-d8	103	86	115
4-Bromofluorobenzene	95	84	115

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-02-10.0	Client:	Farallon Consulting, LLC
Date Received:	10/25/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/26/23	Lab ID:	310446-13
Date Analyzed:	10/26/23	Data File:	102616.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	90	109
Toluene-d8	102	86	115
4-Bromofluorobenzene	97	84	115

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FMW-04-5.0	Client:	Farallon Consulting, LLC
Date Received:	10/25/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/26/23	Lab ID:	310446-16
Date Analyzed:	10/26/23	Data File:	102617.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	90	109
Toluene-d8	101	86	115
4-Bromofluorobenzene	97	84	115

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FMW-04-10.0	Client:	Farallon Consulting, LLC
Date Received:	10/25/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/26/23	Lab ID:	310446-17
Date Analyzed:	10/26/23	Data File:	102618.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	90	109
Toluene-d8	101	86	115
4-Bromofluorobenzene	99	84	115

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Extracted:	10/26/23	Lab ID:	03-2440 mb
Date Analyzed:	10/26/23	Data File:	102606.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	90	109
Toluene-d8	100	86	115
4-Bromofluorobenzene	90	84	115

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/01/23

Date Received: 10/25/23

Project: 3245 158th Ave SE 2403-008, F&BI 310446

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TPH AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**

Laboratory Code: 310442-01 (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	100	70-130



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/01/23

Date Received: 10/25/23

Project: 3245 158th Ave SE 2403-008, F&BI 310446

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-D<sub>x</sub>**

Laboratory Code: 310501-05 (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	53	111	111	63-146	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	106	77-123

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 11/01/23

Date Received: 10/25/23

Project: 3245 158th Ave SE 2403-008, F&BI 310446

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

Laboratory Code: 310464-01 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	86	87	75-125	1
Barium	mg/kg (ppm)	50	50.6	109 b	111 b	75-125	2 b
Cadmium	mg/kg (ppm)	10	<5	96	96	75-125	0
Chromium	mg/kg (ppm)	50	7.64	91	93	75-125	2
Lead	mg/kg (ppm)	50	<5	96	95	75-125	1
Mercury	mg/kg (ppm)	5	<5	93	83	75-125	11
Selenium	mg/kg (ppm)	5	<5	85	90	75-125	6
Silver	mg/kg (ppm)	10	<5	89	91	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	86	80-120
Barium	mg/kg (ppm)	50	92	80-120
Cadmium	mg/kg (ppm)	10	93	80-120
Chromium	mg/kg (ppm)	50	103	80-120
Lead	mg/kg (ppm)	50	95	80-120
Mercury	mg/kg (ppm)	5	91	80-120
Selenium	mg/kg (ppm)	5	92	80-120
Silver	mg/kg (ppm)	10	91	80-120

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 11/01/23

Date Received: 10/25/23

Project: 3245 158th Ave SE 2403-008, F&BI 310446

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

Laboratory Code: 310446-02 (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	50	53	10-142	6
Chloromethane	mg/kg (ppm)	2	<0.5	77	79	10-126	3
Vinyl chloride	mg/kg (ppm)	2	<0.05	78	78	10-138	0
Bromomethane	mg/kg (ppm)	2	<0.5	45	62	10-163	32 vo
Chloroethane	mg/kg (ppm)	2	<0.5	54	74	10-176	31 vo
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	91	86	10-176	6
Acetone	mg/kg (ppm)	10	<5	80	69	10-163	15
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	84	84	10-160	0
Hexane	mg/kg (ppm)	2	<0.25	94	98	10-137	4
Methylene chloride	mg/kg (ppm)	2	<0.5	82	82	10-156	0
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	91	93	21-145	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	92	93	14-137	1
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	90	91	19-140	1
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	101	102	10-158	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	93	97	25-135	4
Chloroform	mg/kg (ppm)	2	<0.05	86	87	21-145	1
2-Butanone (MEK)	mg/kg (ppm)	10	<1	85	83	19-147	2
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	88	88	12-160	0
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	96	99	10-156	3
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	88	90	17-140	2
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	105	108	9-164	3
Benzene	mg/kg (ppm)	2	<0.03	88	91	29-129	3
Trichloroethene	mg/kg (ppm)	2	<0.02	92	90	21-139	2
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	92	95	30-135	3
Bromodichloromethane	mg/kg (ppm)	2	<0.05	89	91	23-155	2
Dibromomethane	mg/kg (ppm)	2	<0.05	96	97	23-145	1
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	92	93	24-155	1
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	92	97	28-144	5
Toluene	mg/kg (ppm)	2	<0.05	89	94	35-130	5
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	90	95	26-149	5
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	91	91	10-205	0
2-Hexanone	mg/kg (ppm)	10	<5	78	82	15-166	5
1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	92	92	31-137	0
Tetrachloroethene	mg/kg (ppm)	2	<0.025	91	91	20-133	0
Dibromochloromethane	mg/kg (ppm)	2	<0.05	95	98	28-150	3
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	92	94	28-142	2
Chlorobenzene	mg/kg (ppm)	2	<0.05	92	93	32-129	1
Ethylbenzene	mg/kg (ppm)	2	<0.05	92	93	32-137	1
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	94	95	31-143	1
m,p-Xylene	mg/kg (ppm)	4	<0.1	92	95	34-136	3
o-Xylene	mg/kg (ppm)	2	<0.05	94	92	33-134	2
Styrene	mg/kg (ppm)	2	<0.05	92	92	35-137	0
Isopropylbenzene	mg/kg (ppm)	2	<0.05	95	93	31-142	2
Bromoform	mg/kg (ppm)	2	<0.05	87	89	21-156	2
n-Propylbenzene	mg/kg (ppm)	2	<0.05	93	90	23-146	3
Bromobenzene	mg/kg (ppm)	2	<0.05	91	89	34-130	2
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	94	90	18-149	4
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	97	95	28-140	2
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	88	85	25-144	3
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	93	88	31-134	6
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	90	87	31-136	3
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	98	95	30-137	3
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	92	90	10-182	2
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	95	91	23-145	4
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	97	93	21-149	4
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	94	90	30-131	4
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	92	90	29-129	2
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	95	92	31-132	3
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	94	91	11-161	3
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	100	92	22-142	8
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	100	99	10-142	1
Naphthalene	mg/kg (ppm)	2	<0.05	99	93	14-157	6
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	101	95	20-144	6

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 11/01/23

Date Received: 10/25/23

Project: 3245 158th Ave SE 2403-008, F&BI 310446

### 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	54	10-146
Chloromethane	mg/kg (ppm)	2	80	27-133
Vinyl chloride	mg/kg (ppm)	2	84	22-139
Bromomethane	mg/kg (ppm)	2	63	10-201
Chloroethane	mg/kg (ppm)	2	72	10-163
Trichlorofluoromethane	mg/kg (ppm)	2	90	10-196
Acetone	mg/kg (ppm)	10	60	52-141
1,1-Dichloroethene	mg/kg (ppm)	2	93	47-128
Hexane	mg/kg (ppm)	2	99	43-142
Methylene chloride	mg/kg (ppm)	2	88	10-184
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	96	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2	96	64-132
1,1-Dichloroethane	mg/kg (ppm)	2	95	64-135
2,2-Dichloropropane	mg/kg (ppm)	2	105	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2	98	64-135
Chloroform	mg/kg (ppm)	2	91	61-139
2-Butanone (MEK)	mg/kg (ppm)	10	89	30-197
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	93	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	105	62-131
1,1-Dichloropropene	mg/kg (ppm)	2	92	64-136
Carbon tetrachloride	mg/kg (ppm)	2	116	60-139
Benzene	mg/kg (ppm)	2	95	65-136
Trichloroethene	mg/kg (ppm)	2	98	63-139
1,2-Dichloropropane	mg/kg (ppm)	2	97	61-145
Bromodichloromethane	mg/kg (ppm)	2	97	57-126
Dibromomethane	mg/kg (ppm)	2	99	62-123
4-Methyl-2-pentanone	mg/kg (ppm)	10	97	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2	103	65-143
Toluene	mg/kg (ppm)	2	94	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2	97	65-131
1,1,2-Trichloroethane	mg/kg (ppm)	2	94	62-131
2-Hexanone	mg/kg (ppm)	10	83	33-152
1,3-Dichloropropene	mg/kg (ppm)	2	95	67-128
Tetrachloroethene	mg/kg (ppm)	2	93	68-128
Dibromochloromethane	mg/kg (ppm)	2	104	55-121
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	94	66-129
Chlorobenzene	mg/kg (ppm)	2	94	67-128
Ethylbenzene	mg/kg (ppm)	2	95	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	97	64-121
m,p-Xylene	mg/kg (ppm)	4	95	68-128
o-Xylene	mg/kg (ppm)	2	96	67-129
Styrene	mg/kg (ppm)	2	95	67-129
Isopropylbenzene	mg/kg (ppm)	2	97	68-128
Bromoform	mg/kg (ppm)	2	96	56-132
n-Propylbenzene	mg/kg (ppm)	2	96	68-129
Bromobenzene	mg/kg (ppm)	2	95	69-128
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	98	69-129
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	100	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2	89	61-137
2-Chlorotoluene	mg/kg (ppm)	2	97	69-128
4-Chlorotoluene	mg/kg (ppm)	2	92	67-127
tert-Butylbenzene	mg/kg (ppm)	2	100	69-129
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	96	69-128
sec-Butylbenzene	mg/kg (ppm)	2	97	69-130
p-Isopropyltoluene	mg/kg (ppm)	2	100	69-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	96	69-127
1,4-Dichlorobenzene	mg/kg (ppm)	2	94	68-126
1,2-Dichlorobenzene	mg/kg (ppm)	2	100	69-127
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	106	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	103	64-135
Hexachlorobutadiene	mg/kg (ppm)	2	101	50-153
Naphthalene	mg/kg (ppm)	2	100	62-128
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	103	61-126

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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 10/25/13

N2153

Page # 1 of 3

310446

Report to Yusuf Fehliwan

Company Foralson Consulting

Address 975 5th Ave NW

City, State, ZIP Issaquah, WA 98027

Phone (425) 745 0600 Email: yfahliwan@foralsonconsulting.com

SAMPLERS (signature) *Yusuf Fehliwan*

PROJECT NAME

3245 158th Ave SE

PO #

2403-008

REMARKS

INVOICE TO

AP

Project specific RLS? - Yes / No

ANALYSES REQUESTED

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			
FMW-03-5.0	01 A-E	10/24/13	0808	Soil	5	x	x			x					X per VP 10/25/13 mt Notes
FMW-03-10.0	02		0845			x	x								HOLD. Contact for analysis
FMW-03-15.0	03		0847												
FMW-03-19.0	04		0848												
FMW-03-20.0	05		0850												
FMW-03-25.0	06		0955												
FMW-03-30.0	07 A-D		1006												Rec 4 samples at lab AP 10/25
FB-03-5.0	08 A-E		1108			x	x			x					
FB-03-10.0	09		1116			x	x								
FB-03-15.0	10		1138												

SIGNATURE

PRINT NAME

COMPANY

DATE TIME

Friedman & Bruya, Inc.

Ph. (206) 285-8282

Relinquished by: Sarah Katz

Sarah Katz

foralson

10/25/13 1003

Received by:

*Yusuf Fehliwan*

Yusuf Fehliwan

F&BI

10/25/13 1003

Relinquished by:

Samples received at 000

Received by:

# SAMPLE CHAIN OF CUSTODY

10/25/23

N2/B3

Page # 2 of 3

310446

Report to Yusuf Rehlivan

Company Farallon

Address 975 5th Ave NW

City, State, ZIP Issaquah, WA 98027

Phone (425) 295 0800 Email yrehlivan@farallon.com

SAMPLERS (signature) <i>Yusuf Rehlivan</i>	
PROJECT NAME 3245 15th Ave SE	PO # 2403-008
REMARKS	INVOICE TO
Project specific RLS? - Yes / No	

TURNAROUND TIME	
<input checked="" type="checkbox"/> Standard turnaround	
<input type="checkbox"/> RUSH	
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Archive samples	
<input type="checkbox"/> Other	
Default: Dispose after 30 days	

ANALYSES REQUESTED														
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 Metals	Notes
FB-03-20.0	11 A-E	10/24/23	1140	Soil	5									Hold. Contact PM
FB-02-5.0	12		1211		1	x	x			x				For analysis
FB-02-10.0	13		1213			x	x			x				
FB-02-15.0	14		1215											
FB-02-20.0	15		1218											
FMW-04-5.0	16		1348			x	x			x			x	
FMW-04-10.0	17		1350			x	x							
FMW-04-15.0	18		1400											
FMW-04-20.0	19		1417											
FMW-04-25.0	20		1437											

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <i>SK</i>		Sarah Katz		Farallon		10/25/23		1003	
Received by: <i>Arthur Truong</i>		Arthur Truong				10/25/23		1003	
Relinquished by:						Samples received at 8:00			
Received by:									

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

Report To Musuf Pehlivan

Company Fertallisa

Address 975 5<sup>th</sup> Ave NW

City, State, ZIP Issaquah, WA 98057

Phone (425) 295 0800 Email [aphilip@franklinconsulting.com](mailto:aphilip@franklinconsulting.com)

## SAMPLE CHAIN OF CUSTODY

$$\frac{10}{25} / \frac{23}{23}$$

N2/B3

of 5

SAMPLES (signature)	
PROJECT NAME	PO #
3245 158th Ave SE	2403-008
REMARKS	INVOICE TO
Project specific RLS? - Yes / No	AP

**FURNAROUND TIME**  
☒ Standard turnaround  
☐ RUSH \_\_\_\_\_  
 Rush charges authorized by: \_\_\_\_\_



---

**SAMPLE DISPOSAL**  
☐ Archive samples  
☐ Other \_\_\_\_\_

Default: Dispose after 30 days

[illegible]

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
	Sarah Katz	Farallon	10/25/23	1003
Received by: 	WILL TRUMAN	F&B I	10/25/23	1003
Relinquished by:		Samples received at	0 °C	
Received by:				

FRIEDMAN & BRUYA, INC.

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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

November 7, 2023

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on October 31, 2023 from the 3245 158th Ave SE 2403-008, F&BI 310563 project. There are 13 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  
FLN1107R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 31, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 310563 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
310563 -01	Geotech-1-103123
310563 -02	FMW-02-103123
310563 -03	FMW-01-103123
310563 -04	FMW-03-103123
310563 -05	Trip Blank

The 8260D calibration standard failed the acceptance criteria for several analytes. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/07/23

Date Received: 10/31/23

Project: 3245 158th Ave SE 2403-008, F&BI 310563

Date Extracted: 11/03/23

Date Analyzed: 11/03/23

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**  
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
Geotech-1-103123 310563-01	<100	92
FMW-02-103123 310563-02	<100	94
FMW-01-103123 310563-03	<100	97
FMW-03-103123 310563-04	<100	91
Method Blank 03-2491 MB	<100	94



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/07/23

Date Received: 10/31/23

Project: 3245 158th Ave SE 2403-008, F&BI 310563

Date Extracted: 11/02/23

Date Analyzed: 11/02/23

**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)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> (% Recovery) (Limit 50-150)
Geotech-1-103123 310563-01	860 x	930 x	90
FMW-02-103123 310563-02	<50	<250	95
FMW-01-103123 310563-03	<50	<250	102
FMW-03-103123 310563-04	<50	<250	107
Method Blank 03-2610 MB	<50	<250	102

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	Geotech-1-103123	Client:	Farallon Consulting, LLC
Date Received:	10/31/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	11/02/23	Lab ID:	310563-01
Date Analyzed:	11/02/23	Data File:	110217.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	90	84	115
4-Bromofluorobenzene	94	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1 ca	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 k	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 k		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FMW-02-103123	Client:	Farallon Consulting, LLC
Date Received:	10/31/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	11/02/23	Lab ID:	310563-02
Date Analyzed:	11/02/23	Data File:	110218.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	78	126
Toluene-d8	96	84	115
4-Bromofluorobenzene	99	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1 ca	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	1.8
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 k	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 k		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FMW-01-103123	Client:	Farallon Consulting, LLC
Date Received:	10/31/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	11/02/23	Lab ID:	310563-03
Date Analyzed:	11/02/23	Data File:	110219.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	89	84	115
4-Bromofluorobenzene	94	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1 ca	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	6.4
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 k	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	0.65	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 k		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FMW-03-103123	Client:	Farallon Consulting, LLC
Date Received:	10/31/23	Project:	3245 158th Ave SE 2403-008
Date Extracted:	11/02/23	Lab ID:	310563-04
Date Analyzed:	11/02/23	Data File:	110220.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	111	78	126
Toluene-d8	91	84	115
4-Bromofluorobenzene	97	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1 ca	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 k	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 k		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Extracted:	11/02/23	Lab ID:	03-2573 mb
Date Analyzed:	11/02/23	Data File:	110208.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	78	126
Toluene-d8	92	84	115
4-Bromofluorobenzene	97	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1 ca	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 k	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 k		



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/07/23

Date Received: 10/31/23

Project: 3245 158th Ave SE 2403-008, F&BI 310563

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TPH AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**

Laboratory Code: 310563-02 (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	100	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/07/23

Date Received: 10/31/23

Project: 3245 158th Ave SE 2403-008, F&BI 310563

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-D<sub>x</sub>**

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	96	100	72-139	4

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 11/07/23

Date Received: 10/31/23

Project: 3245 158th Ave SE 2403-008, F&BI 310563

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

Laboratory Code: 310563-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Dichlorodifluoromethane	ug/L (ppb)	10	<1	83	30-221
Chloromethane	ug/L (ppb)	10	<10	96	50-150
Vinyl chloride	ug/L (ppb)	10	<0.02	89	50-150
Bromomethane	ug/L (ppb)	10	<5	79	50-150
Chloroethane	ug/L (ppb)	10	<1	97	50-150
Trichlorofluoromethane	ug/L (ppb)	10	<1	105	50-150
Acetone	ug/L (ppb)	50	<50	48	18-161
1,1-Dichloroethene	ug/L (ppb)	10	<1	90	50-150
Hexane	ug/L (ppb)	10	<5	88	50-150
Methylene chloride	ug/L (ppb)	10	<5	91	50-150
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	<1	91	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	101	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	95	50-150
2,2-Dichloropropane	ug/L (ppb)	10	<1	92	43-171
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	101	10-211
Chloroform	ug/L (ppb)	10	<1	96	50-150
2-Butanone (MEK)	ug/L (ppb)	50	<20	74	10-192
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<0.2	108	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	98	50-150
1,1-Dichloropropene	ug/L (ppb)	10	<1	93	50-150
Carbon tetrachloride	ug/L (ppb)	10	<0.5	101	50-150
Benzene	ug/L (ppb)	10	<0.35	106	50-150
Trichloroethene	ug/L (ppb)	10	<0.5	102	35-149
1,2-Dichloropropane	ug/L (ppb)	10	<1	97	50-150
Bromodichloromethane	ug/L (ppb)	10	<0.5	102	50-150
Dibromomethane	ug/L (ppb)	10	<1	106	50-150
4-Methyl-2-pentanone	ug/L (ppb)	50	<10	95	50-150
cis-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	96	50-150
Toluene	ug/L (ppb)	10	<1	104	50-150
trans-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	99	50-150
1,1,2-Trichloroethane	ug/L (ppb)	10	<0.5	104	50-150
2-Hexanone	ug/L (ppb)	50	<10	91	50-150
1,3-Dichloropropane	ug/L (ppb)	10	<1	103	50-150
Tetrachloroethene	ug/L (ppb)	10	1.8	112	50-150
Dibromochloromethane	ug/L (ppb)	10	<0.5	110	50-150
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	<0.01	110	50-150
Chlorobenzene	ug/L (ppb)	10	<1	102	50-150
Ethylbenzene	ug/L (ppb)	10	<1	100	50-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	<1	106	50-150
m,p-Xylene	ug/L (ppb)	20	<2	100	50-150
o-Xylene	ug/L (ppb)	10	<1	97	50-150
Styrene	ug/L (ppb)	10	<1	92	50-150
Isopropylbenzene	ug/L (ppb)	10	<1	93	50-150
Bromoform	ug/L (ppb)	10	<5	110	50-150
n-Propylbenzene	ug/L (ppb)	10	<1	92	50-150
Bromobenzene	ug/L (ppb)	10	<1	102	50-150
1,3,5-Trimethylbenzene	ug/L (ppb)	10	<1	94	50-150
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	<0.2	109	50-150
1,2,3-Trichloropropane	ug/L (ppb)	10	<1	102	50-150
2-Chlorotoluene	ug/L (ppb)	10	<1	92	50-150
4-Chlorotoluene	ug/L (ppb)	10	<1	95	50-150
tert-Butylbenzene	ug/L (ppb)	10	<1	92	50-150
1,2,4-Trimethylbenzene	ug/L (ppb)	10	<1	92	50-150
sec-Butylbenzene	ug/L (ppb)	10	<1	93	50-150
p-Isopropyltoluene	ug/L (ppb)	10	<1	95	50-150
1,3-Dichlorobenzene	ug/L (ppb)	10	<1	99	50-150
1,4-Dichlorobenzene	ug/L (ppb)	10	<1	99	50-150
1,2-Dichlorobenzene	ug/L (ppb)	10	<1	101	50-150
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	<10	99	50-150
1,2,4-Trichlorobenzene	ug/L (ppb)	10	<1	88	50-150
Hexachlorobutadiene	ug/L (ppb)	10	<0.5	95	50-150
Naphthalene	ug/L (ppb)	10	<1	89	50-150
1,2,3-Trichlorobenzene	ug/L (ppb)	10	<1	95	50-150

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 11/07/23

Date Received: 10/31/23

Project: 3245 158th Ave SE 2403-008, F&BI 310563

### 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	90	85	46-206	6
Chloromethane	ug/L (ppb)	10	103	97	59-132	6
Vinyl chloride	ug/L (ppb)	10	105	98	64-142	7
Bromomethane	ug/L (ppb)	10	102	86	50-197	17
Chloroethane	ug/L (ppb)	10	113	104	70-130	8
Trichlorofluoromethane	ug/L (ppb)	10	112	101	51-159	10
Acetone	ug/L (ppb)	50	55	51	10-140	8
1,1-Dichloroethene	ug/L (ppb)	10	104	100	64-140	4
Hexane	ug/L (ppb)	10	96	93	54-136	3
Methylene chloride	ug/L (ppb)	10	101	100	43-134	1
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	104	101	70-130	3
trans-1,2-Dichloroethene	ug/L (ppb)	10	117	113	70-130	3
1,1-Dichloroethane	ug/L (ppb)	10	107	103	70-130	4
2,2-Dichloropropane	ug/L (ppb)	10	115	109	64-148	5
cis-1,2-Dichloroethene	ug/L (ppb)	10	116	111	70-130	4
Chloroform	ug/L (ppb)	10	106	102	70-130	4
2-Butanone (MEK)	ug/L (ppb)	50	69	69	47-112	0
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	111	108	70-130	3
1,1,1-Trichloroethane	ug/L (ppb)	10	110	106	70-130	4
1,1-Dichloropropene	ug/L (ppb)	10	95	96	70-130	1
Carbon tetrachloride	ug/L (ppb)	10	112	105	70-130	6
Benzene	ug/L (ppb)	10	109	106	70-130	3
Trichloroethene	ug/L (ppb)	10	104	102	70-130	2
1,2-Dichloropropane	ug/L (ppb)	10	98	95	70-130	3
Bromodichloromethane	ug/L (ppb)	10	100	99	70-130	1
Dibromomethane	ug/L (ppb)	10	105	103	70-130	2
4-Methyl-2-pentanone	ug/L (ppb)	50	92	91	68-130	1
cis-1,3-Dichloropropene	ug/L (ppb)	10	91	90	69-131	1
Toluene	ug/L (ppb)	10	106	103	70-130	3
trans-1,3-Dichloropropene	ug/L (ppb)	10	97	90	70-130	7
1,1,2-Trichloroethane	ug/L (ppb)	10	100	99	70-130	1
2-Hexanone	ug/L (ppb)	50	87	87	45-138	0
1,3-Dichloropropane	ug/L (ppb)	10	98	94	70-130	4
Tetrachloroethene	ug/L (ppb)	10	115	112	70-130	3
Dibromochloromethane	ug/L (ppb)	10	111	109	60-148	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	105	103	70-130	2
Chlorobenzene	ug/L (ppb)	10	102	100	70-130	2
Ethylbenzene	ug/L (ppb)	10	104	102	70-130	2
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	118	116	70-130	2
m,p-Xylene	ug/L (ppb)	20	104	101	70-130	3
o-Xylene	ug/L (ppb)	10	104	101	70-130	3
Styrene	ug/L (ppb)	10	92	92	70-130	0
Isopropylbenzene	ug/L (ppb)	10	102	99	70-130	3
Bromoform	ug/L (ppb)	10	115	106	69-138	8
n-Propylbenzene	ug/L (ppb)	10	94	94	70-130	0
Bromobenzene	ug/L (ppb)	10	100	96	70-130	4
1,3,5-Trimethylbenzene	ug/L (ppb)	10	95	95	70-130	0
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	106	106	70-130	0
1,2,3-Trichloropropane	ug/L (ppb)	10	100	99	70-130	1
2-Chlorotoluene	ug/L (ppb)	10	93	95	70-130	2
4-Chlorotoluene	ug/L (ppb)	10	94	92	70-130	2
tert-Butylbenzene	ug/L (ppb)	10	92	91	70-130	1
1,2,4-Trimethylbenzene	ug/L (ppb)	10	96	93	70-130	3
sec-Butylbenzene	ug/L (ppb)	10	96	93	70-130	3
p-Isopropyltoluene	ug/L (ppb)	10	98	96	70-130	2
1,3-Dichlorobenzene	ug/L (ppb)	10	101	100	70-130	1
1,4-Dichlorobenzene	ug/L (ppb)	10	102	100	70-130	2
1,2-Dichlorobenzene	ug/L (ppb)	10	106	105	70-130	1
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	104	104	70-130	0
1,2,4-Trichlorobenzene	ug/L (ppb)	10	98	98	70-130	0
Hexachlorobutadiene	ug/L (ppb)	10	106	105	70-130	1
Naphthalene	ug/L (ppb)	10	99	99	70-130	0
1,2,3-Trichlorobenzene	ug/L (ppb)	10	102	104	70-130	2

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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.

Report To Visit Pehlivan

## 12/31/23

VW3/C2

10

## TURNAROUND TIME

Company Families

Address 975 5th Ave NW

City, State, ZIP Issaquah, WA 98027

Phone (425) 295 0600 Email [info@familytransitions.com](mailto:info@familytransitions.com)

SAMPLE FBs (signature)

(2019)

PROJECT NAME

3245 158th Ave SE

PO #

2403-008

REMARKS

# INVOICE TO

Project specific RIs? - Yes / No

7

☒ Standard turnaround  
☐ RUSH  
 Rush charges authorized by: \_\_\_\_\_

---

**SAMPLE DISPOSAL**

☐ Archive samples  
☐ Other \_\_\_\_\_

---

Default: Dispose after 30

Default: Dispose after 30 days

## 12/31/23

10

## TURNAROUND TIME

Company Families

Address 975 5th Ave NW

City, State, ZIP Issaquah, WA 98027

Phone (425) 295 0600 Email [info@familytransitionsidm.com](mailto:info@familytransitionsidm.com)

SAMPLE FBs (signature)

(2019)

PROJECT NAME

3245 158th Ave SE

PO #

2403-008

REMARKS

# INVOICE TO

Project specific RIs? - Yes / No

7

☒ Standard turnaround  
☐ RUSH  
 Rush charges authorized by: \_\_\_\_\_

---

**SAMPLE DISPOSAL**

☐ Archive samples  
☐ Other \_\_\_\_\_

---

Default: Dispose after 30

Default: Dispose after 30 days

[illegible]

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Amber</i>	<i>Amber Brown</i>	<i>Furukawa</i>	<i>10-31-23</i>	<i>1540</i>
Received by: <i>Amber</i>	<i>Amber Brown</i>	<i>Furukawa</i>	<i>10-31-23</i>	<i>1540</i>
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

January 2, 2024

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on December 22, 2023 from the 3245 158th Ave SE 2403-008, F&BI 312424 project. There are 11 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  
FLN0102R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on December 22, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 312424 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
312424 -01	FMW-01-122123
312424 -02	B-2-122123
312424 -03	Trip Blank

The 8260D acetone calibration standard exceeded the acceptance criteria. The compound was not detected, therefore this did not represent an out of control condition.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/02/24

Date Received: 12/22/23

Project: 3245 158th Ave SE 2403-008, F&BI 312424

Date Extracted: 12/27/23

Date Analyzed: 12/27/23

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**  
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate <u>(% Recovery)</u> (Limit 50-150)
FMW-01-122123 312424-01	<100	96
B-2-122123 312424-02	<100	89
Method Blank 03-2857 MB	<100	99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/02/24

Date Received: 12/22/23

Project: 3245 158th Ave SE 2403-008, F&BI 312424

Date Extracted: 12/26/23

Date Analyzed: 12/26/23

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-D<sub>x</sub>**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
FMW-01-122123 312424-01	<50	<250	98
B-2-122123 312424-02	<50	<250	91
Method Blank 03-2970 MB	<50	<250	108

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FMW-01-122123	Client:	Farallon Consulting, LLC
Date Received:	12/22/23	Project:	3245 158th Ave SE 2403-008, F&BI 312424
Date Extracted:	12/27/23	Lab ID:	312424-01
Date Analyzed:	12/27/23	Data File:	122710.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	78	126
Toluene-d8	100	84	115
4-Bromofluorobenzene	103	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	5.0
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5 k	1,2-Dibromoethane (EDB)	<0.03
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 k	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 k	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	0.58	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 k		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	B-2-122123	Client:	Farallon Consulting, LLC
Date Received:	12/22/23	Project:	3245 158th Ave SE 2403-008, F&BI 312424
Date Extracted:	12/27/23	Lab ID:	312424-02
Date Analyzed:	12/27/23	Data File:	122711.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	78	126
Toluene-d8	102	84	115
4-Bromofluorobenzene	103	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 k	1,2-Dibromoethane (EDB)	<0.03
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 k	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 k	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 k		



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008, F&BI 312424
Date Extracted:	12/27/23	Lab ID:	03-2961 mb
Date Analyzed:	12/27/23	Data File:	122708.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	78	126
Toluene-d8	103	84	115
4-Bromofluorobenzene	101	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 k	1,2-Dibromoethane (EDB)	<0.03
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 k	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 k	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 k		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/02/24

Date Received: 12/22/23

Project: 3245 158th Ave SE 2403-008, F&BI 312424

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TPH AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**

Laboratory Code: 312424-01 (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	100	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/02/24

Date Received: 12/22/23

Project: 3245 158th Ave SE 2403-008, F&BI 312424

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-D<sub>x</sub>**

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	96	112	65-151	15

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/02/24

Date Received: 12/22/23

Project: 3245 158th Ave SE 2403-008, F&BI 312424

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

Laboratory Code: 312424-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Dichlorodifluoromethane	ug/L (ppb)	10	<1	85	30-221
Chloromethane	ug/L (ppb)	10	<10	90	50-150
Vinyl chloride	ug/L (ppb)	10	<0.02	92	50-150
Bromomethane	ug/L (ppb)	10	<5	90	50-150
Chloroethane	ug/L (ppb)	10	<1	91	50-150
Trichlorofluoromethane	ug/L (ppb)	10	<1	82	50-150
Acetone	ug/L (ppb)	50	<50	41	18-161
1,1-Dichloroethene	ug/L (ppb)	10	<1	84	50-150
Hexane	ug/L (ppb)	10	<5	87	50-150
Methylene chloride	ug/L (ppb)	10	<5	88	50-150
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	<1	87	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	86	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	87	50-150
2,2-Dichloropropane	ug/L (ppb)	10	<1	106	43-171
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	89	10-211
Chloroform	ug/L (ppb)	10	<1	83	50-150
2-Butanone (MEK)	ug/L (ppb)	50	<20	63	10-192
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<0.2	90	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	88	50-150
1,1-Dichloropropene	ug/L (ppb)	10	<1	85	50-150
Carbon tetrachloride	ug/L (ppb)	10	<0.5	98	50-150
Benzene	ug/L (ppb)	10	<0.35	89	50-150
Trichloroethene	ug/L (ppb)	10	0.58	85	35-149
1,2-Dichloropropane	ug/L (ppb)	10	<1	87	50-150
Bromodichloromethane	ug/L (ppb)	10	<0.5	84	50-150
Dibromomethane	ug/L (ppb)	10	<1	84	50-150
4-Methyl-2-pentanone	ug/L (ppb)	50	<10	87	50-150
cis-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	81	50-150
Toluene	ug/L (ppb)	10	<1	83	50-150
trans-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	75	50-150
1,1,2-Trichloroethane	ug/L (ppb)	10	<0.5	81	50-150
2-Hexanone	ug/L (ppb)	50	<10	85	50-150
1,3-Dichloropropane	ug/L (ppb)	10	<1	82	50-150
Tetrachloroethene	ug/L (ppb)	10	5.0	82 b	50-150
Dibromochloromethane	ug/L (ppb)	10	<0.5	76	50-150
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	0.029	84	50-150
Chlorobenzene	ug/L (ppb)	10	<1	80	50-150
Ethylbenzene	ug/L (ppb)	10	<1	86	50-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	<1	80	50-150
m,p-Xylene	ug/L (ppb)	20	<2	82	50-150
o-Xylene	ug/L (ppb)	10	<1	80	50-150
Styrene	ug/L (ppb)	10	<1	78	50-150
Isopropylbenzene	ug/L (ppb)	10	<1	81	50-150
Bromoform	ug/L (ppb)	10	<5	69	50-150
n-Propylbenzene	ug/L (ppb)	10	<1	83	50-150
Bromobenzene	ug/L (ppb)	10	<1	81	50-150
1,3,5-Trimethylbenzene	ug/L (ppb)	10	<1	80	50-150
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	<0.2	86	50-150
1,2,3-Trichloropropane	ug/L (ppb)	10	<1	87	50-150
2-Chlorotoluene	ug/L (ppb)	10	<1	82	50-150
4-Chlorotoluene	ug/L (ppb)	10	<1	81	50-150
tert-Butylbenzene	ug/L (ppb)	10	<1	80	50-150
1,2,4-Trimethylbenzene	ug/L (ppb)	10	<1	80	50-150
sec-Butylbenzene	ug/L (ppb)	10	<1	82	50-150
p-Isopropyltoluene	ug/L (ppb)	10	<1	81	50-150
1,3-Dichlorobenzene	ug/L (ppb)	10	<1	83	50-150
1,4-Dichlorobenzene	ug/L (ppb)	10	<1	82	50-150
1,2-Dichlorobenzene	ug/L (ppb)	10	<1	80	50-150
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	<10	79	50-150
1,2,4-Trichlorobenzene	ug/L (ppb)	10	<1	77	50-150
Hexachlorobutadiene	ug/L (ppb)	10	<0.5	77	50-150
Naphthalene	ug/L (ppb)	10	<1	76	50-150
1,2,3-Trichlorobenzene	ug/L (ppb)	10	<1	76	50-150

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/02/24

Date Received: 12/22/23

Project: 3245 158th Ave SE 2403-008, F&BI 312424

### 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	102	103	46-206	1
Chloromethane	ug/L (ppb)	10	103	103	59-132	0
Vinyl chloride	ug/L (ppb)	10	112	107	64-142	5
Bromomethane	ug/L (ppb)	10	111	111	50-197	0
Chloroethane	ug/L (ppb)	10	110	109	70-130	1
Trichlorofluoromethane	ug/L (ppb)	10	103	104	51-159	1
Acetone	ug/L (ppb)	50	46	52	10-140	12
1,1-Dichloroethene	ug/L (ppb)	10	104	104	64-140	0
Hexane	ug/L (ppb)	10	109	110	54-136	1
Methylene chloride	ug/L (ppb)	10	107	105	43-134	2
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	109	109	70-130	0
trans-1,2-Dichloroethene	ug/L (ppb)	10	106	105	70-130	1
1,1-Dichloroethane	ug/L (ppb)	10	109	106	70-130	3
2,2-Dichloropropane	ug/L (ppb)	10	142	132	64-148	7
cis-1,2-Dichloroethene	ug/L (ppb)	10	107	104	70-130	3
Chloroform	ug/L (ppb)	10	103	104	70-130	1
2-Butanone (MEK)	ug/L (ppb)	50	73	88	47-112	19
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	106	109	70-130	3
1,1,1-Trichloroethane	ug/L (ppb)	10	109	109	70-130	0
1,1-Dichloropropene	ug/L (ppb)	10	107	105	70-130	2
Carbon tetrachloride	ug/L (ppb)	10	125	125	70-130	0
Benzene	ug/L (ppb)	10	106	108	70-130	2
Trichloroethene	ug/L (ppb)	10	102	104	70-130	2
1,2-Dichloropropane	ug/L (ppb)	10	102	101	70-130	1
Bromodichloromethane	ug/L (ppb)	10	102	106	70-130	4
Dibromomethane	ug/L (ppb)	10	97	100	70-130	3
4-Methyl-2-pentanone	ug/L (ppb)	50	102	108	68-130	6
cis-1,3-Dichloropropene	ug/L (ppb)	10	98	103	69-131	5
Toluene	ug/L (ppb)	10	102	105	70-130	3
trans-1,3-Dichloropropene	ug/L (ppb)	10	100	100	70-130	0
1,1,2-Trichloroethane	ug/L (ppb)	10	98	101	70-130	3
2-Hexanone	ug/L (ppb)	50	100	108	45-138	8
1,3-Dichloropropane	ug/L (ppb)	10	97	103	70-130	6
Tetrachloroethene	ug/L (ppb)	10	104	105	70-130	1
Dibromochloromethane	ug/L (ppb)	10	97	98	60-148	1
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	101	105	70-130	4
Chlorobenzene	ug/L (ppb)	10	101	103	70-130	2
Ethylbenzene	ug/L (ppb)	10	107	110	70-130	3
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	100	103	70-130	3
m,p-Xylene	ug/L (ppb)	20	103	106	70-130	3
o-Xylene	ug/L (ppb)	10	102	103	70-130	1
Styrene	ug/L (ppb)	10	98	104	70-130	6
Isopropylbenzene	ug/L (ppb)	10	103	105	70-130	2
Bromoform	ug/L (ppb)	10	89	92	69-138	3
n-Propylbenzene	ug/L (ppb)	10	103	107	70-130	4
Bromobenzene	ug/L (ppb)	10	96	101	70-130	5
1,3,5-Trimethylbenzene	ug/L (ppb)	10	101	101	70-130	0
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	103	105	70-130	2
1,2,3-Trichloropropane	ug/L (ppb)	10	103	107	70-130	4
2-Chlorotoluene	ug/L (ppb)	10	102	105	70-130	3
4-Chlorotoluene	ug/L (ppb)	10	100	104	70-130	4
tert-Butylbenzene	ug/L (ppb)	10	100	102	70-130	2
1,2,4-Trimethylbenzene	ug/L (ppb)	10	101	104	70-130	3
sec-Butylbenzene	ug/L (ppb)	10	104	105	70-130	1
p-Isopropyltoluene	ug/L (ppb)	10	104	104	70-130	0
1,3-Dichlorobenzene	ug/L (ppb)	10	104	103	70-130	1
1,4-Dichlorobenzene	ug/L (ppb)	10	102	104	70-130	2
1,2-Dichlorobenzene	ug/L (ppb)	10	104	104	70-130	0
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	103	101	70-130	2
1,2,4-Trichlorobenzene	ug/L (ppb)	10	101	99	70-130	2
Hexachlorobutadiene	ug/L (ppb)	10	99	99	70-130	0
Naphthalene	ug/L (ppb)	10	101	97	70-130	4
1,2,3-Trichlorobenzene	ug/L (ppb)	10	101	97	70-130	4

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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.



Report To Yusuf Pehlivan

12/22/23 T2/VW1

—

TURNAROUND TIME

☒ Standard turnaround

Rush charges authorized by:

## SAMPLE DISPOSAL

Default: Dispose after 30 days

Company Fallgren  
Address 975 5th Ave NW  
City, State, ZIP Issaquah, WA 98027  
Phone (425) 295 0600 Email info@fallgrenconsulting.com

SAMPLERS (signature)	
PROJECT NAME	PO #
32415 15 <sup>th</sup> Ave SE	2403-008
REMARKS	INVOICE TO
Project specific RLS? - Yes / No	AP

Page # \_\_\_\_\_ of \_\_\_\_\_

**TURNAROUND TIME**

☒ Standard turnaround

☐ RUSH \_\_\_\_\_

Rush charges authorized by: \_\_\_\_\_

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**SAMPLE DISPOSAL**

☐ Archive samples

☐ Other \_\_\_\_\_

Default: Dispose after 30 days

[illegible]

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>[Signature]</i>	<i>Annie Dorman</i>	FLA	12/21/23	1:50
Received by: <i>[Signature]</i>	ANH PHAN	ES 3	12/22/23	11:26
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

January 9, 2024

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on December 22, 2023 from the 3245 158th Ave SE 2403-008, F&BI 312425 project. There are 13 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  
FLN0109R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on December 22, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 312425 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
312425 -01	SG-04-122123
312425 -02	SG-05-122123

Non-petroleum compounds identified in the air phase hydrocarbon (APH) ranges were subtracted per the MA-APH method.

All quality control requirements were acceptable.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-04-122123	Client:	Farallon Consulting, LLC
Date Received:	12/22/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	12/21/23	Lab ID:	312425-01 1/2000
Date Analyzed:	01/04/24	Data File:	010327.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	95	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	890,000
APH EC9-12 aliphatics	2,000,000
APH EC9-10 aromatics	<50,000

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-05-122123	Client:	Farallon Consulting, LLC
Date Received:	12/22/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	12/21/23	Lab ID:	312425-02 1/39
Date Analyzed:	01/04/24	Data File:	010326.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	95	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	2,900
APH EC9-12 aliphatics	14,000
APH EC9-10 aromatics	<970

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Collected:	Not Applicable	Lab ID:	04-0048 mb
Date Analyzed:	01/03/24	Data File:	010315.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	93	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	<75
APH EC9-12 aliphatics	<25
APH EC9-10 aromatics	<25



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SG-04-122123	Client: Farallon Consulting, LLC
Date Received: 12/22/24	Project: 3245 158th Ave SE 2403-008
Date Collected: 12/21/23	Lab ID: 312425-01 1/2000
Date Analyzed: 01/04/24	Data File: 010327.D
Matrix: Air	Instrument: GCMS8
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	93	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<2,400	<1,400	1,2-Dichloropropane	<460	<100
Dichlorodifluoromethane	<2,000	<400	1,4-Dioxane	<720	<200
Chloromethane	<7,400	<3,600	2,2,4-Trimethylpentane	28,000	5,900
F-114	<4,200	<600	Methyl methacrylate	<8,200	<2,000
Vinyl chloride	<510	<200	Heptane	<8,200	<2,000
1,3-Butadiene	<88	<40	Bromodichloromethane	<130	<20
Butane	<9,500	<4,000	Trichloroethene	<210	<40
Bromomethane	<7,800	<2,000	cis-1,3-Dichloropropene	<1,800	<400
Chloroethane	<5,300	<2,000	4-Methyl-2-pentanone	<16,000	<4,000
Vinyl bromide	<870	<200	trans-1,3-Dichloropropene	<910	<200
Ethanol	<15,000 jl	<8,000 jl	Toluene	<15,000	<4,000
Acrolein	<230	<100	1,1,2-Trichloroethane	<110	<20
Pentane	<12,000	<4,000	2-Hexanone	<8,200	<2,000
Trichlorofluoromethane	<4,500	<800	Tetrachloroethene	<14,000	<2,000
Acetone	<9,500	<4,000	Dibromochloromethane	<170 k	<20 k
2-Propanol	<17,000	<7,000	1,2-Dibromoethane (EDB)	<150	<20
1,1-Dichloroethene	<790	<200	Chlorobenzene	<920	<200
trans-1,2-Dichloroethene	<790	<200	Ethylbenzene	<870	<200
Methylene chloride	<69,000	<20,000	1,1,2,2-Tetrachloroethane	<270	<40
t-Butyl alcohol (TBA)	<24,000	<8,000	Nonane	<10,000	<2,000
3-Chloropropene	<6,300	<2,000	Isopropylbenzene	<20,000	<4,000
CFC-113	<3,100	<400	2-Chlorotoluene	<10,000	<2,000
Carbon disulfide	<12,000	<4,000	Propylbenzene	<9,800	<2,000
Methyl t-butyl ether (MTBE)	<14,000	<4,000	4-Ethyltoluene	<9,800	<2,000
Vinyl acetate	<14,000 ca	<4,000 ca	m,p-Xylene	3,200	750
1,1-Dichloroethane	<810	<200	o-Xylene	<870	<200
cis-1,2-Dichloroethene	<790	<200	Styrene	<1,700	<400
Hexane	<7,000	<2,000	Bromoform	<4,100 k	<400 k
Chloroform	<98	<20	Benzyl chloride	<100 k	<20 k
Ethyl acetate	<14,000	<4,000	1,3,5-Trimethylbenzene	<9,800	<2,000
Tetrahydrofuran	<1,200	<400	1,2,4-Trimethylbenzene	<9,800	<2,000
2-Butanone (MEK)	<12,000	<4,000	1,3-Dichlorobenzene	<1,200	<200
1,2-Dichloroethane (EDC)	<81	<20	1,4-Dichlorobenzene	<460	<76
1,1,1-Trichloroethane	<1,100	<200	1,2-Dichlorobenzene	<1,200	<200
Carbon tetrachloride	<630	<100	1,2,4-Trichlorobenzene	<1,500	<200
Benzene	<640	<200	Naphthalene	<520	<100
Cyclohexane	<14,000	<4,000	Hexachlorobutadiene	<430 k	<40 k

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SG-05-122123	Client: Farallon Consulting, LLC
Date Received: 12/22/24	Project: 3245 158th Ave SE 2403-008
Date Collected: 12/21/23	Lab ID: 312425-02 1/39
Date Analyzed: 01/04/24	Data File: 010326.D
Matrix: Air	Instrument: GCMS8
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	93	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<47	<27	1,2-Dichloropropane	<9	<1.9
Dichlorodifluoromethane	<39	<7.8	1,4-Dioxane	<14	<3.9
Chloromethane	<140	<70	2,2,4-Trimethylpentane	<180	<39
F-114	<82	<12	Methyl methacrylate	<160	<39
Vinyl chloride	<5.3 j	<2 j	Heptane	<160	<39
1,3-Butadiene	<1.7	<0.78	Bromodichloromethane	<2.6	<0.39
Butane	<190	<78	Trichloroethene	<4.2	<0.78
Bromomethane	<150	<39	cis-1,3-Dichloropropene	<35	<7.8
Chloroethane	<100	<39	4-Methyl-2-pentanone	<320	<78
Vinyl bromide	<17	<3.9	trans-1,3-Dichloropropene	<18	<3.9
Ethanol	<290 jl	<160 jl	Toluene	<290	<78
Acrolein	<4.5	<1.9	1,1,2-Trichloroethane	<2.1	<0.39
Pentane	<230	<78	2-Hexanone	<160	<39
Trichlorofluoromethane	<88	<16	Tetrachloroethene	<260	<39
Acetone	<190	<78	Dibromochloromethane	<3.3 k	<0.39 k
2-Propanol	<340	<140	1,2-Dibromoethane (EDB)	<3	<0.39
1,1-Dichloroethene	<15	<3.9	Chlorobenzene	<18	<3.9
trans-1,2-Dichloroethene	<15	<3.9	Ethylbenzene	<17	<3.9
Methylene chloride	<1,400	<390	1,1,2,2-Tetrachloroethane	<5.4	<0.78
t-Butyl alcohol (TBA)	<470	<160	Nonane	<200	<39
3-Chloropropene	<120	<39	Isopropylbenzene	<380	<78
CFC-113	<60	<7.8	2-Chlorotoluene	<200	<39
Carbon disulfide	<240	<78	Propylbenzene	<190	<39
Methyl t-butyl ether (MTBE)	<280	<78	4-Ethyltoluene	<190	<39
Vinyl acetate	<270 ca	<78 ca	m,p-Xylene	<34	<7.8
1,1-Dichloroethane	<16	<3.9	o-Xylene	<17	<3.9
cis-1,2-Dichloroethene	<15	<3.9	Styrene	<33	<7.8
Hexane	<140	<39	Bromoform	<81 k	<7.8 k
Chloroform	<1.9	<0.39	Benzyl chloride	<2 k	<0.39 k
Ethyl acetate	<280	<78	1,3,5-Trimethylbenzene	<190	<39
Tetrahydrofuran	<23	<7.8	1,2,4-Trimethylbenzene	<190	<39
2-Butanone (MEK)	<230	<78	1,3-Dichlorobenzene	<23	<3.9
1,2-Dichloroethane (EDC)	<1.6	<0.39	1,4-Dichlorobenzene	<8.9	<1.5
1,1,1-Trichloroethane	<21	<3.9	1,2-Dichlorobenzene	<23	<3.9
Carbon tetrachloride	<12	<1.9	1,2,4-Trichlorobenzene	<29	<3.9
Benzene	<6.4 j	<2 j	Naphthalene	<2 j	<0.95 j
Cyclohexane	<270	<78	Hexachlorobutadiene	<8.3 k	<0.78 k

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Collected:	Not Applicable	Lab ID:	04-0048 mb
Date Analyzed:	01/03/24	Data File:	010315.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<1.2	<0.7	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.99	<0.2	1,4-Dioxane	<0.36	<0.1
Chloromethane	<3.7	<1.8	2,2,4-Trimethylpentane	<4.7	<1
F-114	<2.1	<0.3	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.13 j	<0.05 j	Heptane	<4.1	<1
1,3-Butadiene	<0.044	<0.02	Bromodichloromethane	<0.067	<0.01
Butane	<4.8	<2	Trichloroethene	<0.11	<0.02
Bromomethane	<3.9	<1	cis-1,3-Dichloropropene	<0.91	<0.2
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<8.2	<2
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5 jl	<4 jl	Toluene	<7.5	<2
Acrolein	<0.11	<0.05	1,1,2-Trichloroethane	<0.055	<0.01
Pentane	<5.9	<2	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085 k	<0.01 k
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<35	<10	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<3.1	<1	Isopropylbenzene	<9.8	<2
CFC-113	<1.5	<0.2	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<4.9	<1
Methyl t-butyl ether (MTBE)	<7.2	<2	4-Ethyltoluene	<4.9	<1
Vinyl acetate	<7 ca	<2 ca	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1 k	<0.2 k
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052 k	<0.01 k
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<4.9	<1
Tetrahydrofuran	<0.59	<0.2	1,2,4-Trimethylbenzene	<4.9	<1
2-Butanone (MEK)	<5.9	<2	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.23	<0.038
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.31	<0.05	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.16 j	<0.05 j	Naphthalene	<0.052 j	<0.01 j
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21 k	<0.02 k

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/09/24

Date Received: 12/22/23

Project: 3245 158th Ave SE 2403-008, F&BI 312425

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 401006-01 1/5.2 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	<390	<390	nm
APH EC9-12 aliphatics	ug/m3	180	190	5
APH EC9-10 aromatics	ug/m3	<130	<130	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	83	70-130
APH EC9-12 aliphatics	ug/m3	67	93	70-130
APH EC9-10 aromatics	ug/m3	67	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/09/24

Date Received: 12/22/23

Project: 3245 158th Ave SE 2403-008, F&BI 312425

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 401006-01 1/5.2 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Propene	ug/m3	33	37	11
Dichlorodifluoromethane	ug/m3	<5.1	<5.1	nm
Chloromethane	ug/m3	<19	<19	nm
F-114	ug/m3	<11	<11	nm
Vinyl chloride	ug/m3	<1.3	<1.3	nm
1,3-Butadiene	ug/m3	5.8	5.8	0
Butane	ug/m3	<25	25	nm
Bromomethane	ug/m3	<20	<20	nm
Chloroethane	ug/m3	<14	<14	nm
Vinyl bromide	ug/m3	<2.3	<2.3	nm
Ethanol	ug/m3	42	47	11
Acrolein	ug/m3	1.0	1.0	0
Pentane	ug/m3	<31	<31	nm
Trichlorofluoromethane	ug/m3	<12	<12	nm
Acetone	ug/m3	39	40	3
2-Propanol	ug/m3	1,700	1,900	11
1,1-Dichloroethene	ug/m3	<2.1	<2.1	nm
trans-1,2-Dichloroethene	ug/m3	<2.1	<2.1	nm
Methylene chloride	ug/m3	<180	<180	nm
t-Butyl alcohol (TBA)	ug/m3	<63	<63	nm
3-Chloropropene	ug/m3	<16	<16	nm
CFC-113	ug/m3	<8	<8	nm
Carbon disulfide	ug/m3	<32	<32	nm
Methyl t-butyl ether (MTBE)	ug/m3	<37	<37	nm
Vinyl acetate	ug/m3	<37	<37	nm
1,1-Dichloroethane	ug/m3	<2.1	<2.1	nm
cis-1,2-Dichloroethene	ug/m3	<2.1	<2.1	nm
Hexane	ug/m3	<18	<18	nm
Chloroform	ug/m3	<0.25	<0.25	nm
Ethyl acetate	ug/m3	<37	<37	nm
Tetrahydrofuran	ug/m3	<3.1	<3.1	nm
2-Butanone (MEK)	ug/m3	<31	<31	nm
1,2-Dichloroethane (EDC)	ug/m3	<0.21	<0.21	nm
1,1,1-Trichloroethane	ug/m3	<2.8	<2.8	nm
Carbon tetrachloride	ug/m3	<1.6	<1.6	nm
Benzene	ug/m3	7.5	7.4	1
Cyclohexane	ug/m3	<36	<36	nm
1,2-Dichloropropane	ug/m3	<1.2	<1.2	nm
1,4-Dioxane	ug/m3	<1.9	<1.9	nm
2,2,4-Trimethylpentane	ug/m3	<24	<24	nm

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/09/24

Date Received: 12/22/23

Project: 3245 158th Ave SE 2403-008, F&BI 312425

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: 401006-01 1/5.2 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl methacrylate	ug/m3	<21	<21	nm
Heptane	ug/m3	<21	<21	nm
Bromodichloromethane	ug/m3	<0.35	<0.35	nm
Trichloroethene	ug/m3	<0.56	<0.56	nm
cis-1,3-Dichloropropene	ug/m3	<4.7	<4.7	nm
4-Methyl-2-pentanone	ug/m3	<43	<43	nm
trans-1,3-Dichloropropene	ug/m3	<2.4	<2.4	nm
Toluene	ug/m3	<39	<39	nm
1,1,2-Trichloroethane	ug/m3	<0.28	<0.28	nm
2-Hexanone	ug/m3	<21	<21	nm
Tetrachloroethene	ug/m3	<35	<35	nm
Dibromochloromethane	ug/m3	<0.44	<0.44	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.4	<0.4	nm
Chlorobenzene	ug/m3	<2.4	<2.4	nm
Ethylbenzene	ug/m3	<2.3	<2.3	nm
1,1,2,2-Tetrachloroethane	ug/m3	<0.71	<0.71	nm
Nonane	ug/m3	<27	<27	nm
Isopropylbenzene	ug/m3	<51	<51	nm
2-Chlorotoluene	ug/m3	<27	<27	nm
Propylbenzene	ug/m3	<26	<26	nm
4-Ethyltoluene	ug/m3	<26	<26	nm
m,p-Xylene	ug/m3	<4.5	<4.5	nm
o-Xylene	ug/m3	<2.3	<2.3	nm
Styrene	ug/m3	<4.4	<4.4	nm
Bromoform	ug/m3	<11	<11	nm
Benzyl chloride	ug/m3	<0.27	<0.27	nm
1,3,5-Trimethylbenzene	ug/m3	<26	<26	nm
1,2,4-Trimethylbenzene	ug/m3	<26	<26	nm
1,3-Dichlorobenzene	ug/m3	<3.1	<3.1	nm
1,4-Dichlorobenzene	ug/m3	<1.2	<1.2	nm
1,2-Dichlorobenzene	ug/m3	<3.1	<3.1	nm
1,2,4-Trichlorobenzene	ug/m3	<3.9	<3.9	nm
Naphthalene	ug/m3	<1.4	<1.4	nm
Hexachlorobutadiene	ug/m3	<1.1	<1.1	nm



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/09/24

Date Received: 12/22/23

Project: 3245 158th Ave SE 2403-008, F&BI 312425

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Propene	ug/m3	23	104	70-130
Dichlorodifluoromethane	ug/m3	67	92	70-130
Chloromethane	ug/m3	28	103	70-130
F-114	ug/m3	94	87	70-130
Vinyl chloride	ug/m3	35	86	70-130
1,3-Butadiene	ug/m3	30	82	70-130
Butane	ug/m3	32	81	70-130
Bromomethane	ug/m3	52	95	70-130
Chloroethane	ug/m3	36	93	70-130
Vinyl bromide	ug/m3	59	103	70-130
Ethanol	ug/m3	25	31 vo	70-130
Acrolein	ug/m3	31	72	70-130
Pentane	ug/m3	40	94	70-130
Trichlorofluoromethane	ug/m3	76	89	70-130
Acetone	ug/m3	32	97	70-130
2-Propanol	ug/m3	33	89	70-130
1,1-Dichloroethene	ug/m3	54	93	70-130
trans-1,2-Dichloroethene	ug/m3	54	97	70-130
Methylene chloride	ug/m3	94	87	70-130
t-Butyl alcohol (TBA)	ug/m3	41	89	70-130
3-Chloropropene	ug/m3	42	99	70-130
CFC-113	ug/m3	100	96	70-130
Carbon disulfide	ug/m3	42	89	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	78	70-130
Vinyl acetate	ug/m3	48	65 vo	70-130
1,1-Dichloroethane	ug/m3	55	96	70-130
cis-1,2-Dichloroethene	ug/m3	54	90	70-130
Hexane	ug/m3	48	82	70-130
Chloroform	ug/m3	66	94	70-130
Ethyl acetate	ug/m3	49	121	70-130
Tetrahydrofuran	ug/m3	40	75	70-130
2-Butanone (MEK)	ug/m3	40	84	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	93	70-130
1,1,1-Trichloroethane	ug/m3	74	109	70-130
Carbon tetrachloride	ug/m3	85	121	70-130
Benzene	ug/m3	43	89	70-130
Cyclohexane	ug/m3	46	81	70-130
1,2-Dichloropropane	ug/m3	62	101	70-130
1,4-Dioxane	ug/m3	49	95	70-130
2,2,4-Trimethylpentane	ug/m3	63	95	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/09/24

Date Received: 12/22/23

Project: 3245 158th Ave SE 2403-008, F&BI 312425

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Methyl methacrylate	ug/m3	55	106	70-130
Heptane	ug/m3	55	95	70-130
Bromodichloromethane	ug/m3	90	122	70-130
Trichloroethene	ug/m3	73	99	70-130
cis-1,3-Dichloropropene	ug/m3	61	107	70-130
4-Methyl-2-pentanone	ug/m3	55	97	70-130
trans-1,3-Dichloropropene	ug/m3	61	119	70-130
Toluene	ug/m3	51	100	70-130
1,1,2-Trichloroethane	ug/m3	74	107	70-130
2-Hexanone	ug/m3	55	86	70-130
Tetrachloroethene	ug/m3	92	111	70-130
Dibromochloromethane	ug/m3	120	137 vo	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	106	70-130
Chlorobenzene	ug/m3	62	111	70-130
Ethylbenzene	ug/m3	59	99	70-130
1,1,2,2-Tetrachloroethane	ug/m3	93	116	70-130
Nonane	ug/m3	71	94	70-130
Isopropylbenzene	ug/m3	66	104	70-130
2-Chlorotoluene	ug/m3	70	110	70-130
Propylbenzene	ug/m3	66	107	70-130
4-Ethyltoluene	ug/m3	66	101	70-130
m,p-Xylene	ug/m3	120	101	70-130
o-Xylene	ug/m3	59	104	70-130
Styrene	ug/m3	58	95	70-130
Bromoform	ug/m3	140	166 vo	70-130
Benzyl chloride	ug/m3	70	150 vo	70-130
1,3,5-Trimethylbenzene	ug/m3	66	105	70-130
1,2,4-Trimethylbenzene	ug/m3	66	101	70-130
1,3-Dichlorobenzene	ug/m3	81	123	70-130
1,4-Dichlorobenzene	ug/m3	81	117	70-130
1,2-Dichlorobenzene	ug/m3	81	118	70-130
1,2,4-Trichlorobenzene	ug/m3	100	123	70-130
Naphthalene	ug/m3	71	103	70-130
Hexachlorobutadiene	ug/m3	140	133 vo	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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

12/22/23

312425

Report To Visit Reliquium

Company Emallon

Address 975 5th Ave NW

City, State, ZIP Issaquah, WA 98027

Phone (206) 295 0800 Email phillips@emallonconsulting.com

## SAMPLERS (signature)

Amadon

## PROJECT NAME & ADDRESS

3245 158th Ave SE

## PO #

2403-008

## NOTES:

## INVOICE TO

AP

Page #

1 of 1

## TURNAROUND TIME

Standard  
RUSH

Rush charges authorized by: \_\_\_\_\_

## SAMPLE DISPOSAL

Default: Clean following final report delivery  
Hold (Fee may apply): \_\_\_\_\_

## SAMPLE INFORMATION

Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. ("Hg)	Field Initial Time	Final Vac. ("Hg)	Field Final Time	TO15 Full Scan	TO15 BTEXN	TO15 cVOCs	APH	Helium	Notes
SG-04-122123	01	SN 0985	72	IA (SG)	12/21/23	-30	1416	-5	1422	X			X		
SG-05-122123	02	SN 8527	304	IA (SG)	1	-30	1307	-5	1312	X			X		
<del>SG-06-122123</del>				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											

Samples received at 19.00

## SIGNATURE

Relinquished by: Amadon

Received by: AP

Relinquished by:

Received by:

## PRINT NAME

Amadon

AMH PHAN

## COMPANY

Emallon

ESB

## DATE

12/21/23

12/22/23

## TIME

1703

11:26

Friedman & Bruya, Inc.  
5500 4th Avenue South  
Seattle, WA 98108  
Ph. (206) 285-8282  
Fax (206) 283-5044

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 12, 2024

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on February 6, 2024 from the 3245 158th Ave SE 2403-008, F&BI 402068 project. There are 5 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  
FLN0212R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 6, 2024 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 402068 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
402068 -01	FMW-01-020524
402068 -02	Trip Blank

All quality control requirements were acceptable.



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FMW-01-020524	Client:	Farallon Consulting, LLC
Date Received:	02/06/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/07/24	Lab ID:	402068-01
Date Analyzed:	02/07/24	Data File:	020717.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	78	126
Toluene-d8	99	84	115
4-Bromofluorobenzene	106	72	130

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.02
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<0.2
1,1,1-Trichloroethane	<1
Trichloroethene	<0.5
Tetrachloroethene	3.6

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/07/24	Lab ID:	04-0284 mb
Date Analyzed:	02/07/24	Data File:	020709.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	113	78	126
Toluene-d8	97	84	115
4-Bromofluorobenzene	103	72	130

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.02
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<0.2
1,1,1-Trichloroethane	<1
Trichloroethene	<0.5
Tetrachloroethene	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 02/12/24

Date Received: 02/06/24

Project: 3245 158th Ave SE 2403-008, F&BI 402068

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

Laboratory Code: 402068-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Vinyl chloride	ug/L (ppb)	10	<0.02	99	50-150
Chloroethane	ug/L (ppb)	10	<1	96	50-150
1,1-Dichloroethene	ug/L (ppb)	10	<1	88	50-150
Methylene chloride	ug/L (ppb)	10	<5	91	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	94	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	93	50-150
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	94	10-211
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<0.2	91	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	87	50-150
Trichloroethene	ug/L (ppb)	10	<0.5	88	35-149
Tetrachloroethene	ug/L (ppb)	10	3.6	95 b	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	ug/L (ppb)	10	100	99	64-142	1
Chloroethane	ug/L (ppb)	10	97	96	70-130	1
1,1-Dichloroethene	ug/L (ppb)	10	90	90	64-140	0
Methylene chloride	ug/L (ppb)	10	97	93	43-134	4
trans-1,2-Dichloroethene	ug/L (ppb)	10	92	95	70-130	3
1,1-Dichloroethane	ug/L (ppb)	10	94	94	70-130	0
cis-1,2-Dichloroethene	ug/L (ppb)	10	93	93	70-130	0
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	94	93	70-130	1
1,1,1-Trichloroethane	ug/L (ppb)	10	89	88	70-130	1
Trichloroethene	ug/L (ppb)	10	93	90	70-130	3
Tetrachloroethene	ug/L (ppb)	10	99	98	70-130	1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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.

02/06/24 WU

Page # \_\_\_\_\_ of \_\_\_\_\_  
TIRNABOIND TIME \_\_\_\_\_

1.

PO#

2403--008

# INVOICE TO

Project specific RIs? - Yes / No

☐ Other \_\_\_\_\_

Default: Dispose after 30 days

ANALYSES REQUESTED						
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	Notes
Fmw-01-020524	01A-C	2/5/24	1240	~	3	
Trip Blank	02A-B	-	-	water	2	
<div>Added at lab</div> <div>AP 02/06/24</div>						
<div>Samples received at 0 °C</div>						

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Mrp Hong Thon</i>	Mrp - Hong Nelson	Facillion Consulting	2/5/24	2000
Received by: <i>[Signature]</i>	VINTH	FB1	2-6-24	101600
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 Ave South  
Seattle, WA 98108-2419  
(206) 285-8282  
office@friedmanandbruya.com  
www.friedmanandbruya.com

May 7, 2024

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the amended results from the testing of material submitted on February 6, 2024 from the 3245 158th Ave SE 2403-008, F&BI 402069 project. Per your request, MA-APH results were reported to the method detection limit.

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  
FLN0216R.DOC



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

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on February 6, 2024 from the 3245 158th Ave SE 2403-008, F&BI 402069 project. There are 11 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  
FLN0216R.DOC

### CASE NARRATIVE

This case narrative encompasses samples received on February 6, 2024 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 402069 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
402069 -01	AA-01-020524

Non-petroleum compounds identified in the air phase hydrocarbon (APH) ranges were subtracted per the MA-APH method.

The TO-15 calibration standard did not meet the acceptance criteria for acrolein. The data were flagged accordingly.

The TO-15 calibration standard for several compounds exceeded the acceptance criteria. The compounds were not detected, therefore this did not represent an out of control condition, and were qualified with a "k" qualifier.

All other quality control requirements were acceptable.

## Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	AA-01-020524	Client:	Farallon Consulting, LLC
Date Received:	02/06/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	02/05/24	Lab ID:	402069-01
Date Analyzed:	02/13/24	Data File:	021317.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	88	70	130

Compounds:	Concentration ug/m3
------------	------------------------

APH EC5-8 aliphatics	74 j
APH EC9-12 aliphatics	<2.5 j
APH EC9-10 aromatics	<2.5 j

## Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Collected:	Not Applicable	Lab ID:	04-0304 MB
Date Analyzed:	02/13/24	Data File:	021312.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	85	70	130

Compounds:	Concentration ug/m3
------------	------------------------

APH EC5-8 aliphatics	<65 j
APH EC9-12 aliphatics	<2.5 j
APH EC9-10 aromatics	<2.5 j

# Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	AA-01-020524	Client:	Farallon Consulting, LLC
Date Received:	02/06/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	02/05/24	Lab ID:	402069-01
Date Analyzed:	02/13/24	Data File:	021317.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<1.2	<0.7	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	2.1	0.43	1,4-Dioxane	<0.36	<0.1
Chloromethane	<3.7	<1.8	2,2,4-Trimethylpentane	<4.7	<1
F-114	<2.1	<0.3	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	0.086	0.039	Bromodichloromethane	<0.067	<0.01
Butane	<4.8	<2	Trichloroethene	<0.11	<0.02
Bromomethane	<3.9	<1	cis-1,3-Dichloropropene	<0.91	<0.2
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<8.2	<2
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5 k	<4 k	Toluene	<7.5	<2
Acrolein	0.16 ca	0.069 ca	1,1,2-Trichloroethane	<0.055	<0.01
Pentane	<5.9	<2	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<35	<10	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<3.1	<1	Isopropylbenzene	<9.8	<2
CFC-113	<1.5	<0.2	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<4.9	<1
Methyl t-butyl ether (MTBE)	<7.2	<2	4-Ethyltoluene	<4.9	<1
Vinyl acetate	<7 k	<2 k	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1	<0.2
Chloroform	0.078	0.016	Benzyl chloride	<0.052 k	<0.01 k
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<4.9	<1
Tetrahydrofuran	<0.59	<0.2	1,2,4-Trimethylbenzene	<4.9	<1
2-Butanone (MEK)	<5.9	<2	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	0.065	0.016	1,4-Dichlorobenzene	<0.23	<0.038
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	0.41	0.065	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	0.51	0.16	Naphthalene	0.089 j	0.017 j
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02

# Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Collected:	Not Applicable	Lab ID:	04-0304 MB
Date Analyzed:	02/13/24	Data File:	021312.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	89	70	130

Compounds:	Concentration		Compounds:	Concentration	
	ug/m3	ppbv		ug/m3	ppbv
Propene	<1.2	<0.7	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.99	<0.2	1,4-Dioxane	<0.36	<0.1
Chloromethane	<3.7	<1.8	2,2,4-Trimethylpentane	<4.7	<1
F-114	<2.1	<0.3	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	<0.044	<0.02	Bromodichloromethane	<0.067	<0.01
Butane	<4.8	<2	Trichloroethene	<0.11	<0.02
Bromomethane	<3.9	<1	cis-1,3-Dichloropropene	<0.91	<0.2
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<8.2	<2
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5 k	<4 k	Toluene	<7.5	<2
Acrolein	<0.11 k	<0.05 k	1,1,2-Trichloroethane	<0.055	<0.01
Pentane	<5.9	<2	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<35	<10	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<3.1	<1	Isopropylbenzene	<9.8	<2
CFC-113	<1.5	<0.2	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<4.9	<1
Methyl t-butyl ether (MTBE)	<7.2	<2	4-Ethyltoluene	<4.9	<1
Vinyl acetate	<7 k	<2 k	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1	<0.2
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052 k	<0.01 k
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<4.9	<1
Tetrahydrofuran	<0.59	<0.2	1,2,4-Trimethylbenzene	<4.9	<1
2-Butanone (MEK)	<5.9	<2	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.23	<0.038
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.31	<0.05	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.32	<0.1	Naphthalene	<0.073 j	<0.014 j
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02

Date of Report: 02/16/24

Date Received: 02/06/24

Project: 3245 158th Ave SE 2403-008, F&BI 402069

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 402128-03 1/4.8 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	<360	<360	nm
APH EC9-12 aliphatics	ug/m3	1,300	1,300	0
APH EC9-10 aromatics	ug/m3	<120	<120	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	80	70-130
APH EC9-12 aliphatics	ug/m3	67	101	70-130
APH EC9-10 aromatics	ug/m3	67	87	70-130



Date of Report: 02/16/24

Date Received: 02/06/24

Project: 3245 158th Ave SE 2403-008, F&BI 402069

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 402128-03 1/4.8 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Propene	ug/m3	<5.8	<5.8	nm
Dichlorodifluoromethane	ug/m3	<4.7	<4.7	nm
Chloromethane	ug/m3	<18	<18	nm
F-114	ug/m3	<10	<10	nm
Vinyl chloride	ug/m3	<1.2	<1.2	nm
1,3-Butadiene	ug/m3	0.31	0.29	7
Butane	ug/m3	<23	<23	nm
Bromomethane	ug/m3	<19	<19	nm
Chloroethane	ug/m3	<13	<13	nm
Vinyl bromide	ug/m3	<2.1	<2.1	nm
Ethanol	ug/m3	150	160	6
Acrolein	ug/m3	1.3	1.1	17
Pentane	ug/m3	<28	<28	nm
Trichlorofluoromethane	ug/m3	<11	<11	nm
Acetone	ug/m3	73	70	4
2-Propanol	ug/m3	3,500	3,500	0
1,1-Dichloroethene	ug/m3	<1.9	<1.9	nm
trans-1,2-Dichloroethene	ug/m3	<1.9	<1.9	nm
Methylene chloride	ug/m3	<170	<170	nm
t-Butyl alcohol (TBA)	ug/m3	<58	<58	nm
3-Chloropropene	ug/m3	<15	<15	nm
CFC-113	ug/m3	<7.4	<7.4	nm
Carbon disulfide	ug/m3	<30	<30	nm
Methyl t-butyl ether (MTBE)	ug/m3	<35	<35	nm
Vinyl acetate	ug/m3	<34	<34	nm
1,1-Dichloroethane	ug/m3	<1.9	<1.9	nm
cis-1,2-Dichloroethene	ug/m3	<1.9	<1.9	nm
Hexane	ug/m3	<17	<17	nm
Chloroform	ug/m3	<0.23	<0.23	nm
Ethyl acetate	ug/m3	<35	<35	nm
Tetrahydrofuran	ug/m3	<2.8	<2.8	nm
2-Butanone (MEK)	ug/m3	<28	<28	nm
1,2-Dichloroethane (EDC)	ug/m3	<0.19	<0.19	nm
1,1,1-Trichloroethane	ug/m3	<2.6	<2.6	nm
Carbon tetrachloride	ug/m3	<1.5	<1.5	nm
Benzene	ug/m3	<1.5	<1.5	nm
Cyclohexane	ug/m3	180	180	0
1,2-Dichloropropane	ug/m3	<1.1	<1.1	nm
1,4-Dioxane	ug/m3	<1.7	<1.7	nm
2,2,4-Trimethylpentane	ug/m3	<22	<22	nm

Date of Report: 02/16/24

Date Received: 02/06/24

Project: 3245 158th Ave SE 2403-008, F&BI 402069

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 402128-03 1/4.8 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl methacrylate	ug/m3	<20	<20	nm
Heptane	ug/m3	<20	<20	nm
Bromodichloromethane	ug/m3	<0.32	<0.32	nm
Trichloroethene	ug/m3	<0.52	<0.52	nm
cis-1,3-Dichloropropene	ug/m3	<4.4	<4.4	nm
4-Methyl-2-pentanone	ug/m3	<39	<39	nm
trans-1,3-Dichloropropene	ug/m3	<2.2	<2.2	nm
Toluene	ug/m3	<36	<36	nm
1,1,2-Trichloroethane	ug/m3	<0.26	<0.26	nm
2-Hexanone	ug/m3	<20	<20	nm
Tetrachloroethene	ug/m3	<33	<33	nm
Dibromochloromethane	ug/m3	<0.41	<0.41	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.37	<0.37	nm
Chlorobenzene	ug/m3	<2.2	<2.2	nm
Ethylbenzene	ug/m3	3.9	3.8	3
1,1,2,2-Tetrachloroethane	ug/m3	<0.66	<0.66	nm
Nonane	ug/m3	<25	<25	nm
Isopropylbenzene	ug/m3	<47	<47	nm
2-Chlorotoluene	ug/m3	<25	<25	nm
Propylbenzene	ug/m3	<24	<24	nm
4-Ethyltoluene	ug/m3	<24	<24	nm
m,p-Xylene	ug/m3	12	11	9
o-Xylene	ug/m3	8.0	7.8	3
Styrene	ug/m3	<4.1	<4.1	nm
Bromoform	ug/m3	<9.9	<9.9	nm
Benzyl chloride	ug/m3	<0.25	<0.25	nm
1,3,5-Trimethylbenzene	ug/m3	<24	<24	nm
1,2,4-Trimethylbenzene	ug/m3	<24	<24	nm
1,3-Dichlorobenzene	ug/m3	<2.9	<2.9	nm
1,4-Dichlorobenzene	ug/m3	<1.1	<1.1	nm
1,2-Dichlorobenzene	ug/m3	<2.9	<2.9	nm
1,2,4-Trichlorobenzene	ug/m3	<3.6	<3.6	nm
Naphthalene	ug/m3	2.8	2.0	33 vo
Hexachlorobutadiene	ug/m3	<1	<1	nm

Date of Report: 02/16/24

Date Received: 02/06/24

Project: 3245 158th Ave SE 2403-008, F&BI 402069

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Acceptance Criteria
			Recovery LCS	
Propene	ug/m3	23	87	70-130
Dichlorodifluoromethane	ug/m3	67	106	70-130
Chloromethane	ug/m3	28	120	70-130
F-114	ug/m3	94	116	70-130
Vinyl chloride	ug/m3	35	106	70-130
1,3-Butadiene	ug/m3	30	93	70-130
Butane	ug/m3	32	93	70-130
Bromomethane	ug/m3	52	120	70-130
Chloroethane	ug/m3	36	108	70-130
Vinyl bromide	ug/m3	59	117	70-130
Ethanol	ug/m3	25	89	70-130
Acrolein	ug/m3	31	100	70-130
Pentane	ug/m3	40	93	70-130
Trichlorofluoromethane	ug/m3	76	111	70-130
Acetone	ug/m3	32	105	70-130
2-Propanol	ug/m3	33	102	70-130
1,1-Dichloroethene	ug/m3	54	106	70-130
trans-1,2-Dichloroethene	ug/m3	54	100	70-130
Methylene chloride	ug/m3	94	109	70-130
t-Butyl alcohol (TBA)	ug/m3	41	101	70-130
3-Chloropropene	ug/m3	42	89	70-130
CFC-113	ug/m3	100	111	70-130
Carbon disulfide	ug/m3	42	106	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	97	70-130
Vinyl acetate	ug/m3	48	81	70-130
1,1-Dichloroethane	ug/m3	55	105	70-130
cis-1,2-Dichloroethene	ug/m3	54	100	70-130
Hexane	ug/m3	48	90	70-130
Chloroform	ug/m3	66	107	70-130
Ethyl acetate	ug/m3	49	96	70-130
Tetrahydrofuran	ug/m3	40	95	70-130
2-Butanone (MEK)	ug/m3	40	96	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	106	70-130
1,1,1-Trichloroethane	ug/m3	74	110	70-130
Carbon tetrachloride	ug/m3	85	115	70-130
Benzene	ug/m3	43	96	70-130
Cyclohexane	ug/m3	46	92	70-130
1,2-Dichloropropane	ug/m3	62	110	70-130
1,4-Dioxane	ug/m3	49	106	70-130
2,2,4-Trimethylpentane	ug/m3	63	100	70-130

Date of Report: 02/16/24

Date Received: 02/06/24

Project: 3245 158th Ave SE 2403-008, F&BI 402069

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Acceptance Criteria
			Recovery LCS	
Methyl methacrylate	ug/m3	55	101	70-130
Heptane	ug/m3	55	93	70-130
Bromodichloromethane	ug/m3	90	116	70-130
Trichloroethene	ug/m3	73	112	70-130
cis-1,3-Dichloropropene	ug/m3	61	106	70-130
4-Methyl-2-pentanone	ug/m3	55	113	70-130
trans-1,3-Dichloropropene	ug/m3	61	105	70-130
Toluene	ug/m3	51	101	70-130
1,1,2-Trichloroethane	ug/m3	74	119	70-130
2-Hexanone	ug/m3	55	104	70-130
Tetrachloroethene	ug/m3	92	117	70-130
Dibromochloromethane	ug/m3	120	122	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	113	70-130
Chlorobenzene	ug/m3	62	112	70-130
Ethylbenzene	ug/m3	59	97	70-130
1,1,2,2-Tetrachloroethane	ug/m3	93	112	70-130
Nonane	ug/m3	71	102	70-130
Isopropylbenzene	ug/m3	66	105	70-130
2-Chlorotoluene	ug/m3	70	107	70-130
Propylbenzene	ug/m3	66	108	70-130
4-Ethyltoluene	ug/m3	66	104	70-130
m,p-Xylene	ug/m3	120	102	70-130
o-Xylene	ug/m3	59	105	70-130
Styrene	ug/m3	58	100	70-130
Bromoform	ug/m3	140	122	70-130
Benzyl chloride	ug/m3	70	112	70-130
1,3,5-Trimethylbenzene	ug/m3	66	106	70-130
1,2,4-Trimethylbenzene	ug/m3	66	99	70-130
1,3-Dichlorobenzene	ug/m3	81	116	70-130
1,4-Dichlorobenzene	ug/m3	81	113	70-130
1,2-Dichlorobenzene	ug/m3	81	116	70-130
1,2,4-Trichlorobenzene	ug/m3	100	93	70-130
Naphthalene	ug/m3	71	87	70-130
Hexachlorobutadiene	ug/m3	140	111	70-130

## **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.

Phone 425 295 0800 Email y.yeh@vivaconsulting.com

**Final report delivery**  
**Hold (Fee may apply):**

## ANALYSIS REQUESTED

[illegible]

**Fax (206) 283-5044**

FORMS\COCC\COCTO-15.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Max Nelson</i>	Max Nelson	Facilities consulting	2/5/24	20:00
Received by: <i>[Signature]</i>	VINTA	FBI	2-6-24	10:40
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.  
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5500 4th Ave South  
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February 27, 2024

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on February 21, 2024 from the 3245 158th Ave SE 2403-008, F&BI 402298 project. There are 40 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  
FLN0227R.DOC



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on February 21, 2024 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 402298 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
402298 -01	FB-04-5.0
402298 -02	FB-04-10.0
402298 -03	FB-04-15.0
402298 -04	FB-04-20.0
402298 -05	FB-05-5.0
402298 -06	FB-05-10.0
402298 -07	FB-05-15.0
402298 -08	FB-05-20.0
402298 -09	FB-06-5.0
402298 -10	FB-06-10.0
402298 -11	FB-06-15.0
402298 -12	FB-06-16.5
402298 -13	FB-06-20.0
402298 -14	FB-07-5.0
402298 -15	FB-07-10.0
402298 -16	FB-07-14.0
402298 -17	FB-07-15.0
402298 -18	FB-07-20.0
402298 -19	FB-08-5.0
402298 -20	FB-08-10.0
402298 -21	FB-08-15.0
402298 -22	FB-08-20.0
402298 -23	FB-09-5.0
402298 -24	FB-09-10.0
402298 -25	FB-09-15.0
402298 -26	FB-09-20.0
402298 -27	FB-10-5.0
402298 -28	FB-10-10.0
402298 -29	FB-10-15.0
402298 -30	FB-10-20.0
402298 -31	FB-11-5.0
402298 -32	FB-11-10.0
402298 -33	FB-11-17.0
402298 -34	FB-11-20.0
402298 -35	SG-07-10.0
402298 -36	SG-08-5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
402298 -37	SG-09-5.0
402298 -38	SG-10-5.0
402298 -39	SG-11-5.0

The 8260D calibration standard exceeded the acceptance criteria for 1,2,3-trichloropropane and carbon tetrachloride. These analytes were not detected in the samples, therefore the data were reported and qualified with a “k” qualifier.

The 8260D matrix spike failed the acceptance criteria for dichlorodifluoromethane. The laboratory control sample passed the acceptance criteria, therefore the data were reported.

The 8260D acetone matrix spike and duplicate precision failed the acceptance criteria. This analyte was not detected in the samples, therefore the data were acceptable.

The 8260D 1,2-dichloroethane-d4 surrogate in sample FB-08-10.0 exceeded the acceptance criteria. No target analytes were detected in this sample, therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/27/24

Date Received: 02/21/24

Project: 3245 158th Ave SE 2403-008, F&BI 402298

Date Extracted: 02/23/24

Date Analyzed: 02/23/24

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u>	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
Laboratory ID		
FB-04-5.0 402298-01	<5	95
FB-04-10.0 402298-02	<5	101
FB-05-5.0 402298-05	<5	99
FB-05-10.0 402298-06	<5	96
FB-06-5.0 402298-09	<5	98
FB-06-10.0 402298-10	<5	92
FB-07-5.0 402298-14	<5	97
FB-07-10.0 402298-15	<5	99
FB-08-5.0 402298-19	<5	94
FB-08-10.0 402298-20	<5	97

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/27/24

Date Received: 02/21/24

Project: 3245 158th Ave SE 2403-008, F&BI 402298

Date Extracted: 02/23/24

Date Analyzed: 02/23/24

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
FB-09-5.0 402298-23	<5	98
FB-09-10.0 402298-24	<5	101
FB-10-5.0 402298-27	<5	97
FB-10-10.0 402298-28	<5	97
FB-11-5.0 402298-31	<5	98
FB-11-10.0 402298-32	<5	95
SG-07-10.0 402298-35	<5	101
SG-08-5.0 402298-36	<5	94
SG-09-5.0 402298-37	<5	94
SG-10-5.0 402298-38	<5	97

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/27/24

Date Received: 02/21/24

Project: 3245 158th Ave SE 2403-008, F&BI 402298

Date Extracted: 02/23/24

Date Analyzed: 02/23/24

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u>	<u>Gasoline Range</u>	Surrogate (% Recovery)
Laboratory ID		(Limit 50-150)
SG-11-5.0 402298-39	<5	98
Method Blank 04-231 MB	<5	97
Method Blank 04-232 MB	<5	101

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/27/24

Date Received: 02/21/24

Project: 3245 158th Ave SE 2403-008, F&BI 402298

Date Extracted: 02/22/24

Date Analyzed: 02/22/24

**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)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
FB-04-5.0 402298-01	<50	<250	93
FB-04-10.0 402298-02	<50	<250	96
FB-05-5.0 402298-05	<50	<250	98
FB-05-10.0 402298-06	<50	<250	95
FB-06-5.0 402298-09	<50	<250	96
FB-06-10.0 402298-10	<50	<250	99
FB-07-5.0 402298-14	<50	<250	100
FB-07-10.0 402298-15	<50	<250	97
FB-08-5.0 402298-19	<50	<250	101
FB-08-10.0 402298-20	<50	<250	102

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/27/24

Date Received: 02/21/24

Project: 3245 158th Ave SE 2403-008, F&BI 402298

Date Extracted: 02/22/24

Date Analyzed: 02/22/24

**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)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
FB-09-5.0 402298-23	<50	<250	97
FB-09-10.0 402298-24	<50	<250	93
FB-10-5.0 402298-27	<50	<250	98
FB-10-10.0 402298-28	<50	<250	101
FB-11-5.0 402298-31	<50	<250	101
FB-11-10.0 402298-32	<50	<250	102
SG-07-10.0 402298-35	<50	<250	93
SG-08-5.0 402298-36	<50	<250	100
SG-09-5.0 402298-37	<50	<250	100
SG-10-5.0 402298-38	<50	<250	104



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/27/24

Date Received: 02/21/24

Project: 3245 158th Ave SE 2403-008, F&BI 402298

Date Extracted: 02/22/24

Date Analyzed: 02/22/24

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-D<sub>x</sub>**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
SG-11-5.0 402298-39	<50	<250	104
Method Blank 04-381 MB	<50	<250	95
Method Blank 04-382 MB	<50	<250	99

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-04-5.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-01
Date Analyzed:	02/22/24	Data File:	022211.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	86	114
Toluene-d8	95	86	115
4-Bromofluorobenzene	104	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-04-10.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-02
Date Analyzed:	02/22/24	Data File:	022212.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	86	114
Toluene-d8	99	86	115
4-Bromofluorobenzene	102	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID: FB-05-5.0	Client: Farallon Consulting, LLC
Date Received: 02/21/24	Project: 3245 158th Ave SE 2403-008
Date Extracted: 02/22/24	Lab ID: 402298-05
Date Analyzed: 02/22/24	Data File: 022213.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm) Dry Weight	Operator: MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	86	114
Toluene-d8	100	86	115
4-Bromofluorobenzene	108	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-05-10.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-06
Date Analyzed:	02/22/24	Data File:	022214.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	86	114
Toluene-d8	94	86	115
4-Bromofluorobenzene	101	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID: FB-06-5.0	Client: Farallon Consulting, LLC
Date Received: 02/21/24	Project: 3245 158th Ave SE 2403-008
Date Extracted: 02/22/24	Lab ID: 402298-09
Date Analyzed: 02/22/24	Data File: 022215.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm) Dry Weight	Operator: MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	86	114
Toluene-d8	98	86	115
4-Bromofluorobenzene	102	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-06-10.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-10
Date Analyzed:	02/22/24	Data File:	022216.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	86	114
Toluene-d8	98	86	115
4-Bromofluorobenzene	109	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-07-5.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-14
Date Analyzed:	02/22/24	Data File:	022217.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	86	114
Toluene-d8	96	86	115
4-Bromofluorobenzene	107	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID: FB-07-10.0	Client: Farallon Consulting, LLC
Date Received: 02/21/24	Project: 3245 158th Ave SE 2403-008
Date Extracted: 02/22/24	Lab ID: 402298-15
Date Analyzed: 02/22/24	Data File: 022218.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm) Dry Weight	Operator: MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	86	114
Toluene-d8	94	86	115
4-Bromofluorobenzene	107	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-08-5.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-19
Date Analyzed:	02/22/24	Data File:	022219.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	86	114
Toluene-d8	93	86	115
4-Bromofluorobenzene	103	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-08-10.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-20
Date Analyzed:	02/22/24	Data File:	022220.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	116 vo	86	114
Toluene-d8	95	86	115
4-Bromofluorobenzene	100	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-09-5.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-23
Date Analyzed:	02/22/24	Data File:	022221.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	86	114
Toluene-d8	98	86	115
4-Bromofluorobenzene	109	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-09-10.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-24
Date Analyzed:	02/22/24	Data File:	022207.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	86	114
Toluene-d8	96	86	115
4-Bromofluorobenzene	100	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-10-5.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-27
Date Analyzed:	02/22/24	Data File:	022222.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	86	114
Toluene-d8	97	86	115
4-Bromofluorobenzene	112	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID: FB-10-10.0	Client: Farallon Consulting, LLC
Date Received: 02/21/24	Project: 3245 158th Ave SE 2403-008
Date Extracted: 02/22/24	Lab ID: 402298-28
Date Analyzed: 02/22/24	Data File: 022223.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm) Dry Weight	Operator: MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	86	114
Toluene-d8	99	86	115
4-Bromofluorobenzene	101	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-11-5.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-31
Date Analyzed:	02/22/24	Data File:	022224.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	86	114
Toluene-d8	95	86	115
4-Bromofluorobenzene	107	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	FB-11-10.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-32
Date Analyzed:	02/22/24	Data File:	022225.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	86	114
Toluene-d8	94	86	115
4-Bromofluorobenzene	103	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	SG-07-10.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-35
Date Analyzed:	02/22/24	Data File:	022226.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	86	114
Toluene-d8	100	86	115
4-Bromofluorobenzene	105	83	116

Compounds:	Concentration mg/kg (ppm)
Benzene	<0.03
Toluene	<0.05
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	SG-08-5.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-36
Date Analyzed:	02/22/24	Data File:	022227.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	108	86	114
Toluene-d8	102	86	115
4-Bromofluorobenzene	109	83	116

Compounds:	Concentration mg/kg (ppm)
Benzene	<0.03
Toluene	<0.05
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	SG-09-5.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-37
Date Analyzed:	02/22/24	Data File:	022228.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	86	114
Toluene-d8	95	86	115
4-Bromofluorobenzene	102	83	116

Compounds:	Concentration mg/kg (ppm)
Benzene	<0.03
Toluene	<0.05
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	SG-10-5.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-38
Date Analyzed:	02/22/24	Data File:	022229.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	109	86	114
Toluene-d8	98	86	115
4-Bromofluorobenzene	108	83	116

Compounds:	Concentration mg/kg (ppm)
Benzene	<0.03
Toluene	<0.05
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	SG-11-5.0	Client:	Farallon Consulting, LLC
Date Received:	02/21/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	402298-39
Date Analyzed:	02/22/24	Data File:	022211.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	84	120
Toluene-d8	98	73	128
4-Bromofluorobenzene	105	57	146

Compounds:	Concentration mg/kg (ppm)
Benzene	<0.03
Toluene	<0.05
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	04-0448 mb
Date Analyzed:	02/22/24	Data File:	022206.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	86	114
Toluene-d8	97	86	115
4-Bromofluorobenzene	105	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05 k	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Extracted:	02/22/24	Lab ID:	04-0457 mb
Date Analyzed:	02/22/24	Data File:	022209.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	79	128
Toluene-d8	102	84	121
4-Bromofluorobenzene	101	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05 k	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	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)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	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	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/27/24

Date Received: 02/21/24

Project: 3245 158th Ave SE 2403-008, F&BI 402298

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TPH AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**

Laboratory Code: 402298-01 (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	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/27/24

Date Received: 02/21/24

Project: 3245 158th Ave SE 2403-008, F&BI 402298

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TPH AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**

Laboratory Code: 402298-02 (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	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/27/24

Date Received: 02/21/24

Project: 3245 158th Ave SE 2403-008, F&BI 402298

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-D<sub>x</sub>**

Laboratory Code: 402300-01 (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	<50	116	118	53-141	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	108	71-126

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/27/24

Date Received: 02/21/24

Project: 3245 158th Ave SE 2403-008, F&BI 402298

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-D<sub>x</sub>**

Laboratory Code: 402298-01 (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	<50	112	118	53-141	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	114	71-126



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 02/27/24

Date Received: 02/21/24

Project: 3245 158th Ave SE 2403-008, F&BI 402298

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

Laboratory Code: 402298-24 (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	54	54	10-142	0
Chloromethane	mg/kg (ppm)	2	<0.5	69	70	10-126	1
Vinyl chloride	mg/kg (ppm)	2	<0.05	72	67	10-138	7
Bromomethane	mg/kg (ppm)	2	<0.5	65	58	10-163	11
Chloroethane	mg/kg (ppm)	2	<0.5	78	66	10-176	17
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	91	88	10-176	3
Acetone	mg/kg (ppm)	10	<5	60	86	10-163	36 vo
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	82	78	10-160	5
Hexane	mg/kg (ppm)	2	<0.25	86	83	10-137	4
Methylene chloride	mg/kg (ppm)	2	<0.5	80	80	10-156	0
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	77	77	21-145	0
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	80	78	14-137	3
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	80	78	19-140	3
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	89	81	10-158	9
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	81	80	25-135	1
Chloroform	mg/kg (ppm)	2	<0.05	79	78	21-145	1
2-Butanone (MEK)	mg/kg (ppm)	10	<1	69	77	19-147	11
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	84	80	12-160	5
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	85	82	10-156	4
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	84	84	17-140	0
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	103	97	9-164	6
Benzene	mg/kg (ppm)	2	<0.03	82	79	29-129	4
Trichloroethene	mg/kg (ppm)	2	<0.02	80	79	21-139	1
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	81	81	30-135	0
Bromodichloromethane	mg/kg (ppm)	2	<0.05	82	81	23-155	1
Dibromomethane	mg/kg (ppm)	2	<0.05	83	81	23-145	2
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	82	79	24-155	4
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	84	80	28-144	5
Toluene	mg/kg (ppm)	2	<0.05	80	83	35-130	4
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	84	84	26-149	0
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	79	81	10-205	2
2-Hexanone	mg/kg (ppm)	10	<5	65	73	15-166	12
1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	84	84	31-137	0
Tetrachloroethene	mg/kg (ppm)	2	<0.025	83	82	20-133	1
Dibromochloromethane	mg/kg (ppm)	2	<0.05	78	74	28-150	5
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	79	82	28-142	4
Chlorobenzene	mg/kg (ppm)	2	<0.05	83	82	32-129	1
Ethylbenzene	mg/kg (ppm)	2	<0.05	85	84	32-137	1
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	83	84	31-143	1
m,p-Xylene	mg/kg (ppm)	4	<0.1	85	85	34-136	0
o-Xylene	mg/kg (ppm)	2	<0.05	78	80	33-134	3
Styrene	mg/kg (ppm)	2	<0.05	83	84	35-137	1
Isopropylbenzene	mg/kg (ppm)	2	<0.05	85	84	31-142	1
Bromoform	mg/kg (ppm)	2	<0.05	74	75	21-156	1
n-Propylbenzene	mg/kg (ppm)	2	<0.05	85	86	23-146	1
Bromobenzene	mg/kg (ppm)	2	<0.05	86	87	34-130	1
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	84	86	18-149	2
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	84	86	28-140	2
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	83	83	25-144	0
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	82	85	31-134	4
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	83	82	31-136	1
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	84	86	30-137	2
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	85	85	10-182	0
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	85	88	23-145	3
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	89	88	21-149	1
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	83	85	30-131	2
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	82	83	29-129	1
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	86	85	31-132	1
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	80	83	11-161	4
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	87	89	22-142	2
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	83	88	10-142	6
Naphthalene	mg/kg (ppm)	2	<0.05	85	87	14-157	2
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	86	87	20-144	1

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## ENVIRONMENTAL CHEMISTS

Date of Report: 02/27/24

Date Received: 02/21/24

Project: 3245 158th Ave SE 2403-008, F&BI 402298

### 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	59	10-146
Chloromethane	mg/kg (ppm)	2	71	27-133
Vinyl chloride	mg/kg (ppm)	2	75	22-139
Bromomethane	mg/kg (ppm)	2	68	10-201
Chloroethane	mg/kg (ppm)	2	68	10-163
Trichlorofluoromethane	mg/kg (ppm)	2	93	10-196
Acetone	mg/kg (ppm)	10	70	52-141
1,1-Dichloroethene	mg/kg (ppm)	2	82	47-128
Hexane	mg/kg (ppm)	2	83	43-142
Methylene chloride	mg/kg (ppm)	2	83	10-184
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	83	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2	82	64-132
1,1-Dichloroethane	mg/kg (ppm)	2	84	64-135
2,2-Dichloropropane	mg/kg (ppm)	2	87	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2	82	64-135
Chloroform	mg/kg (ppm)	2	82	61-139
2-Butanone (MEK)	mg/kg (ppm)	10	79	30-197
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	86	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	86	62-131
1,1-Dichloropropene	mg/kg (ppm)	2	84	64-136
Carbon tetrachloride	mg/kg (ppm)	2	105	60-139
Benzene	mg/kg (ppm)	2	84	65-136
Trichloroethene	mg/kg (ppm)	2	83	63-139
1,2-Dichloropropane	mg/kg (ppm)	2	86	61-145
Bromodichloromethane	mg/kg (ppm)	2	85	57-126
Dibromomethane	mg/kg (ppm)	2	82	62-123
4-Methyl-2-pentanone	mg/kg (ppm)	10	84	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2	82	65-143
Toluene	mg/kg (ppm)	2	86	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2	88	65-131
1,1,2-Trichloroethane	mg/kg (ppm)	2	83	62-131
2-Hexanone	mg/kg (ppm)	10	77	33-152
1,3-Dichloropropene	mg/kg (ppm)	2	90	67-128
Tetrachloroethene	mg/kg (ppm)	2	86	68-128
Dibromochloromethane	mg/kg (ppm)	2	82	55-121
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	79	66-129
Chlorobenzene	mg/kg (ppm)	2	91	67-128
Ethylbenzene	mg/kg (ppm)	2	91	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	86	64-121
m,p-Xylene	mg/kg (ppm)	4	90	68-128
o-Xylene	mg/kg (ppm)	2	84	67-129
Styrene	mg/kg (ppm)	2	87	67-129
Isopropylbenzene	mg/kg (ppm)	2	88	68-128
Bromoform	mg/kg (ppm)	2	78	56-132
n-Propylbenzene	mg/kg (ppm)	2	91	68-129
Bromobenzene	mg/kg (ppm)	2	90	69-128
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	89	69-129
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	89	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2	88	61-137
2-Chlorotoluene	mg/kg (ppm)	2	90	69-128
4-Chlorotoluene	mg/kg (ppm)	2	86	67-127
tert-Butylbenzene	mg/kg (ppm)	2	89	69-129
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	92	69-128
sec-Butylbenzene	mg/kg (ppm)	2	90	69-130
p-Isopropyltoluene	mg/kg (ppm)	2	91	69-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	87	69-127
1,4-Dichlorobenzene	mg/kg (ppm)	2	86	68-126
1,2-Dichlorobenzene	mg/kg (ppm)	2	90	69-127
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	85	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	95	64-135
Hexachlorobutadiene	mg/kg (ppm)	2	89	50-153
Naphthalene	mg/kg (ppm)	2	90	62-128
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	93	61-126

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## ENVIRONMENTAL CHEMISTS

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

Laboratory Code: 402305-01 (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	49 vo	50	50-150	2
Chloromethane	mg/kg (ppm)	2	<0.5	71	71	50-150	0
Vinyl chloride	mg/kg (ppm)	2	<0.05	77	78	50-150	1
Bromomethane	mg/kg (ppm)	2	<0.5	86	83	50-150	4
Chloroethane	mg/kg (ppm)	2	<0.5	82	79	50-150	4
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	77	78	50-150	1
Acetone	mg/kg (ppm)	10	<5	97	103	50-150	6
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	84	85	50-150	1
Hexane	mg/kg (ppm)	2	<0.25	81	84	50-150	4
Methylene chloride	mg/kg (ppm)	2	<0.5	85	87	50-150	2
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	91	92	50-150	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	87	89	50-150	2
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	90	90	50-150	0
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	103	100	50-150	3
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	90	91	50-150	1
Chloroform	mg/kg (ppm)	2	<0.05	89	89	50-150	0
2-Butanone (MEK)	mg/kg (ppm)	10	<1	94	88	50-150	7
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	87	89	50-150	2
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	88	89	50-150	1
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	88	89	50-150	1
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	90	91	50-150	1
Benzene	mg/kg (ppm)	2	<0.03	89	91	50-150	2
Trichloroethene	mg/kg (ppm)	2	<0.02	87	89	50-150	2
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	85	88	50-150	3
Bromodichloromethane	mg/kg (ppm)	2	<0.05	85	86	50-150	1
Dibromomethane	mg/kg (ppm)	2	<0.05	85	89	50-150	5
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	86	91	50-150	6
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	86	88	50-150	2
Toluene	mg/kg (ppm)	2	<0.05	83	88	50-150	6
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	81	87	50-150	7
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	81	85	50-150	5
2-Hexanone	mg/kg (ppm)	10	<0.5	94	98	50-150	4
1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	78	83	50-150	6
Tetrachloroethene	mg/kg (ppm)	2	<0.025	85	89	50-150	5
Dibromochloromethane	mg/kg (ppm)	2	<0.05	81	87	50-150	7
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	83	89	50-150	7
Chlorobenzene	mg/kg (ppm)	2	<0.05	83	89	50-150	7
Ethylbenzene	mg/kg (ppm)	2	<0.05	88	92	50-150	4
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	82	84	50-150	2
m,p-Xylene	mg/kg (ppm)	4	<0.1	86	91	50-150	6
o-Xylene	mg/kg (ppm)	2	<0.05	85	89	50-150	5
Styrene	mg/kg (ppm)	2	<0.05	86	89	50-150	3
Isopropylbenzene	mg/kg (ppm)	2	<0.05	85	89	50-150	5
Bromoform	mg/kg (ppm)	2	<0.05	79	84	50-150	6
n-Propylbenzene	mg/kg (ppm)	2	<0.05	91	95	50-150	4
Bromobenzene	mg/kg (ppm)	2	<0.05	86	90	50-150	5
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	91	92	50-150	1
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	88	87	50-150	1
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	87	90	50-150	3
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	88	92	50-150	4
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	89	91	50-150	2
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	88	92	50-150	4
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	89	93	50-150	4
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	90	93	50-150	3
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	92	95	50-150	3
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	89	92	50-150	3
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	88	90	50-150	2
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	89	91	50-150	2
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	86	85	50-150	1
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	90	96	50-150	6
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	96	97	50-150	1
Naphthalene	mg/kg (ppm)	2	<0.05	87	94	50-150	8
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	90	97	50-150	7

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## ENVIRONMENTAL CHEMISTS

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### 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	75	10-150
Chloromethane	mg/kg (ppm)	2	78	21-140
Vinyl chloride	mg/kg (ppm)	2	86	35-135
Bromomethane	mg/kg (ppm)	2	93	20-151
Chloroethane	mg/kg (ppm)	2	86	21-147
Trichlorofluoromethane	mg/kg (ppm)	2	91	47-143
Acetone	mg/kg (ppm)	10	126	13-169
1,1-Dichloroethene	mg/kg (ppm)	2	88	49-138
Hexane	mg/kg (ppm)	2	92	61-141
Methylene chloride	mg/kg (ppm)	2	89	25-146
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	92	65-129
trans-1,2-Dichloroethene	mg/kg (ppm)	2	91	62-126
1,1-Dichloroethane	mg/kg (ppm)	2	90	64-131
2,2-Dichloropropane	mg/kg (ppm)	2	114	76-150
cis-1,2-Dichloroethene	mg/kg (ppm)	2	92	62-127
Chloroform	mg/kg (ppm)	2	89	67-129
2-Butanone (MEK)	mg/kg (ppm)	10	116	19-171
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	92	73-123
1,1,1-Trichloroethane	mg/kg (ppm)	2	91	66-125
1,1-Dichloropropene	mg/kg (ppm)	2	90	70-131
Carbon tetrachloride	mg/kg (ppm)	2	96	53-135
Benzene	mg/kg (ppm)	2	94	70-130
Trichloroethene	mg/kg (ppm)	2	93	62-116
1,2-Dichloropropane	mg/kg (ppm)	2	91	70-130
Bromodichloromethane	mg/kg (ppm)	2	90	70-130
Dibromomethane	mg/kg (ppm)	2	95	70-130
4-Methyl-2-pentanone	mg/kg (ppm)	10	104	64-137
cis-1,3-Dichloropropene	mg/kg (ppm)	2	96	68-137
Toluene	mg/kg (ppm)	2	89	70-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2	88	70-130
1,1,2-Trichloroethane	mg/kg (ppm)	2	89	70-130
2-Hexanone	mg/kg (ppm)	10	121	55-145
1,3-Dichloropropene	mg/kg (ppm)	2	89	70-130
Tetrachloroethene	mg/kg (ppm)	2	91	69-131
Dibromochloromethane	mg/kg (ppm)	2	89	61-137
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	94	70-130
Chlorobenzene	mg/kg (ppm)	2	90	70-130
Ethylbenzene	mg/kg (ppm)	2	94	70-130
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	86	56-134
m,p-Xylene	mg/kg (ppm)	4	93	70-130
o-Xylene	mg/kg (ppm)	2	90	70-130
Styrene	mg/kg (ppm)	2	94	70-130
Isopropylbenzene	mg/kg (ppm)	2	90	67-131
Bromoform	mg/kg (ppm)	2	88	70-130
n-Propylbenzene	mg/kg (ppm)	2	93	70-130
Bromobenzene	mg/kg (ppm)	2	90	70-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	90	70-130
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	92	70-130
1,2,3-Trichloropropane	mg/kg (ppm)	2	90	70-130
2-Chlorotoluene	mg/kg (ppm)	2	89	70-130
4-Chlorotoluene	mg/kg (ppm)	2	91	70-130
tert-Butylbenzene	mg/kg (ppm)	2	93	70-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	90	70-130
sec-Butylbenzene	mg/kg (ppm)	2	91	68-131
p-Isopropyltoluene	mg/kg (ppm)	2	93	70-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	91	70-130
1,4-Dichlorobenzene	mg/kg (ppm)	2	91	70-130
1,2-Dichlorobenzene	mg/kg (ppm)	2	87	70-130
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	85	70-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	84	66-140
Hexachlorobutadiene	mg/kg (ppm)	2	91	67-141
Naphthalene	mg/kg (ppm)	2	82	69-119
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	84	66-138

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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.

402298

## SAMPLE CHAIN OF CUSTODY

02/21/24 Du/23

Page # 1 of 4

Report To Musaf PehlivanCompany FarallonAddress 975 5th Ave NWCity, State, ZIP Issaquah, WA 98027Phone (425) 295 0800 Email musafpehlivan@farallonconsulting.comSAMPLERS (signature) Amel

PROJECT NAME

3245 158th Ave SE

PO #

2405-008

REMARKS

INVOICE TO

Project specific RLS? - Yes / No

AP

TURNAROUND TIME

☐ Standard turnaround☐ RUSH

Rush charges authorized by: \_\_\_\_\_

SAMPLE DISPOSAL

☐ Archive samples☐ Other \_\_\_\_\_

Default: Dispose after 30 days

## ANALYSES REQUESTED

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	Notes
FB-04-5.0	01 A-E	2/19/24	0955	Soil	5	X	X			X			X-PR-1P M-2/24 HOLD contact analysts
FB-04-10.0	02		0957			X	X			X			
FB-04-15.0	03		1006										
FB-04-20.0	04		1013										
FB-05-5.0	05		1052			X	X			X			
FB-05-10.0	06		1058			X	X			X			
FB-05-15.0	07		1100										
FB-05-20.0	08		1115										
FB-06-5.0	09		1220			X	X			X			
FB-06-10.0	10		1224			X	X			X			

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

SIGNATURE

Relinquished by: Amel

PRINT NAME

Received by: AmelAmel Bruya

COMPANY

Relinquished by:

AmelVINAT

DATE

FLNFDI

TIME

2/21/242-21-2408301200

Received by:

Samples received at 4 °C

# SAMPLE CHAIN OF CUSTODY

02/21/24

Dr / N3

Page # 2 of 4

402298

SAMPLERS (signature) *Antoine*

Report To

Company

Address

City, State, ZIP

Phone Email

*see page 1*

PROJECT NAME

*see page 1*

PO #

REMARKS

INVOICE TO

Project specific RIs? - Yes / No

TURNAROUND TIME  
☐ Standard turnaround  
☐ RUSH  
 Rush charges authorized by:  
 SAMPLE DISPOSAL  
☐ Archive samples  
☐ Other  
 Default: Dispose after 30 days

## ANALYSES REQUESTED

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	Notes
FB-06-15.0	11 A-E	2-14-24	1225	Soil	5								X-12-YP 145-2/21 Notes Contact for analysis
FB-06-16.5	12		1229										
FB-06-20.0	13		1230										
FB-07-5.0	14		1358			X	X			X			
FB-07-10.0	15		1400			X	X			X			
FB-07-14.0	16		1413										
FB-07-15.0	17 A-D		1404										
FB-07-20.0	18 A-E		1415										
FB-08-5.0	19		1450			X	X			X			
FB-08-10.0	20		1451			X	X			X			

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

*Antoine*

*Angie Dumar*

*Furadan*

2/21/24

0836

Friedman & Bruya, Inc.

Received by:

*Wm*

*UNIT*

FB1

2-21-24

1200

Relinquished by:

*Wm*

*UNIT*

FB1

2-21-24

1200

Received by:

*Wm*

*UNIT*

FB1

2-21-24

1200

Samples received at 4 °C



402298

SAMPLE CHAIN OF CUSTODY

02/21/24

Page # 3 of 4

Report To

Company

Address

City, State, ZIP

Phone

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

Project specific RLS? - Yes / No

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	ANALYSES REQUESTED							Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	
FB-08-15.0	21 A-E	2-19-24	1454	Soil	5								x-1st yr M02/1-1 Notes
FB-08-20.0	22		1501										Hold - for analysis
FB-09-5.0	23		1602			x	x		x				
FB-09-10.0	24		1603			x	x		x				
FB-09-15.0	25		1612										
FB-09-20.0	26		1614										
FB-10-5.0	27	2-20-24	0917			x	x		x				
FB-10-10.0	28		0919			x	x						
FB-10-15.0	29		0926										
FB-10-20.0	30		0930										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Angie Brown

Furallson

2/21/24

0830

Received by:

Wen

VINATA

FB1

2-21-24

1200

Relinquished by:

Received by:

Samples received at 4 °C

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

# SAMPLE CHAIN OF CUSTODY

02/21/24

Page # 4 of 4

402298

SAMPLERS (signature)

*Amber*

TURNAROUND TIME

4 4 13

D4

Report To \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City, State, ZIP \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

PROJECT NAME

PO #

REMARKS

*See page 1*

INVOICE TO

Project specific RLS? - Yes / No

☐ Standard turnaround

☐ RUSH

Rush charges authorized by: \_\_\_\_\_

SAMPLE DISPOSAL

☐ Archive samples

☐ Other \_\_\_\_\_

Default: Dispose after 30 days

## ANALYSES REQUESTED

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	Notes
FB-11-5.0	31 A-E	2/20/24	1052	Soil	5	x	x			x			x-pr 402298
FB-11-10.0	32		1112			x	x						↑
FB-11-17.0	33		1115										↑
FB-11-20.6	34		1116										↑
SG-07-10.0	35		1215			x	x	x					↑
SG-08-5.0	36		1303			x	x	x					↑
SG-09-5.0	37		1500			x	x	x					↑
SG-10-5.0	38		1542			x	x	x					↑
SG-11-5.0	39		1625			x	x	x					↑
	40												↑

↑ Contact PM for analysis

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: *Amber*

*Annie Dorman*

*Farallon*

2/21/24

0830

Received by: *lll*

*VINTA*

*FB1*

2-21-24

12:00

Relinquished by:

Received by:

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

Samples received at 4 °C

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

May 13, 2024

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on May 6, 2024 from the 3245 158th Ave SE 2403-008, F&BI 405104 project. There are 13 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  
FLN0513R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 6, 2024 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 405104 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
405104 -01	B-2-050624
405104 -02	FMW-03-050624
405104 -03	FMW-02-050624
405104 -04	FMW-01-050624
405104 -05	Trip Blank

The 8260D calibration standard did not meet the acceptance criteria for acetone. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/13/24

Date Received: 05/06/24

Project: 3245 158th Ave SE 2403-008, F&BI 405104

Date Extracted: 05/08/24

Date Analyzed: 05/08/24

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**  
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
B-2-050624 405104-01	<100	85
FMW-03-050624 405104-02	<100	84
FMW-02-050624 405104-03	<100	85
FMW-01-050624 405104-04	<100	79
Method Blank 04-881 MB	<100	85

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/13/24

Date Received: 05/06/24

Project: 3245 158th Ave SE 2403-008, F&BI 405104

Date Extracted: 05/07/24

Date Analyzed: 05/07/24

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-D<sub>x</sub>**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> (% Recovery) (Limit 50-150)
B-2-050624 405104-01	<50	<250	104
FMW-03-050624 405104-02	<50	<250	107
FMW-02-050624 405104-03	<50	<250	109
FMW-01-050624 405104-04	<50	<250	104
Method Blank 04-1122 MB2	<50	<250	104

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	B-2-050624	Client:	Farallon Consulting, LLC
Date Received:	05/06/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	05/08/24	Lab ID:	405104-01
Date Analyzed:	05/08/24	Data File:	050817.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	78	126
Toluene-d8	99	84	115
4-Bromofluorobenzene	101	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	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		



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FMW-03-050624	Client:	Farallon Consulting, LLC
Date Received:	05/06/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	05/08/24	Lab ID:	405104-02
Date Analyzed:	05/08/24	Data File:	050818.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	78	126
Toluene-d8	100	84	115
4-Bromofluorobenzene	97	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	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		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	FMW-02-050624	Client:	Farallon Consulting, LLC
Date Received:	05/06/24	Project:	3245 158th Ave SE 2403-008
Date Extracted:	05/08/24	Lab ID:	405104-03
Date Analyzed:	05/08/24	Data File:	050819.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	78	126
Toluene-d8	97	84	115
4-Bromofluorobenzene	97	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	1.7
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	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		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID: FMW-01-050624	Client: Farallon Consulting, LLC
Date Received: 05/06/24	Project: 3245 158th Ave SE 2403-008
Date Extracted: 05/08/24	Lab ID: 405104-04
Date Analyzed: 05/08/24	Data File: 050820.D
Matrix: Water	Instrument: GCMS11
Units: ug/L (ppb)	Operator: IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	91	78	126
Toluene-d8	101	84	115
4-Bromofluorobenzene	97	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	4.2
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	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		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Extracted:	05/08/24	Lab ID:	04-1066 mb
Date Analyzed:	05/08/24	Data File:	050809.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	78	126
Toluene-d8	97	84	115
4-Bromofluorobenzene	98	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	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		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/13/24

Date Received: 05/06/24

Project: 3245 158th Ave SE 2403-008, F&BI 405104

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TPH AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**

Laboratory Code: 405104-01 (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	100	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/13/24

Date Received: 05/06/24

Project: 3245 158th Ave SE 2403-008, F&BI 405104

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-D<sub>x</sub>**

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	104	104	72-139	0

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 05/13/24

Date Received: 05/06/24

Project: 3245 158th Ave SE 2403-008, F&BI 405104

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

Laboratory Code: 405104-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Dichlorodifluoromethane	ug/L (ppb)	10	<1	85	30-221
Chloromethane	ug/L (ppb)	10	<10	86	50-150
Vinyl chloride	ug/L (ppb)	10	<0.02	93	50-150
Bromomethane	ug/L (ppb)	10	<5	100	50-150
Chloroethane	ug/L (ppb)	10	<1	103	50-150
Trichlorofluoromethane	ug/L (ppb)	10	<1	97	50-150
Acetone	ug/L (ppb)	50	<50	75	18-161
1,1-Dichloroethene	ug/L (ppb)	10	<1	95	50-150
Hexane	ug/L (ppb)	10	<5	94	50-150
Methylene chloride	ug/L (ppb)	10	<5	95	50-150
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	<1	98	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	99	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	96	50-150
2,2-Dichloropropane	ug/L (ppb)	10	<1	98	43-171
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	97	10-211
Chloroform	ug/L (ppb)	10	<1	97	50-150
2-Butanone (MEK)	ug/L (ppb)	50	<20	84	10-192
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<0.2	96	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	97	50-150
1,1-Dichloropropene	ug/L (ppb)	10	<1	94	50-150
Carbon tetrachloride	ug/L (ppb)	10	<0.5	97	50-150
Benzene	ug/L (ppb)	10	<0.35	99	50-150
Trichloroethene	ug/L (ppb)	10	<0.5	96	35-149
1,2-Dichloropropane	ug/L (ppb)	10	<1	92	50-150
Bromodichloromethane	ug/L (ppb)	10	<0.5	95	50-150
Dibromomethane	ug/L (ppb)	10	<1	98	50-150
4-Methyl-2-pentanone	ug/L (ppb)	50	<10	95	50-150
cis-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	90	50-150
Toluene	ug/L (ppb)	10	<1	99	50-150
trans-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	92	50-150
1,1,2-Trichloroethane	ug/L (ppb)	10	<0.5	93	50-150
2-Hexanone	ug/L (ppb)	50	<10	88	50-150
1,3-Dichloropropane	ug/L (ppb)	10	<1	93	50-150
Tetrachloroethene	ug/L (ppb)	10	<1	101	50-150
Dibromochloromethane	ug/L (ppb)	10	<0.5	97	50-150
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	<0.01	99	50-150
Chlorobenzene	ug/L (ppb)	10	<1	95	50-150
Ethylbenzene	ug/L (ppb)	10	<1	100	50-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	<1	97	50-150
m,p-Xylene	ug/L (ppb)	20	<2	99	50-150
o-Xylene	ug/L (ppb)	10	<1	99	50-150
Styrene	ug/L (ppb)	10	<1	89	50-150
Isopropylbenzene	ug/L (ppb)	10	<1	95	50-150
Bromoform	ug/L (ppb)	10	<5	91	50-150
n-Propylbenzene	ug/L (ppb)	10	<1	94	50-150
Bromobenzene	ug/L (ppb)	10	<1	97	50-150
1,3,5-Trimethylbenzene	ug/L (ppb)	10	<1	95	50-150
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	<0.2	100	50-150
1,2,3-Trichloropropane	ug/L (ppb)	10	<1	95	50-150
2-Chlorotoluene	ug/L (ppb)	10	<1	95	50-150
4-Chlorotoluene	ug/L (ppb)	10	<1	94	50-150
tert-Butylbenzene	ug/L (ppb)	10	<1	94	50-150
1,2,4-Trimethylbenzene	ug/L (ppb)	10	<1	93	50-150
sec-Butylbenzene	ug/L (ppb)	10	<1	97	50-150
p-Isopropyltoluene	ug/L (ppb)	10	<1	97	50-150
1,3-Dichlorobenzene	ug/L (ppb)	10	<1	95	50-150
1,4-Dichlorobenzene	ug/L (ppb)	10	<1	96	50-150
1,2-Dichlorobenzene	ug/L (ppb)	10	<1	95	50-150
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	<10	94	50-150
1,2,4-Trichlorobenzene	ug/L (ppb)	10	<1	96	50-150
Hexachlorobutadiene	ug/L (ppb)	10	<0.5	97	50-150
Naphthalene	ug/L (ppb)	10	<1	95	50-150
1,2,3-Trichlorobenzene	ug/L (ppb)	10	<1	95	50-150

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 05/13/24

Date Received: 05/06/24

Project: 3245 158th Ave SE 2403-008, F&BI 405104

### 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	88	88	46-206	0
Chloromethane	ug/L (ppb)	10	88	90	59-132	2
Vinyl chloride	ug/L (ppb)	10	93	93	64-142	0
Bromomethane	ug/L (ppb)	10	97	104	50-197	7
Chloroethane	ug/L (ppb)	10	99	97	70-130	2
Trichlorofluoromethane	ug/L (ppb)	10	97	95	51-159	2
Acetone	ug/L (ppb)	50	69	76	10-140	10
1,1-Dichloroethene	ug/L (ppb)	10	94	92	64-140	2
Hexane	ug/L (ppb)	10	99	97	54-136	2
Methylene chloride	ug/L (ppb)	10	98	94	43-134	4
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	97	95	70-130	2
trans-1,2-Dichloroethene	ug/L (ppb)	10	97	93	70-130	4
1,1-Dichloroethane	ug/L (ppb)	10	94	92	70-130	2
2,2-Dichloropropane	ug/L (ppb)	10	109	106	64-148	3
cis-1,2-Dichloroethene	ug/L (ppb)	10	98	93	70-130	5
Chloroform	ug/L (ppb)	10	94	91	70-130	3
2-Butanone (MEK)	ug/L (ppb)	50	86	93	47-112	8
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	99	97	70-130	2
1,1,1-Trichloroethane	ug/L (ppb)	10	99	96	70-130	3
1,1-Dichloropropene	ug/L (ppb)	10	90	94	70-130	4
Carbon tetrachloride	ug/L (ppb)	10	100	100	70-130	0
Benzene	ug/L (ppb)	10	99	97	70-130	2
Trichloroethene	ug/L (ppb)	10	96	92	70-130	4
1,2-Dichloropropane	ug/L (ppb)	10	91	91	70-130	0
Bromodichloromethane	ug/L (ppb)	10	96	95	70-130	1
Dibromomethane	ug/L (ppb)	10	104	92	70-130	12
4-Methyl-2-pentanone	ug/L (ppb)	50	99	95	68-130	4
cis-1,3-Dichloropropene	ug/L (ppb)	10	94	90	69-131	4
Toluene	ug/L (ppb)	10	102	97	70-130	5
trans-1,3-Dichloropropene	ug/L (ppb)	10	96	93	70-130	3
1,1,2-Trichloroethane	ug/L (ppb)	10	96	93	70-130	3
2-Hexanone	ug/L (ppb)	50	98	93	45-138	5
1,3-Dichloropropene	ug/L (ppb)	10	94	95	70-130	1
Tetrachloroethene	ug/L (ppb)	10	105	101	70-130	4
Dibromochloromethane	ug/L (ppb)	10	99	94	60-148	5
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	102	98	70-130	4
Chlorobenzene	ug/L (ppb)	10	96	94	70-130	2
Ethylbenzene	ug/L (ppb)	10	103	99	70-130	4
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	104	99	70-130	5
m,p-Xylene	ug/L (ppb)	20	102	98	70-130	4
o-Xylene	ug/L (ppb)	10	101	96	70-130	5
Styrene	ug/L (ppb)	10	89	85	70-130	5
Isopropylbenzene	ug/L (ppb)	10	98	95	70-130	3
Bromoform	ug/L (ppb)	10	96	93	69-138	3
n-Propylbenzene	ug/L (ppb)	10	95	92	70-130	3
Bromobenzene	ug/L (ppb)	10	100	96	70-130	4
1,3,5-Trimethylbenzene	ug/L (ppb)	10	95	91	70-130	4
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	103	99	70-130	4
1,2,3-Trichloropropane	ug/L (ppb)	10	99	94	70-130	5
2-Chlorotoluene	ug/L (ppb)	10	97	90	70-130	7
4-Chlorotoluene	ug/L (ppb)	10	97	93	70-130	4
tert-Butylbenzene	ug/L (ppb)	10	97	91	70-130	6
1,2,4-Trimethylbenzene	ug/L (ppb)	10	96	91	70-130	5
sec-Butylbenzene	ug/L (ppb)	10	98	93	70-130	5
p-Isopropyltoluene	ug/L (ppb)	10	98	91	70-130	7
1,3-Dichlorobenzene	ug/L (ppb)	10	100	95	70-130	5
1,4-Dichlorobenzene	ug/L (ppb)	10	98	94	70-130	4
1,2-Dichlorobenzene	ug/L (ppb)	10	98	94	70-130	4
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	99	93	70-130	6
1,2,4-Trichlorobenzene	ug/L (ppb)	10	94	88	70-130	7
Hexachlorobutadiene	ug/L (ppb)	10	98	89	70-130	10
Naphthalene	ug/L (ppb)	10	90	83	70-130	8
1,2,3-Trichlorobenzene	ug/L (ppb)	10	97	88	70-130	10



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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.

11474/

Page # 1 of 11☒ Standard turnaround

☐ RUSH \_\_\_\_\_

## SAMPLE DISPOSAL

☐ Other \_\_\_\_\_

Default: Dispose after 30 days

Page # 1 of 11 Feb 2006

**TURNAROUND TIME**

☒ Standard turnaround

☐ RUSH \_\_\_\_\_

Rush charges authorized by: \_\_\_\_\_

\_\_\_\_\_

**SAMPLE DISPOSAL**

☐ Archive samples

☐ Other \_\_\_\_\_

Default: Dispose after 30 days

ANALYSES REQUESTED										
Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Notes
1105	H <sub>2</sub> O	3	X	X			X			
1146	I	I	X	X			X			
234	I	I	X	X			X			
341	I	I	X	X			X			
—	H <sub>2</sub> O	2								
Added at lab NS 5/6/24										
Samples received at 4 °C										

TIME

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1

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 405104 CLIENT Aspect INITIALS/ DATE: 5/16/24

If custody seals are present on cooler, are they intact? YES NA NO

Cooler/Sample temperature 4 °C

Were samples received on ice/cold packs? YES NO

How did samples arrive? Over the Counter Picked up by F&BI FedEx/UPS/GSO

Is there a Chain-of-Custody\* (COC)? YES NO

Number of days samples have been sitting prior to receipt at laboratory 8 days

Are the samples clearly identified? (explain "no" answer below) YES NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) YES NO

Were appropriate sample containers used? YES NO Unknown

If custody seals are present on samples, are they intact? YES NA NO

Are samples requiring no headspace, headspace free? YES NA NO

Is the following information provided on the COC, and does it match the sample label? (explain "no" answer below)

Sample ID's YES NO Date Sampled YES NO Time Sampled YES NO # of Containers YES NO Relinquished YES NO Requested analysis YES NO On Hold

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? YES NA NO

Number of unused TO15 canisters

Number of unused TO17 tubes

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.

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www.friedmanandbruya.com

July 24, 2024

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on July 10, 2024 from the 3245 158th Ave SE 2403-008, F&BI 407106 project. There are 21 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  
FLN0724R.DOC

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on July 10, 2024 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 407106 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
407106 -01	SG-10-070924
407106 -02	SG-08-070924
407106 -03	SG-09-070924
407106 -04	SG-05-071024
407106 -05	SG-06-071024
407106 -06	SG-11-071024

Non-petroleum compounds identified in the air phase hydrocarbon (APH) ranges were subtracted per the MA-APH method.

The butane concentration in sample SG-06-071024 exceeded the calibration range of the instrument. The data were flagged accordingly.

All other quality control requirements were acceptable.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-10-070924	Client:	Farallon Consulting, LLC
Date Received:	07/10/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	07/09/24	Lab ID:	407106-01 1/9.2
Date Analyzed:	07/16/24	Data File:	071623.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	86	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	930
APH EC9-12 aliphatics	480
APH EC9-10 aromatics	<230

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-08-070924	Client:	Farallon Consulting, LLC
Date Received:	07/10/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	07/09/24	Lab ID:	407106-02 1/20
Date Analyzed:	07/17/24	Data File:	071625.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	84	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	2,000
APH EC9-12 aliphatics	1,100
APH EC9-10 aromatics	<500

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-09-070924	Client:	Farallon Consulting, LLC
Date Received:	07/10/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	07/09/24	Lab ID:	407106-03 1/19
Date Analyzed:	07/17/24	Data File:	071626.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	3,100
APH EC9-12 aliphatics	3,000
APH EC9-10 aromatics	<470



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-05-071024	Client:	Farallon Consulting, LLC
Date Received:	07/10/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	07/09/24	Lab ID:	407106-04 1/8.7
Date Analyzed:	07/16/24	Data File:	071620.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	86	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	830
APH EC9-12 aliphatics	470
APH EC9-10 aromatics	<220

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-06-071024	Client:	Farallon Consulting, LLC
Date Received:	07/10/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	07/09/24	Lab ID:	407106-05 1/9.6
Date Analyzed:	07/16/24	Data File:	071624.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	86	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	1,900
APH EC9-12 aliphatics	1,000
APH EC9-10 aromatics	<240

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-11-071024	Client:	Farallon Consulting, LLC
Date Received:	07/10/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	07/09/24	Lab ID:	407106-06 1/9.2
Date Analyzed:	07/16/24	Data File:	071622.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	85	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	850
APH EC9-12 aliphatics	620
APH EC9-10 aromatics	<230

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Collected:	Not Applicable	Lab ID:	04-1582 mb
Date Analyzed:	07/16/24	Data File:	071612.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	83	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	<75
APH EC9-12 aliphatics	<25
APH EC9-10 aromatics	<25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-10-070924	Client:	Farallon Consulting, LLC
Date Received:	07/10/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	07/09/24	Lab ID:	407106-01 1/9.2
Date Analyzed:	07/16/24	Data File:	071623.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates:			
4-Bromofluorobenzene	87	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<13	<7.4	1,2-Dichloropropane	<2.1	<0.46
Dichlorodifluoromethane	<9.1	<1.8	1,4-Dioxane	<3.3	<0.92
Chloromethane	<34	<17	2,2,4-Trimethylpentane	<43	<9.2
F-114	<19	<2.8	Methyl methacrylate	<38	<9.2
Vinyl chloride	<2.4	<0.92	Heptane	<38	<9.2
1,3-Butadiene	<0.41	<0.18	Bromodichloromethane	0.74	0.11
Butane	<44	<18	Trichloroethene	<0.99	<0.18
Bromomethane	<36	<9.2	cis-1,3-Dichloropropene	<8.4	<1.8
Chloroethane	<24	<9.2	4-Methyl-2-pentanone	<75	<18
Vinyl bromide	<4	<0.92	trans-1,3-Dichloropropene	<4.2	<0.92
Ethanol	<69	<37	Toluene	<69	<18
Acrolein	<1.1	<0.46	1,1,2-Trichloroethane	<0.5	<0.092
Pentane	<54	<18	2-Hexanone	<38	<9.2
Trichlorofluoromethane	<21	<3.7	Tetrachloroethene	<62	<9.2
Acetone	<44	<18	Dibromochloromethane	<0.78	<0.092
2-Propanol	<79	<32	1,2-Dibromoethane (EDB)	<0.71	<0.092
1,1-Dichloroethene	<3.6	<0.92	Chlorobenzene	<4.2	<0.92
trans-1,2-Dichloroethene	<3.6	<0.92	Ethylbenzene	<4	<0.92
Methylene chloride	<320	<92	1,1,2,2-Tetrachloroethane	<1.3	<0.18
t-Butyl alcohol (TBA)	<110	<37	Nonane	<48	<9.2
3-Chloropropene	<29	<9.2	Isopropylbenzene	<90	<18
CFC-113	<14	<1.8	2-Chlorotoluene	<48	<9.2
Carbon disulfide	<57	<18	Propylbenzene	<45	<9.2
Methyl t-butyl ether (MTBE)	<66	<18	4-Ethyltoluene	<45	<9.2
Vinyl acetate	<65	<18	m,p-Xylene	<8	<1.8
1,1-Dichloroethane	<3.7	<0.92	o-Xylene	<4	<0.92
cis-1,2-Dichloroethene	<3.6	<0.92	Styrene	<7.8	<1.8
Hexane	<32	<9.2	Bromoform	<19	<1.8
Chloroform	1.9	0.39	Benzyl chloride	<0.48	<0.092
Ethyl acetate	<66	<18	1,3,5-Trimethylbenzene	<45	<9.2
Tetrahydrofuran	<8.1	<2.8	1,2,4-Trimethylbenzene	<45	<9.2
2-Butanone (MEK)	<54	<18	1,3-Dichlorobenzene	<5.5	<0.92
1,2-Dichloroethane (EDC)	<0.37	<0.092	1,4-Dichlorobenzene	<2.1	<0.35
1,1,1-Trichloroethane	<5	<0.92	1,2-Dichlorobenzene	<5.5	<0.92
Carbon tetrachloride	<2.9	<0.46	1,2,4-Trichlorobenzene	<6.8	<0.92
Benzene	<2.9	<0.92	Naphthalene	<0.68	<0.13
Cyclohexane	<63	<18	Hexachlorobutadiene	<2	<0.18

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SG-08-070924	Client: Farallon Consulting, LLC
Date Received: 07/10/24	Project: 3245 158th Ave SE 2403-008
Date Collected: 07/09/24	Lab ID: 407106-02 1/20
Date Analyzed: 07/17/24	Data File: 071625.D
Matrix: Air	Instrument: GCMS8
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	84	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<28	<16	1,2-Dichloropropane	<4.6	<1
Dichlorodifluoromethane	<20	<4	1,4-Dioxane	<7.2	<2
Chloromethane	<74	<36	2,2,4-Trimethylpentane	<93	<20
F-114	<42	<6	Methyl methacrylate	<82	<20
Vinyl chloride	<5.1	<2	Heptane	<82	<20
1,3-Butadiene	<0.88	<0.4	Bromodichloromethane	1.5	0.22
Butane	<95	<40	Trichloroethene	<2.1	<0.4
Bromomethane	<78	<20	cis-1,3-Dichloropropene	<18	<4
Chloroethane	<53	<20	4-Methyl-2-pentanone	<160	<40
Vinyl bromide	<8.7	<2	trans-1,3-Dichloropropene	<9.1	<2
Ethanol	<150	<80	Toluene	<150	<40
Acrolein	<2.3	<1	1,1,2-Trichloroethane	<1.1	<0.2
Pentane	<120	<40	2-Hexanone	<82	<20
Trichlorofluoromethane	<45	<8	Tetrachloroethene	<140	<20
Acetone	<95	<40	Dibromochloromethane	<1.7	<0.2
2-Propanol	<170	<70	1,2-Dibromoethane (EDB)	<1.5	<0.2
1,1-Dichloroethene	<7.9	<2	Chlorobenzene	<9.2	<2
trans-1,2-Dichloroethene	<7.9	<2	Ethylbenzene	<8.7	<2
Methylene chloride	<690	<200	1,1,2,2-Tetrachloroethane	<2.7	<0.4
t-Butyl alcohol (TBA)	<240	<80	Nonane	<100	<20
3-Chloropropene	<63	<20	Isopropylbenzene	<200	<40
CFC-113	<31	<4	2-Chlorotoluene	<100	<20
Carbon disulfide	<120	<40	Propylbenzene	<98	<20
Methyl t-butyl ether (MTBE)	<140	<40	4-Ethyltoluene	<98	<20
Vinyl acetate	<140	<40	m,p-Xylene	<17	<4
1,1-Dichloroethane	<8.1	<2	o-Xylene	<8.7	<2
cis-1,2-Dichloroethene	<7.9	<2	Styrene	<17	<4
Hexane	<70	<20	Bromoform	<41	<4
Chloroform	2.5	0.52	Benzyl chloride	<1	<0.2
Ethyl acetate	<140	<40	1,3,5-Trimethylbenzene	<98	<20
Tetrahydrofuran	<18	<6	1,2,4-Trimethylbenzene	<98	<20
2-Butanone (MEK)	<120	<40	1,3-Dichlorobenzene	<12	<2
1,2-Dichloroethane (EDC)	<0.81	<0.2	1,4-Dichlorobenzene	<4.6	<0.76
1,1,1-Trichloroethane	<11	<2	1,2-Dichlorobenzene	<12	<2
Carbon tetrachloride	<6.3	<1	1,2,4-Trichlorobenzene	<15	<2
Benzene	8.4	2.6	Naphthalene	<1.5	<0.28
Cyclohexane	<140	<40	Hexachlorobutadiene	<4.3	<0.4

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SG-09-070924	Client: Farallon Consulting, LLC
Date Received: 07/10/24	Project: 3245 158th Ave SE 2403-008
Date Collected: 07/09/24	Lab ID: 407106-03 1/19
Date Analyzed: 07/17/24	Data File: 071626.D
Matrix: Air	Instrument: GCMS8
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<26	<15	1,2-Dichloropropane	<4.4	<0.95
Dichlorodifluoromethane	<19	<3.8	1,4-Dioxane	<6.8	<1.9
Chloromethane	<71	<34	2,2,4-Trimethylpentane	<89	<19
F-114	<40	<5.7	Methyl methacrylate	<78	<19
Vinyl chloride	<4.9	<1.9	Heptane	<78	<19
1,3-Butadiene	<0.84	<0.38	Bromodichloromethane	<1.3	<0.19
Butane	110	48	Trichloroethene	<2	<0.38
Bromomethane	<74	<19	cis-1,3-Dichloropropene	<17	<3.8
Chloroethane	<50	<19	4-Methyl-2-pentanone	<160	<38
Vinyl bromide	<8.3	<1.9	trans-1,3-Dichloropropene	<8.6	<1.9
Ethanol	<140	<76	Toluene	<140	<38
Acrolein	2.6	1.1	1,1,2-Trichloroethane	<1	<0.19
Pentane	<110	<38	2-Hexanone	<78	<19
Trichlorofluoromethane	<43	<7.6	Tetrachloroethene	<130	<19
Acetone	210	89	Dibromochloromethane	<1.6	<0.19
2-Propanol	<160	<66	1,2-Dibromoethane (EDB)	<1.5	<0.19
1,1-Dichloroethene	<7.5	<1.9	Chlorobenzene	<8.7	<1.9
trans-1,2-Dichloroethene	<7.5	<1.9	Ethylbenzene	<8.3	<1.9
Methylene chloride	<660	<190	1,1,2,2-Tetrachloroethane	<2.6	<0.38
t-Butyl alcohol (TBA)	<230	<76	Nonane	<100	<19
3-Chloropropene	<59	<19	Isopropylbenzene	<190	<38
CFC-113	<29	<3.8	2-Chlorotoluene	<98	<19
Carbon disulfide	<120	<38	Propylbenzene	<93	<19
Methyl t-butyl ether (MTBE)	<140	<38	4-Ethyltoluene	<93	<19
Vinyl acetate	<130	<38	m,p-Xylene	<17	<3.8
1,1-Dichloroethane	<7.7	<1.9	o-Xylene	<8.3	<1.9
cis-1,2-Dichloroethene	<7.5	<1.9	Styrene	<16	<3.8
Hexane	<67	<19	Bromoform	<39	<3.8
Chloroform	<0.93	<0.19	Benzyl chloride	<0.98	<0.19
Ethyl acetate	<140	<38	1,3,5-Trimethylbenzene	<93	<19
Tetrahydrofuran	<17	<5.7	1,2,4-Trimethylbenzene	<93	<19
2-Butanone (MEK)	<110	<38	1,3-Dichlorobenzene	<11	<1.9
1,2-Dichloroethane (EDC)	<0.77	<0.19	1,4-Dichlorobenzene	<4.3	<0.72
1,1,1-Trichloroethane	<10	<1.9	1,2-Dichlorobenzene	<11	<1.9
Carbon tetrachloride	<6	<0.95	1,2,4-Trichlorobenzene	<14	<1.9
Benzene	<6.1	<1.9	Naphthalene	<1.4	<0.27
Cyclohexane	<130	<38	Hexachlorobutadiene	<4.1	<0.38

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-05-071024	Client:	Farallon Consulting, LLC
Date Received:	07/10/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	07/09/24	Lab ID:	407106-04 1/8.7
Date Analyzed:	07/16/24	Data File:	071620.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	86	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<12	<7	1,2-Dichloropropane	<2	<0.43
Dichlorodifluoromethane	<8.6	<1.7	1,4-Dioxane	<3.1	<0.87
Chloromethane	<32	<16	2,2,4-Trimethylpentane	<41	<8.7
F-114	<18	<2.6	Methyl methacrylate	<36	<8.7
Vinyl chloride	<2.2	<0.87	Heptane	<36	<8.7
1,3-Butadiene	<0.38	<0.17	Bromodichloromethane	<0.58	<0.087
Butane	<41	<17	Trichloroethene	<0.94	<0.17
Bromomethane	<34	<8.7	cis-1,3-Dichloropropene	<7.9	<1.7
Chloroethane	<23	<8.7	4-Methyl-2-pentanone	<71	<17
Vinyl bromide	<3.8	<0.87	trans-1,3-Dichloropropene	<3.9	<0.87
Ethanol	<66	<35	Toluene	<66	<17
Acrolein	<1	<0.43	1,1,2-Trichloroethane	<0.47	<0.087
Pentane	<51	<17	2-Hexanone	<36	<8.7
Trichlorofluoromethane	<20	<3.5	Tetrachloroethene	<59	<8.7
Acetone	<41	<17	Dibromochloromethane	<0.74	<0.087
2-Propanol	<75	<30	1,2-Dibromoethane (EDB)	<0.67	<0.087
1,1-Dichloroethene	<3.4	<0.87	Chlorobenzene	<4	<0.87
trans-1,2-Dichloroethene	<3.4	<0.87	Ethylbenzene	<3.8	<0.87
Methylene chloride	<300	<87	1,1,2,2-Tetrachloroethane	<1.2	<0.17
t-Butyl alcohol (TBA)	<110	<35	Nonane	<46	<8.7
3-Chloropropene	<27	<8.7	Isopropylbenzene	<86	<17
CFC-113	<13	<1.7	2-Chlorotoluene	<45	<8.7
Carbon disulfide	<54	<17	Propylbenzene	<43	<8.7
Methyl t-butyl ether (MTBE)	<63	<17	4-Ethyltoluene	<43	<8.7
Vinyl acetate	<61	<17	m,p-Xylene	<7.6	<1.7
1,1-Dichloroethane	<3.5	<0.87	o-Xylene	<3.8	<0.87
cis-1,2-Dichloroethene	<3.4	<0.87	Styrene	<7.4	<1.7
Hexane	<31	<8.7	Bromoform	<18	<1.7
Chloroform	0.76	0.16	Benzyl chloride	<0.45	<0.087
Ethyl acetate	<63	<17	1,3,5-Trimethylbenzene	<43	<8.7
Tetrahydrofuran	39	13	1,2,4-Trimethylbenzene	<43	<8.7
2-Butanone (MEK)	<51	<17	1,3-Dichlorobenzene	<5.2	<0.87
1,2-Dichloroethane (EDC)	<0.35	<0.087	1,4-Dichlorobenzene	<2	<0.33
1,1,1-Trichloroethane	<4.7	<0.87	1,2-Dichlorobenzene	<5.2	<0.87
Carbon tetrachloride	<2.7	<0.43	1,2,4-Trichlorobenzene	<6.5	<0.87
Benzene	<2.8	<0.87	Naphthalene	0.64	0.12
Cyclohexane	<60	<17	Hexachlorobutadiene	<1.9	<0.17



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-06-071024	Client:	Farallon Consulting, LLC
Date Received:	07/10/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	07/09/24	Lab ID:	407106-05 1/9.6
Date Analyzed:	07/16/24	Data File:	071624.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	87	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<13	<7.7	1,2-Dichloropropane	<2.2	<0.48
Dichlorodifluoromethane	<9.5	<1.9	1,4-Dioxane	<3.5	<0.96
Chloromethane	<36	<17	2,2,4-Trimethylpentane	<45	<9.6
F-114	<20	<2.9	Methyl methacrylate	<39	<9.6
Vinyl chloride	<2.5	<0.96	Heptane	<39	<9.6
1,3-Butadiene	<0.42	<0.19	Bromodichloromethane	<0.64	<0.096
Butane	360 ve	150 ve	Trichloroethene	<1	<0.19
Bromomethane	<37	<9.6	cis-1,3-Dichloropropene	<8.7	<1.9
Chloroethane	<25	<9.6	4-Methyl-2-pentanone	<79	<19
Vinyl bromide	<4.2	<0.96	trans-1,3-Dichloropropene	<4.4	<0.96
Ethanol	<72	<38	Toluene	<72	<19
Acrolein	<1.1	<0.48	1,1,2-Trichloroethane	<0.52	<0.096
Pentane	180	61	2-Hexanone	<39	<9.6
Trichlorofluoromethane	<22	<3.8	Tetrachloroethene	<65	<9.6
Acetone	<46	<19	Dibromochloromethane	<0.82	<0.096
2-Propanol	<83	<34	1,2-Dibromoethane (EDB)	<0.74	<0.096
1,1-Dichloroethene	<3.8	<0.96	Chlorobenzene	<4.4	<0.96
trans-1,2-Dichloroethene	<3.8	<0.96	Ethylbenzene	<4.2	<0.96
Methylene chloride	<330	<96	1,1,2,2-Tetrachloroethane	<1.3	<0.19
t-Butyl alcohol (TBA)	<120	<38	Nonane	<50	<9.6
3-Chloropropene	<30	<9.6	Isopropylbenzene	<94	<19
CFC-113	<15	<1.9	2-Chlorotoluene	<50	<9.6
Carbon disulfide	<60	<19	Propylbenzene	<47	<9.6
Methyl t-butyl ether (MTBE)	<69	<19	4-Ethyltoluene	<47	<9.6
Vinyl acetate	<68	<19	m,p-Xylene	<8.3	<1.9
1,1-Dichloroethane	<3.9	<0.96	o-Xylene	<4.2	<0.96
cis-1,2-Dichloroethene	<3.8	<0.96	Styrene	<8.2	<1.9
Hexane	<34	<9.6	Bromoform	<20	<1.9
Chloroform	3.0	0.61	Benzyl chloride	<0.5	<0.096
Ethyl acetate	<69	<19	1,3,5-Trimethylbenzene	<47	<9.6
Tetrahydrofuran	<8.5	<2.9	1,2,4-Trimethylbenzene	<47	<9.6
2-Butanone (MEK)	<57	<19	1,3-Dichlorobenzene	<5.8	<0.96
1,2-Dichloroethane (EDC)	<0.39	<0.096	1,4-Dichlorobenzene	<2.2	<0.36
1,1,1-Trichloroethane	<5.2	<0.96	1,2-Dichlorobenzene	<5.8	<0.96
Carbon tetrachloride	<3	<0.48	1,2,4-Trichlorobenzene	<7.1	<0.96
Benzene	<3.1	<0.96	Naphthalene	<0.7	<0.13
Cyclohexane	<66	<19	Hexachlorobutadiene	<2	<0.19

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SG-11-071024	Client: Farallon Consulting, LLC
Date Received: 07/10/24	Project: 3245 158th Ave SE 2403-008
Date Collected: 07/09/24	Lab ID: 407106-06 1/9.2
Date Analyzed: 07/16/24	Data File: 071622.D
Matrix: Air	Instrument: GCMS8
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	86	70	130

Compounds:	Concentration		Compounds:	Concentration	
	ug/m3	ppbv		ug/m3	ppbv
Propene	<13	<7.4	1,2-Dichloropropane	<2.1	<0.46
Dichlorodifluoromethane	<9.1	<1.8	1,4-Dioxane	<3.3	<0.92
Chloromethane	<34	<17	2,2,4-Trimethylpentane	<43	<9.2
F-114	<19	<2.8	Methyl methacrylate	<38	<9.2
Vinyl chloride	<2.4	<0.92	Heptane	<38	<9.2
1,3-Butadiene	<0.41	<0.18	Bromodichloromethane	<0.62	<0.092
Butane	<44	<18	Trichloroethene	<0.99	<0.18
Bromomethane	<36	<9.2	cis-1,3-Dichloropropene	<8.4	<1.8
Chloroethane	<24	<9.2	4-Methyl-2-pentanone	<75	<18
Vinyl bromide	<4	<0.92	trans-1,3-Dichloropropene	<4.2	<0.92
Ethanol	<69	<37	Toluene	<69	<18
Acrolein	1.3	0.55	1,1,2-Trichloroethane	<0.5	<0.092
Pentane	<54	<18	2-Hexanone	<38	<9.2
Trichlorofluoromethane	<21	<3.7	Tetrachloroethene	<62	<9.2
Acetone	56	23	Dibromochloromethane	<0.78	<0.092
2-Propanol	<79	<32	1,2-Dibromoethane (EDB)	<0.71	<0.092
1,1-Dichloroethene	<3.6	<0.92	Chlorobenzene	<4.2	<0.92
trans-1,2-Dichloroethene	<3.6	<0.92	Ethylbenzene	<4	<0.92
Methylene chloride	<320	<92	1,1,2,2-Tetrachloroethane	<1.3	<0.18
t-Butyl alcohol (TBA)	<110	<37	Nonane	<48	<9.2
3-Chloropropene	<29	<9.2	Isopropylbenzene	<90	<18
CFC-113	<14	<1.8	2-Chlorotoluene	<48	<9.2
Carbon disulfide	<57	<18	Propylbenzene	<45	<9.2
Methyl t-butyl ether (MTBE)	<66	<18	4-Ethyltoluene	<45	<9.2
Vinyl acetate	<65	<18	m,p-Xylene	<8	<1.8
1,1-Dichloroethane	<3.7	<0.92	o-Xylene	<4	<0.92
cis-1,2-Dichloroethene	<3.6	<0.92	Styrene	<7.8	<1.8
Hexane	<32	<9.2	Bromoform	<19	<1.8
Chloroform	0.49	0.10	Benzyl chloride	<0.48	<0.092
Ethyl acetate	<66	<18	1,3,5-Trimethylbenzene	<45	<9.2
Tetrahydrofuran	<8.1	<2.8	1,2,4-Trimethylbenzene	<45	<9.2
2-Butanone (MEK)	<54	<18	1,3-Dichlorobenzene	<5.5	<0.92
1,2-Dichloroethane (EDC)	<0.37	<0.092	1,4-Dichlorobenzene	<2.1	<0.35
1,1,1-Trichloroethane	<5	<0.92	1,2-Dichlorobenzene	<5.5	<0.92
Carbon tetrachloride	<2.9	<0.46	1,2,4-Trichlorobenzene	<6.8	<0.92
Benzene	<2.9	<0.92	Naphthalene	<0.68	<0.13
Cyclohexane	<63	<18	Hexachlorobutadiene	<2	<0.18

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Collected:	Not Applicable	Lab ID:	04-1582 mb
Date Analyzed:	07/16/24	Data File:	071612.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	84	70	130

Compounds:	Concentration		Compounds:	Concentration	
	ug/m3	ppbv		ug/m3	ppbv
Propene	<1.4	<0.8	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.99	<0.2	1,4-Dioxane	<0.36	<0.1
Chloromethane	<3.7	<1.8	2,2,4-Trimethylpentane	<4.7	<1
F-114	<2.1	<0.3	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	<0.044	<0.02	Bromodichloromethane	<0.067	<0.01
Butane	<4.8	<2	Trichloroethene	<0.11	<0.02
Bromomethane	<3.9	<1	cis-1,3-Dichloropropene	<0.91	<0.2
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<8.2	<2
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5	<4	Toluene	<7.5	<2
Acrolein	<0.11	<0.05	1,1,2-Trichloroethane	<0.055	<0.01
Pentane	<5.9	<2	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<35	<10	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<3.1	<1	Isopropylbenzene	<9.8	<2
CFC-113	<1.5	<0.2	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<4.9	<1
Methyl t-butyl ether (MTBE)	<7.2	<2	4-Ethyltoluene	<4.9	<1
Vinyl acetate	<7	<2	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1	<0.2
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052	<0.01
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<4.9	<1
Tetrahydrofuran	<0.88	<0.3	1,2,4-Trimethylbenzene	<4.9	<1
2-Butanone (MEK)	<5.9	<2	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.23	<0.038
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.31	<0.05	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.32	<0.1	Naphthalene	<0.26	<0.05
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/24

Date Received: 07/10/24

Project: 3245 158th Ave SE 2403-008, F&BI 407106

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 407106-04 1/8.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	830	830	0
APH EC9-12 aliphatics	ug/m3	470	490	4
APH EC9-10 aromatics	ug/m3	<220	<220	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	100	70-130
APH EC9-12 aliphatics	ug/m3	67	119	70-130
APH EC9-10 aromatics	ug/m3	67	109	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/24

Date Received: 07/10/24

Project: 3245 158th Ave SE 2403-008, F&BI 407106

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: 407106-04 1/8.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Propene	ug/m3	<12	<12	nm
Dichlorodifluoromethane	ug/m3	<8.6	<8.6	nm
Chloromethane	ug/m3	<32	<32	nm
F-114	ug/m3	<18	<18	nm
Vinyl chloride	ug/m3	<2.2	<2.2	nm
1,3-Butadiene	ug/m3	<0.38	<0.38	nm
Butane	ug/m3	<41	<41	nm
Bromomethane	ug/m3	<34	<34	nm
Chloroethane	ug/m3	<23	<23	nm
Vinyl bromide	ug/m3	<3.8	<3.8	nm
Ethanol	ug/m3	<66	<66	nm
Acrolein	ug/m3	<1	<1	nm
Pentane	ug/m3	<51	<51	nm
Trichlorofluoromethane	ug/m3	<20	<20	nm
Acetone	ug/m3	<41	<41	nm
2-Propanol	ug/m3	<75	<75	nm
1,1-Dichloroethene	ug/m3	<3.4	<3.4	nm
trans-1,2-Dichloroethene	ug/m3	<3.4	<3.4	nm
Methylene chloride	ug/m3	<300	<300	nm
t-Butyl alcohol (TBA)	ug/m3	<110	<110	nm
3-Chloropropene	ug/m3	<27	<27	nm
CFC-113	ug/m3	<13	<13	nm
Carbon disulfide	ug/m3	<54	<54	nm
Methyl t-butyl ether (MTBE)	ug/m3	<63	<63	nm
Vinyl acetate	ug/m3	<61	<61	nm
1,1-Dichloroethane	ug/m3	<3.5	<3.5	nm
cis-1,2-Dichloroethene	ug/m3	<3.4	<3.4	nm
Hexane	ug/m3	<31	<31	nm
Chloroform	ug/m3	0.76	0.81	6
Ethyl acetate	ug/m3	<63	<63	nm
Tetrahydrofuran	ug/m3	39	31	23
2-Butanone (MEK)	ug/m3	<51	<51	nm
1,2-Dichloroethane (EDC)	ug/m3	<0.35	<0.35	nm
1,1,1-Trichloroethane	ug/m3	<4.7	<4.7	nm
Carbon tetrachloride	ug/m3	<2.7	<2.7	nm
Benzene	ug/m3	<2.8	<2.8	nm
Cyclohexane	ug/m3	<60	<60	nm
1,2-Dichloropropane	ug/m3	<2	<2	nm
1,4-Dioxane	ug/m3	<3.1	<3.1	nm
2,2,4-Trimethylpentane	ug/m3	<41	<41	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/24

Date Received: 07/10/24

Project: 3245 158th Ave SE 2403-008, F&BI 407106

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 407106-04 1/8.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl methacrylate	ug/m3	<36	<36	nm
Heptane	ug/m3	<36	<36	nm
Bromodichloromethane	ug/m3	<0.58	<0.58	nm
Trichloroethene	ug/m3	<0.94	<0.94	nm
cis-1,3-Dichloropropene	ug/m3	<7.9	<7.9	nm
4-Methyl-2-pentanone	ug/m3	<71	<71	nm
trans-1,3-Dichloropropene	ug/m3	<3.9	<3.9	nm
Toluene	ug/m3	<66	<66	nm
1,1,2-Trichloroethane	ug/m3	<0.47	<0.47	nm
2-Hexanone	ug/m3	<36	<36	nm
Tetrachloroethene	ug/m3	<59	<59	nm
Dibromochloromethane	ug/m3	<0.74	<0.74	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.67	<0.67	nm
Chlorobenzene	ug/m3	<4	<4	nm
Ethylbenzene	ug/m3	<3.8	<3.8	nm
1,1,2,2-Tetrachloroethane	ug/m3	<1.2	<1.2	nm
Nonane	ug/m3	<46	<46	nm
Isopropylbenzene	ug/m3	<86	<86	nm
2-Chlorotoluene	ug/m3	<45	<45	nm
Propylbenzene	ug/m3	<43	<43	nm
4-Ethyltoluene	ug/m3	<43	<43	nm
m,p-Xylene	ug/m3	<7.6	<7.6	nm
o-Xylene	ug/m3	<3.8	<3.8	nm
Styrene	ug/m3	<7.4	<7.4	nm
Bromoform	ug/m3	<18	<18	nm
Benzyl chloride	ug/m3	<0.45	<0.45	nm
1,3,5-Trimethylbenzene	ug/m3	<43	<43	nm
1,2,4-Trimethylbenzene	ug/m3	<43	<43	nm
1,3-Dichlorobenzene	ug/m3	<5.2	<5.2	nm
1,4-Dichlorobenzene	ug/m3	<2	<2	nm
1,2-Dichlorobenzene	ug/m3	<5.2	<5.2	nm
1,2,4-Trichlorobenzene	ug/m3	<6.5	<6.5	nm
Naphthalene	ug/m3	<2.3	<2.3	nm
Hexachlorobutadiene	ug/m3	<1.9	<1.9	nm

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/24

Date Received: 07/10/24

Project: 3245 158th Ave SE 2403-008, F&BI 407106

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Propene	ug/m3	23	95	70-130
Dichlorodifluoromethane	ug/m3	67	103	70-130
Chloromethane	ug/m3	28	89	70-130
F-114	ug/m3	94	108	70-130
Vinyl chloride	ug/m3	35	96	70-130
1,3-Butadiene	ug/m3	30	92	70-130
Butane	ug/m3	32	86	70-130
Bromomethane	ug/m3	52	109	70-130
Chloroethane	ug/m3	36	101	70-130
Vinyl bromide	ug/m3	59	114	70-130
Ethanol	ug/m3	25	76	70-130
Acrolein	ug/m3	31	91	70-130
Pentane	ug/m3	40	90	70-130
Trichlorofluoromethane	ug/m3	76	97	70-130
Acetone	ug/m3	32	99	70-130
2-Propanol	ug/m3	33	98	70-130
1,1-Dichloroethene	ug/m3	54	104	70-130
trans-1,2-Dichloroethene	ug/m3	54	105	70-130
Methylene chloride	ug/m3	94	101	70-130
t-Butyl alcohol (TBA)	ug/m3	41	91	70-130
3-Chloropropene	ug/m3	42	93	70-130
CFC-113	ug/m3	100	101	70-130
Carbon disulfide	ug/m3	42	103	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	89	70-130
Vinyl acetate	ug/m3	48	87	70-130
1,1-Dichloroethane	ug/m3	55	105	70-130
cis-1,2-Dichloroethene	ug/m3	54	102	70-130
Hexane	ug/m3	48	91	70-130
Chloroform	ug/m3	66	106	70-130
Ethyl acetate	ug/m3	49	94	70-130
Tetrahydrofuran	ug/m3	40	90	70-130
2-Butanone (MEK)	ug/m3	40	76	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	107	70-130
1,1,1-Trichloroethane	ug/m3	74	109	70-130
Carbon tetrachloride	ug/m3	85	106	70-130
Benzene	ug/m3	43	97	70-130
Cyclohexane	ug/m3	46	73	70-130
1,2-Dichloropropane	ug/m3	62	105	70-130
1,4-Dioxane	ug/m3	49	106	70-130
2,2,4-Trimethylpentane	ug/m3	63	96	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/24

Date Received: 07/10/24

Project: 3245 158th Ave SE 2403-008, F&BI 407106

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Methyl methacrylate	ug/m3	55	96	70-130
Heptane	ug/m3	55	93	70-130
Bromodichloromethane	ug/m3	90	110	70-130
Trichloroethene	ug/m3	73	115	70-130
cis-1,3-Dichloropropene	ug/m3	61	106	70-130
4-Methyl-2-pentanone	ug/m3	55	120	70-130
trans-1,3-Dichloropropene	ug/m3	61	100	70-130
Toluene	ug/m3	51	106	70-130
1,1,2-Trichloroethane	ug/m3	74	111	70-130
2-Hexanone	ug/m3	55	94	70-130
Tetrachloroethene	ug/m3	92	117	70-130
Dibromochloromethane	ug/m3	120	111	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	110	70-130
Chlorobenzene	ug/m3	62	107	70-130
Ethylbenzene	ug/m3	59	98	70-130
1,1,2,2-Tetrachloroethane	ug/m3	93	103	70-130
Nonane	ug/m3	71	84	70-130
Isopropylbenzene	ug/m3	66	100	70-130
2-Chlorotoluene	ug/m3	70	97	70-130
Propylbenzene	ug/m3	66	95	70-130
4-Ethyltoluene	ug/m3	66	94	70-130
m,p-Xylene	ug/m3	120	97	70-130
o-Xylene	ug/m3	59	102	70-130
Styrene	ug/m3	58	93	70-130
Bromoform	ug/m3	140	108	70-130
Benzyl chloride	ug/m3	70	104	70-130
1,3,5-Trimethylbenzene	ug/m3	66	96	70-130
1,2,4-Trimethylbenzene	ug/m3	66	91	70-130
1,3-Dichlorobenzene	ug/m3	81	112	70-130
1,4-Dichlorobenzene	ug/m3	81	107	70-130
1,2-Dichlorobenzene	ug/m3	81	107	70-130
1,2,4-Trichlorobenzene	ug/m3	100	101	70-130
Naphthalene	ug/m3	71	99	70-130
Hexachlorobutadiene	ug/m3	140	111	70-130



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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.

407106

SAMPLE CHAIN OF CUSTODY

07/10/24

Report To Masaf BelhivanCompany FarallonAddress 13555 SE 36th St. BellevueCity, State, ZIP WA 98006Phone (425) 295 0800 Email april@farallonwa.comSAMPLERS (signature) ANH PHAN

PROJECT NAME &amp; ADDRESS

3845 158th Ave SE

PO #

2403-008

NOTES:

INVOICE TO

APPage # 1 of 1

TURNAROUND TIME

☒ Standard☐ RUSH

Rush charges authorized by: \_\_\_\_\_

SAMPLE DISPOSAL

Default: Clean following

final report delivery

Hold (Fee may apply): \_\_\_\_\_

## SAMPLE INFORMATION

Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. ("Hg)	Field Initial Time	Final Vac. ("Hg)	Field Final Time	TO15 Full Scan	TO15 BTEXN	APH	Chlorinated VOCs	Helium	Notes
SG-10-070924	01	3664	107	IA / (SG)	7-9-24	-30	1245	-5	1251	X	X	X			
SG-08-070924	02	<del>3664</del> 3661	241	IA / (SG)	1	-28	1329	-3	1335	X	X	X			
SG-09-070924	03	9561	92	IA / (SG)	1	-30	1405	-5	1409	X	X	X			
SG-05-071024	04	8346	96	IA / (SG)	7-10-24	-29	0901	-4	0906	X	X	X			
SG-06-071024	05	3259	305	IA / (SG)	1	-27	0937	-5	0946	X	X	X			
SG-11-071024	06	4181	89	IA / (SG)	1	-29	1008	-4	1013	X	X	X			
				IA / SG											
				IA / SG											
				IA / SG											

## ANALYSIS REQUESTED

## SIGNATURE

Relinquished by: ANH PHAN

## PRINT NAME

Received by: ANH PHAN

## COMPANY

FN

## DATE

7/10/24

## TIME

11:19Relinquished by: ANH PHAN

## PRINT NAME

FN07/10/2411:19Received by: ANH PHANSamples received at 25 °C

Friedman &amp; Bruya, Inc.

5500 4th Avenue South

Seattle, WA 98108

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COCC\COCTO-15.DOC

# SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 407106 CLIENT FLN INITIALS/ AP  
DATE: 07/10/24

If custody seals are present on cooler, are they intact? ☒ NA ☐ YES ☐ NO

Cooler/Sample temperature 23 °C  
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☐ YES ☒ NO

How did samples arrive?  
☒ Over the Counter ☐ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody\* (COC)? ☒ YES ☐ NO Initials/ AP  
\*or other representative documents, letters, and/or shipping memos Date: 07/10/24

Number of days samples have been sitting prior to receipt at laboratory 8-1 days

Are the samples clearly identified? (explain "no" answer below) ☒ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☒ YES ☐ NO

Were appropriate sample containers used? ☒ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☒ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☒ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?  
(explain "no" answer below)

Sample ID's	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not on COC/label
Date Sampled	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not on COC/label
Time Sampled	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not on COC/label
# of Containers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Relinquished	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Requested analysis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> On Hold	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☐ NA ☒ YES ☐ NO

Number of unused TO15 canisters 02 Number of unused TO17 tubes \_\_\_\_\_  
(SN: 9560, 3251)

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

July 24, 2024

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on July 10, 2024 from the 3245 158th Ave SE 2403-008, F&BI 407107 project. There are 11 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  
FLN0724R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 10, 2024 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 407107 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID

407107-01

Farallon Consulting, LLC

SG-04-071024

Non-petroleum compounds identified in the air phase hydrocarbon (APH) ranges were subtracted per the MA-APH method.

All quality control requirements were acceptable.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-04-071024	Client:	Farallon Consulting, LLC
Date Received:	07/10/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	07/10/24	Lab ID:	407107-01 1/30000
Date Analyzed:	07/17/24	Data File:	071628.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	110	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	6,200,000
APH EC9-12 aliphatics	15,000,000
APH EC9-10 aromatics	<750,000

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Collected:	Not Applicable	Lab ID:	04-1582 mb
Date Analyzed:	07/16/24	Data File:	071612.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	83	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	<75
APH EC9-12 aliphatics	<25
APH EC9-10 aromatics	<25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-04-071024	Client:	Farallon Consulting, LLC
Date Received:	07/10/24	Project:	3245 158th Ave SE 2403-008
Date Collected:	07/10/24	Lab ID:	407107-01 1/30000
Date Analyzed:	07/17/24	Data File:	071628.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	116	70	130

Compounds:	Concentration		Compounds:	Concentration	
	ug/m3	ppbv		ug/m3	ppbv
Propene	<41,000	<24,000	1,2-Dichloropropane	<6,900	<1,500
Dichlorodifluoromethane	<30,000	<6,000	1,4-Dioxane	<11,000	<3,000
Chloromethane	<110,000	<54,000	2,2,4-Trimethylpentane	<140,000	<30,000
F-114	<63,000	<9,000	Methyl methacrylate	<120,000	<30,000
Vinyl chloride	<7,700	<3,000	Heptane	<120,000	<30,000
1,3-Butadiene	<1,300	<600	Bromodichloromethane	<2,000	<300
Butane	<140,000	<60,000	Trichloroethene	<3,200	<600
Bromomethane	<120,000	<30,000	cis-1,3-Dichloropropene	<27,000	<6,000
Chloroethane	<79,000	<30,000	4-Methyl-2-pentanone	<250,000	<60,000
Vinyl bromide	<13,000	<3,000	trans-1,3-Dichloropropene	<14,000	<3,000
Ethanol	<230,000	<120,000	Toluene	<230,000	<60,000
Acrolein	<3,400	<1,500	1,1,2-Trichloroethane	<1,600	<300
Pentane	<180,000	<60,000	2-Hexanone	<120,000	<30,000
Trichlorofluoromethane	<67,000	<12,000	Tetrachloroethene	<200,000	<30,000
Acetone	<140,000	<60,000	Dibromochloromethane	<2,600	<300
2-Propanol	<260,000	<100,000	1,2-Dibromoethane (EDB)	<2,300	<300
1,1-Dichloroethene	<12,000	<3,000	Chlorobenzene	<14,000	<3,000
trans-1,2-Dichloroethene	<12,000	<3,000	Ethylbenzene	<13,000	<3,000
Methylene chloride	<1,000,000	<300,000	1,1,2,2-Tetrachloroethane	<4,100	<600
t-Butyl alcohol (TBA)	<360,000	<120,000	Nonane	<160,000	<30,000
3-Chloropropene	<94,000	<30,000	Isopropylbenzene	<290,000	<60,000
CFC-113	<46,000	<6,000	2-Chlorotoluene	<160,000	<30,000
Carbon disulfide	<190,000	<60,000	Propylbenzene	<150,000	<30,000
Methyl t-butyl ether (MTBE)	<220,000	<60,000	4-Ethyltoluene	<150,000	<30,000
Vinyl acetate	<210,000	<60,000	m,p-Xylene	<26,000	<6,000
1,1-Dichloroethane	<12,000	<3,000	o-Xylene	<13,000	<3,000
cis-1,2-Dichloroethene	<12,000	<3,000	Styrene	<26,000	<6,000
Hexane	<110,000	<30,000	Bromoform	<62,000	<6,000
Chloroform	<1,500	<300	Benzyl chloride	<1,600	<300
Ethyl acetate	<220,000	<60,000	1,3,5-Trimethylbenzene	<150,000	<30,000
Tetrahydrofuran	<27,000	<9,000	1,2,4-Trimethylbenzene	<150,000	<30,000
2-Butanone (MEK)	<180,000	<60,000	1,3-Dichlorobenzene	<18,000	<3,000
1,2-Dichloroethane (EDC)	<1,200	<300	1,4-Dichlorobenzene	<6,900	<1,100
1,1,1-Trichloroethane	<16,000	<3,000	1,2-Dichlorobenzene	<18,000	<3,000
Carbon tetrachloride	<9,400	<1,500	1,2,4-Trichlorobenzene	<22,000	<3,000
Benzene	<9,600	<3,000	Naphthalene	<2,200	<420
Cyclohexane	<210,000	<60,000	Hexachlorobutadiene	<6,400	<600



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE 2403-008
Date Collected:	Not Applicable	Lab ID:	04-1582 mb
Date Analyzed:	07/16/24	Data File:	071612.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	84	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<1.4	<0.8	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.99	<0.2	1,4-Dioxane	<0.36	<0.1
Chloromethane	<3.7	<1.8	2,2,4-Trimethylpentane	<4.7	<1
F-114	<2.1	<0.3	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	<0.044	<0.02	Bromodichloromethane	<0.067	<0.01
Butane	<4.8	<2	Trichloroethene	<0.11	<0.02
Bromomethane	<3.9	<1	cis-1,3-Dichloropropene	<0.91	<0.2
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<8.2	<2
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5	<4	Toluene	<7.5	<2
Acrolein	<0.11	<0.05	1,1,2-Trichloroethane	<0.055	<0.01
Pentane	<5.9	<2	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<35	<10	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<3.1	<1	Isopropylbenzene	<9.8	<2
CFC-113	<1.5	<0.2	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<4.9	<1
Methyl t-butyl ether (MTBE)	<7.2	<2	4-Ethyltoluene	<4.9	<1
Vinyl acetate	<7	<2	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1	<0.2
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052	<0.01
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<4.9	<1
Tetrahydrofuran	<0.88	<0.3	1,2,4-Trimethylbenzene	<4.9	<1
2-Butanone (MEK)	<5.9	<2	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.23	<0.038
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.31	<0.05	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.32	<0.1	Naphthalene	<0.26	<0.05
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/24

Date Received: 07/10/24

Project: 3245 158th Ave SE 2403-008, F&BI 407107

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 407106-04 1/8.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	830	830	0
APH EC9-12 aliphatics	ug/m3	470	490	4
APH EC9-10 aromatics	ug/m3	<220	<220	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	100	70-130
APH EC9-12 aliphatics	ug/m3	67	119	70-130
APH EC9-10 aromatics	ug/m3	67	109	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/24

Date Received: 07/10/24

Project: 3245 158th Ave SE 2403-008, F&BI 407107

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 407106-04 1/8.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Propene	ug/m3	<12	<12	nm
Dichlorodifluoromethane	ug/m3	<8.6	<8.6	nm
Chloromethane	ug/m3	<32	<32	nm
F-114	ug/m3	<18	<18	nm
Vinyl chloride	ug/m3	<2.2	<2.2	nm
1,3-Butadiene	ug/m3	<0.38	<0.38	nm
Butane	ug/m3	<41	<41	nm
Bromomethane	ug/m3	<34	<34	nm
Chloroethane	ug/m3	<23	<23	nm
Vinyl bromide	ug/m3	<3.8	<3.8	nm
Ethanol	ug/m3	<66	<66	nm
Acrolein	ug/m3	<1	<1	nm
Pentane	ug/m3	<51	<51	nm
Trichlorofluoromethane	ug/m3	<20	<20	nm
Acetone	ug/m3	<41	<41	nm
2-Propanol	ug/m3	<75	<75	nm
1,1-Dichloroethene	ug/m3	<3.4	<3.4	nm
trans-1,2-Dichloroethene	ug/m3	<3.4	<3.4	nm
Methylene chloride	ug/m3	<300	<300	nm
t-Butyl alcohol (TBA)	ug/m3	<110	<110	nm
3-Chloropropene	ug/m3	<27	<27	nm
CFC-113	ug/m3	<13	<13	nm
Carbon disulfide	ug/m3	<54	<54	nm
Methyl t-butyl ether (MTBE)	ug/m3	<63	<63	nm
Vinyl acetate	ug/m3	<61	<61	nm
1,1-Dichloroethane	ug/m3	<3.5	<3.5	nm
cis-1,2-Dichloroethene	ug/m3	<3.4	<3.4	nm
Hexane	ug/m3	<31	<31	nm
Chloroform	ug/m3	0.76	0.81	6
Ethyl acetate	ug/m3	<63	<63	nm
Tetrahydrofuran	ug/m3	39	31	23
2-Butanone (MEK)	ug/m3	<51	<51	nm
1,2-Dichloroethane (EDC)	ug/m3	<0.35	<0.35	nm
1,1,1-Trichloroethane	ug/m3	<4.7	<4.7	nm
Carbon tetrachloride	ug/m3	<2.7	<2.7	nm
Benzene	ug/m3	<2.8	<2.8	nm
Cyclohexane	ug/m3	<60	<60	nm
1,2-Dichloropropane	ug/m3	<2	<2	nm
1,4-Dioxane	ug/m3	<3.1	<3.1	nm
2,2,4-Trimethylpentane	ug/m3	<41	<41	nm

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/24

Date Received: 07/10/24

Project: 3245 158th Ave SE 2403-008, F&BI 407107

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: 407106-04 1/8.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl methacrylate	ug/m3	<36	<36	nm
Heptane	ug/m3	<36	<36	nm
Bromodichloromethane	ug/m3	<0.58	<0.58	nm
Trichloroethene	ug/m3	<0.94	<0.94	nm
cis-1,3-Dichloropropene	ug/m3	<7.9	<7.9	nm
4-Methyl-2-pentanone	ug/m3	<71	<71	nm
trans-1,3-Dichloropropene	ug/m3	<3.9	<3.9	nm
Toluene	ug/m3	<66	<66	nm
1,1,2-Trichloroethane	ug/m3	<0.47	<0.47	nm
2-Hexanone	ug/m3	<36	<36	nm
Tetrachloroethene	ug/m3	<59	<59	nm
Dibromochloromethane	ug/m3	<0.74	<0.74	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.67	<0.67	nm
Chlorobenzene	ug/m3	<4	<4	nm
Ethylbenzene	ug/m3	<3.8	<3.8	nm
1,1,2,2-Tetrachloroethane	ug/m3	<1.2	<1.2	nm
Nonane	ug/m3	<46	<46	nm
Isopropylbenzene	ug/m3	<86	<86	nm
2-Chlorotoluene	ug/m3	<45	<45	nm
Propylbenzene	ug/m3	<43	<43	nm
4-Ethyltoluene	ug/m3	<43	<43	nm
m,p-Xylene	ug/m3	<7.6	<7.6	nm
o-Xylene	ug/m3	<3.8	<3.8	nm
Styrene	ug/m3	<7.4	<7.4	nm
Bromoform	ug/m3	<18	<18	nm
Benzyl chloride	ug/m3	<0.45	<0.45	nm
1,3,5-Trimethylbenzene	ug/m3	<43	<43	nm
1,2,4-Trimethylbenzene	ug/m3	<43	<43	nm
1,3-Dichlorobenzene	ug/m3	<5.2	<5.2	nm
1,4-Dichlorobenzene	ug/m3	<2	<2	nm
1,2-Dichlorobenzene	ug/m3	<5.2	<5.2	nm
1,2,4-Trichlorobenzene	ug/m3	<6.5	<6.5	nm
Naphthalene	ug/m3	<2.3	<2.3	nm
Hexachlorobutadiene	ug/m3	<1.9	<1.9	nm

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/24

Date Received: 07/10/24

Project: 3245 158th Ave SE 2403-008, F&BI 407107

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Propene	ug/m3	23	95	70-130
Dichlorodifluoromethane	ug/m3	67	103	70-130
Chloromethane	ug/m3	28	89	70-130
F-114	ug/m3	94	108	70-130
Vinyl chloride	ug/m3	35	96	70-130
1,3-Butadiene	ug/m3	30	92	70-130
Butane	ug/m3	32	86	70-130
Bromomethane	ug/m3	52	109	70-130
Chloroethane	ug/m3	36	101	70-130
Vinyl bromide	ug/m3	59	114	70-130
Ethanol	ug/m3	25	76	70-130
Acrolein	ug/m3	31	91	70-130
Pentane	ug/m3	40	90	70-130
Trichlorofluoromethane	ug/m3	76	97	70-130
Acetone	ug/m3	32	99	70-130
2-Propanol	ug/m3	33	98	70-130
1,1-Dichloroethene	ug/m3	54	104	70-130
trans-1,2-Dichloroethene	ug/m3	54	105	70-130
Methylene chloride	ug/m3	94	101	70-130
t-Butyl alcohol (TBA)	ug/m3	41	91	70-130
3-Chloropropene	ug/m3	42	93	70-130
CFC-113	ug/m3	100	101	70-130
Carbon disulfide	ug/m3	42	103	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	89	70-130
Vinyl acetate	ug/m3	48	87	70-130
1,1-Dichloroethane	ug/m3	55	105	70-130
cis-1,2-Dichloroethene	ug/m3	54	102	70-130
Hexane	ug/m3	48	91	70-130
Chloroform	ug/m3	66	106	70-130
Ethyl acetate	ug/m3	49	94	70-130
Tetrahydrofuran	ug/m3	40	90	70-130
2-Butanone (MEK)	ug/m3	40	76	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	107	70-130
1,1,1-Trichloroethane	ug/m3	74	109	70-130
Carbon tetrachloride	ug/m3	85	106	70-130
Benzene	ug/m3	43	97	70-130
Cyclohexane	ug/m3	46	73	70-130
1,2-Dichloropropane	ug/m3	62	105	70-130
1,4-Dioxane	ug/m3	49	106	70-130
2,2,4-Trimethylpentane	ug/m3	63	96	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/24

Date Received: 07/10/24

Project: 3245 158th Ave SE 2403-008, F&BI 407107

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Methyl methacrylate	ug/m3	55	96	70-130
Heptane	ug/m3	55	93	70-130
Bromodichloromethane	ug/m3	90	110	70-130
Trichloroethene	ug/m3	73	115	70-130
cis-1,3-Dichloropropene	ug/m3	61	106	70-130
4-Methyl-2-pentanone	ug/m3	55	120	70-130
trans-1,3-Dichloropropene	ug/m3	61	100	70-130
Toluene	ug/m3	51	106	70-130
1,1,2-Trichloroethane	ug/m3	74	111	70-130
2-Hexanone	ug/m3	55	94	70-130
Tetrachloroethene	ug/m3	92	117	70-130
Dibromochloromethane	ug/m3	120	111	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	110	70-130
Chlorobenzene	ug/m3	62	107	70-130
Ethylbenzene	ug/m3	59	98	70-130
1,1,2,2-Tetrachloroethane	ug/m3	93	103	70-130
Nonane	ug/m3	71	84	70-130
Isopropylbenzene	ug/m3	66	100	70-130
2-Chlorotoluene	ug/m3	70	97	70-130
Propylbenzene	ug/m3	66	95	70-130
4-Ethyltoluene	ug/m3	66	94	70-130
m,p-Xylene	ug/m3	120	97	70-130
o-Xylene	ug/m3	59	102	70-130
Styrene	ug/m3	58	93	70-130
Bromoform	ug/m3	140	108	70-130
Benzyl chloride	ug/m3	70	104	70-130
1,3,5-Trimethylbenzene	ug/m3	66	96	70-130
1,2,4-Trimethylbenzene	ug/m3	66	91	70-130
1,3-Dichlorobenzene	ug/m3	81	112	70-130
1,4-Dichlorobenzene	ug/m3	81	107	70-130
1,2-Dichlorobenzene	ug/m3	81	107	70-130
1,2,4-Trichlorobenzene	ug/m3	100	101	70-130
Naphthalene	ug/m3	71	99	70-130
Hexachlorobutadiene	ug/m3	140	111	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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.

07/10/24

Page # 1 of 1

PO#

2403-008

INVOICE TO

AP

**SAMPLE DISPOSAL**  
Default: Clean following  
final report delivery  
Hold (Fee may apply): \_\_\_\_\_

ANALYSIS REQUESTED

[illegible]

TIME

LINE

101

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21

1

FORMS\COC\COC\TO-15.DOC



# SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 407107 CLIENT FLN INITIALS/ AP  
DATE: 07/10/24

If custody seals are present on cooler, are they intact? ☒ NA ☐ YES ☐ NO

Cooler/Sample temperature 23 °C  
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☐ YES ☒ NO

How did samples arrive?  
☒ Over the Counter ☐ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody\* (COC)? ☒ YES ☐ NO Initials/ AP  
\*or other representative documents, letters, and/or shipping memos Date: 07/10/24

Number of days samples have been sitting prior to receipt at laboratory 0 days

Are the samples clearly identified? (explain "no" answer below) ☒ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☒ YES ☐ NO

Were appropriate sample containers used? ☒ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☒ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☒ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?  
(explain "no" answer below)

Sample ID's ☒ Yes ☐ No ☐ Not on COC/label

Date Sampled ☒ Yes ☐ No ☐ Not on COC/label

Time Sampled ☒ Yes ☐ No ☐ Not on COC/label

# of Containers ☒ Yes ☐ No

Relinquished ☒ Yes ☐ No

Requested analysis ☒ Yes ☐ On Hold

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☐ NA ☐ YES ☒ NO

Number of unused TO15 canisters \_\_\_\_\_ Number of unused TO17 tubes \_\_\_\_\_

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

November 16, 2023

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the additional results from the testing of material submitted on October 31, 2023 from the 3245 158th Ave SE, F&BI 310563 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  
FLN1116R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 31, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE 2403-008, F&BI 310563 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
310563 -01	Geotech-1-103123
310563 -02	FMW-02-103123
310563 -03	FMW-01-103123
310563 -04	FMW-03-103123
310563 -05	Trip Blank-103123

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/16/23

Date Received: 10/31/23

Project: 3245 158th Ave SE, F&BI 310563

Date Extracted: 11/02/23

Date Analyzed: 11/14/23

**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)**

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Motor Oil Range</u>	<u>Surrogate</u>
Laboratory ID	(C <sub>10</sub> -C <sub>25</sub> )	(C <sub>25</sub> -C <sub>36</sub> )	(% Recovery)
			(Limit 50-150)
Geotech-1-103123	560 x	910 x	93
310563-01			
Method Blank	<50	<250	105
03-2610 MB			

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/16/23

Date Received: 10/31/23

Project: 3245 158th Ave SE, F&BI 310563

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-D<sub>x</sub>**

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	96	96	72-139	0

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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.

~~Report to~~ Visit Beijing

## 12/31/23

WJ3/C2

De 4

2

Address 975 5th Ave NYC

City, State, ZIP 15509104, WA 98007

Phone (425) 295 0680 Email [ipchilipm@familyinsulting.com](mailto:ipchilipm@familyinsulting.com)

Project specific RLS? - Yes / No

74

Mr. O'Connell

108

**INVOICE TO**

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	ANALYSES REQUESTED								Notes
						NWTPH-Dx GPO	NWTPH-GX GPO	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	α w / SSC	
Geotech-1-103123	01 A-E	10/31/23	1030	water	5	X	X			X				✓ - S
FMW-02-103123	02 A-G		1120		7	X	X			X				11/14
FMW-01-103123	03		1220		1	X	X			X				
FMW-03-103123	04 ✓	I	1330	I	1	X	X			X				
Trip Blank	05 AB	-	-	water	2									Added at Lab ADP 10/31/23

Samples received at 2 °C

Default: Dispose after 30 days

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

**SIGNATURE**

PRINT NAME \_\_\_\_\_

COMPANY

DATE \_\_\_\_\_

TIME

Relinquished by: Amelia

Angie Brown

Farrallon

10-31-23

1540

**Relinquished by:**

AMHPHAN

Feb 25

10/31/23 15:40

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

April 17, 2024

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on April 5, 2024 from the 3245 158th Ave SE Bellevue WA 2403-008, F&BI 404097 project. There are 17 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  
FLN0417R.DOC



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on April 5, 2024 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 158th Ave SE Bellevue WA 2403-008, F&BI 404097 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
404097 -01	SG-05-040424
404097 -02	SG-11-040424
404097 -03	SG-10-040424
404097 -04	SG-09-040424

Non-petroleum compounds identified in the air phase hydrocarbon (APH) ranges were subtracted per the MA-APH method.

The acetone concentration in sample SG-05-040424 exceeded the calibration range of the instrument. The data were flagged accordingly.

The TO-15 calibration standard for several compounds exceeded the acceptance criteria. The compounds were not detected, therefore this did not represent an out of control condition, and were qualified with a "k" qualifier.

All other quality control requirements were acceptable.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-05-040424	Client:	Farallon Consulting, LLC
Date Received:	04/05/24	Project:	3245 158th Ave SE Bellevue WA
Date Collected:	04/04/24	Lab ID:	404097-01 1/7.3
Date Analyzed:	04/11/24	Data File:	041021.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	92	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	590
APH EC9-12 aliphatics	610
APH EC9-10 aromatics	<180

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-11-040424	Client:	Farallon Consulting, LLC
Date Received:	04/05/24	Project:	3245 158th Ave SE Bellevue WA
Date Collected:	04/04/24	Lab ID:	404097-02 1/10
Date Analyzed:	04/11/24	Data File:	041023.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	93	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	800
APH EC9-12 aliphatics	970
APH EC9-10 aromatics	<250

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-10-040424	Client:	Farallon Consulting, LLC
Date Received:	04/05/24	Project:	3245 158th Ave SE Bellevue WA
Date Collected:	04/04/24	Lab ID:	404097-03 1/6.9
Date Analyzed:	04/11/24	Data File:	041024.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	93	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	580
APH EC9-12 aliphatics	<170
APH EC9-10 aromatics	<170

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-09-040424	Client:	Farallon Consulting, LLC
Date Received:	04/05/24	Project:	3245 158th Ave SE Bellevue WA
Date Collected:	04/04/24	Lab ID:	404097-04 1/8.2
Date Analyzed:	04/11/24	Data File:	041025.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	91	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	870
APH EC9-12 aliphatics	<200
APH EC9-10 aromatics	<200

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE Bellevue WA
Date Collected:	Not Applicable	Lab ID:	04-0778 mb
Date Analyzed:	04/10/24	Data File:	041012.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	<75
APH EC9-12 aliphatics	<25
APH EC9-10 aromatics	<25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-05-040424	Client:	Farallon Consulting, LLC
Date Received:	04/05/24	Project:	3245 158th Ave SE Bellevue WA
Date Collected:	04/04/24	Lab ID:	404097-01 1/4.8
Date Analyzed:	04/06/24	Data File:	040517.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	96	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<5.8	<3.4	1,2-Dichloropropane	<1.1	<0.24
Dichlorodifluoromethane	<4.7	<0.96	1,4-Dioxane	<1.7	<0.48
Chloromethane	<18	<8.6	2,2,4-Trimethylpentane	<22	<4.8
F-114	<10	<1.4	Methyl methacrylate	<20	<4.8
Vinyl chloride	<1.2	<0.48	Heptane	<20	<4.8
1,3-Butadiene	<0.21	<0.096	Bromodichloromethane	<0.32	<0.048
Butane	<23	<9.6	Trichloroethene	<0.52	<0.096
Bromomethane	<19	<4.8	cis-1,3-Dichloropropene	<4.4	<0.96
Chloroethane	<13	<4.8	4-Methyl-2-pentanone	<39	<9.6
Vinyl bromide	<2.1	<0.48	trans-1,3-Dichloropropene	<2.2	<0.48
Ethanol	<36 k	<19 k	Toluene	<36	<9.6
Acrolein	<0.55	<0.24	1,1,2-Trichloroethane	<0.26	<0.048
Pentane	<28	<9.6	2-Hexanone	<20	<4.8
Trichlorofluoromethane	<11	<1.9	Tetrachloroethene	<33	<4.8
Acetone	220 ve	94 ve	Dibromochloromethane	<0.41	<0.048
2-Propanol	<41	<17	1,2-Dibromoethane (EDB)	<0.37	<0.048
1,1-Dichloroethene	<1.9	<0.48	Chlorobenzene	<2.2	<0.48
trans-1,2-Dichloroethene	<1.9	<0.48	Ethylbenzene	<2.1	<0.48
Methylene chloride	<170	<48	1,1,2,2-Tetrachloroethane	<0.66	<0.096
t-Butyl alcohol (TBA)	<58	<19	Nonane	<25	<4.8
3-Chloropropene	<15	<4.8	Isopropylbenzene	<47	<9.6
CFC-113	<7.4	<0.96	2-Chlorotoluene	<25	<4.8
Carbon disulfide	<30	<9.6	Propylbenzene	<24	<4.8
Methyl t-butyl ether (MTBE)	<35	<9.6	4-Ethyltoluene	<24	<4.8
Vinyl acetate	<34 k	<9.6 k	m,p-Xylene	<4.2	<0.96
1,1-Dichloroethane	<1.9	<0.48	o-Xylene	<2.1	<0.48
cis-1,2-Dichloroethene	<1.9	<0.48	Styrene	<4.1	<0.96
Hexane	<17	<4.8	Bromoform	<9.9	<0.96
Chloroform	0.30	0.062	Benzyl chloride	<0.25 k	<0.048 k
Ethyl acetate	<35	<9.6	1,3,5-Trimethylbenzene	<24	<4.8
Tetrahydrofuran	16	5.4	1,2,4-Trimethylbenzene	<24	<4.8
2-Butanone (MEK)	<28	<9.6	1,3-Dichlorobenzene	<2.9	<0.48
1,2-Dichloroethane (EDC)	<0.19	<0.048	1,4-Dichlorobenzene	<1.1	<0.18
1,1,1-Trichloroethane	<2.6	<0.48	1,2-Dichlorobenzene	<2.9	<0.48
Carbon tetrachloride	<1.5	<0.24	1,2,4-Trichlorobenzene	<3.6	<0.48
Benzene	<1.5	<0.48	Naphthalene	<1.3	<0.24
Cyclohexane	<33	<9.6	Hexachlorobutadiene	<1	<0.096

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SG-11-040424	Client: Farallon Consulting, LLC
Date Received: 04/05/24	Project: 3245 158th Ave SE Bellevue WA
Date Collected: 04/04/24	Lab ID: 404097-02 1/6.8
Date Analyzed: 04/06/24	Data File: 040518.D
Matrix: Air	Instrument: GCMS8
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	95	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<8.2	<4.8	1,2-Dichloropropane	<1.6	<0.34
Dichlorodifluoromethane	<6.7	<1.4	1,4-Dioxane	<2.5	<0.68
Chloromethane	<25	<12	2,2,4-Trimethylpentane	<32	<6.8
F-114	<14	<2	Methyl methacrylate	<28	<6.8
Vinyl chloride	<1.7	<0.68	Heptane	<28	<6.8
1,3-Butadiene	<0.3	<0.14	Bromodichloromethane	0.96	0.14
Butane	<32	<14	Trichloroethene	<0.73	<0.14
Bromomethane	<26	<6.8	cis-1,3-Dichloropropene	<6.2	<1.4
Chloroethane	<18	<6.8	4-Methyl-2-pentanone	<56	<14
Vinyl bromide	<3	<0.68	trans-1,3-Dichloropropene	<3.1	<0.68
Ethanol	<51 k	<27 k	Toluene	<51	<14
Acrolein	<0.78	<0.34	1,1,2-Trichloroethane	<0.37	<0.068
Pentane	<40	<14	2-Hexanone	<28	<6.8
Trichlorofluoromethane	<15	<2.7	Tetrachloroethene	<46	<6.8
Acetone	200	84	Dibromochloromethane	0.87	0.10
2-Propanol	<59	<24	1,2-Dibromoethane (EDB)	<0.52	<0.068
1,1-Dichloroethene	<2.7	<0.68	Chlorobenzene	<3.1	<0.68
trans-1,2-Dichloroethene	<2.7	<0.68	Ethylbenzene	<3	<0.68
Methylene chloride	<240	<68	1,1,2,2-Tetrachloroethane	<0.93	<0.14
t-Butyl alcohol (TBA)	<82	<27	Nonane	<36	<6.8
3-Chloropropene	<21	<6.8	Isopropylbenzene	<67	<14
CFC-113	<10	<1.4	2-Chlorotoluene	<35	<6.8
Carbon disulfide	<42	<14	Propylbenzene	<33	<6.8
Methyl t-butyl ether (MTBE)	<49	<14	4-Ethyltoluene	<33	<6.8
Vinyl acetate	<48 k	<14 k	m,p-Xylene	<5.9	<1.4
1,1-Dichloroethane	<2.8	<0.68	o-Xylene	<3	<0.68
cis-1,2-Dichloroethene	<2.7	<0.68	Styrene	<5.8	<1.4
Hexane	<24	<6.8	Bromoform	<14	<1.4
Chloroform	1.4	0.28	Benzyl chloride	<0.35 k	<0.068 k
Ethyl acetate	<49	<14	1,3,5-Trimethylbenzene	<33	<6.8
Tetrahydrofuran	<4	<1.4	1,2,4-Trimethylbenzene	<33	<6.8
2-Butanone (MEK)	<40	<14	1,3-Dichlorobenzene	<4.1	<0.68
1,2-Dichloroethane (EDC)	<0.28	<0.068	1,4-Dichlorobenzene	<1.6	<0.26
1,1,1-Trichloroethane	<3.7	<0.68	1,2-Dichlorobenzene	<4.1	<0.68
Carbon tetrachloride	<2.1	<0.34	1,2,4-Trichlorobenzene	<5	<0.68
Benzene	<2.2	<0.68	Naphthalene	<1.8	<0.34
Cyclohexane	<47	<14	Hexachlorobutadiene	<1.5	<0.14



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SG-10-040424	Client: Farallon Consulting, LLC
Date Received: 04/05/24	Project: 3245 158th Ave SE Bellevue WA
Date Collected: 04/04/24	Lab ID: 404097-03 1/4.6
Date Analyzed: 04/06/24	Data File: 040519.D
Matrix: Air	Instrument: GCMS8
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	94	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<5.5	<3.2	1,2-Dichloropropane	<1.1	<0.23
Dichlorodifluoromethane	<4.5	<0.92	1,4-Dioxane	<1.7	<0.46
Chloromethane	<17	<8.3	2,2,4-Trimethylpentane	<21	<4.6
F-114	<9.6	<1.4	Methyl methacrylate	<19	<4.6
Vinyl chloride	<1.2	<0.46	Heptane	<19	<4.6
1,3-Butadiene	<0.2	<0.092	Bromodichloromethane	2.7	0.40
Butane	<22	<9.2	Trichloroethene	<0.49	<0.092
Bromomethane	<18	<4.6	cis-1,3-Dichloropropene	<4.2	<0.92
Chloroethane	<12	<4.6	4-Methyl-2-pentanone	<38	<9.2
Vinyl bromide	<2	<0.46	trans-1,3-Dichloropropene	<2.1	<0.46
Ethanol	<35 k	<18 k	Toluene	<35	<9.2
Acrolein	<0.53	<0.23	1,1,2-Trichloroethane	<0.25	<0.046
Pentane	<27	<9.2	2-Hexanone	<19	<4.6
Trichlorofluoromethane	<10	<1.8	Tetrachloroethene	<31	<4.6
Acetone	<22	<9.2	Dibromochloromethane	1.8	0.21
2-Propanol	<40	<16	1,2-Dibromoethane (EDB)	<0.35	<0.046
1,1-Dichloroethene	<1.8	<0.46	Chlorobenzene	<2.1	<0.46
trans-1,2-Dichloroethene	<1.8	<0.46	Ethylbenzene	<2	<0.46
Methylene chloride	<160	<46	1,1,2,2-Tetrachloroethane	<0.63	<0.092
t-Butyl alcohol (TBA)	<56	<18	Nonane	<24	<4.6
3-Chloropropene	<14	<4.6	Isopropylbenzene	<45	<9.2
CFC-113	<7.1	<0.92	2-Chlorotoluene	<24	<4.6
Carbon disulfide	<29	<9.2	Propylbenzene	<23	<4.6
Methyl t-butyl ether (MTBE)	<33	<9.2	4-Ethyltoluene	<23	<4.6
Vinyl acetate	<32 k	<9.2 k	m,p-Xylene	<4	<0.92
1,1-Dichloroethane	<1.9	<0.46	o-Xylene	<2	<0.46
cis-1,2-Dichloroethene	<1.8	<0.46	Styrene	<3.9	<0.92
Hexane	<16	<4.6	Bromoform	<9.5	<0.92
Chloroform	7.0	1.4	Benzyl chloride	<0.24 k	<0.046 k
Ethyl acetate	<33	<9.2	1,3,5-Trimethylbenzene	<23	<4.6
Tetrahydrofuran	<2.7	<0.92	1,2,4-Trimethylbenzene	<23	<4.6
2-Butanone (MEK)	<27	<9.2	1,3-Dichlorobenzene	<2.8	<0.46
1,2-Dichloroethane (EDC)	<0.19	<0.046	1,4-Dichlorobenzene	<1.1	<0.17
1,1,1-Trichloroethane	<2.5	<0.46	1,2-Dichlorobenzene	<2.8	<0.46
Carbon tetrachloride	<1.4	<0.23	1,2,4-Trichlorobenzene	<3.4	<0.46
Benzene	<1.5	<0.46	Naphthalene	<1.2	<0.23
Cyclohexane	<32	<9.2	Hexachlorobutadiene	<0.98	<0.092

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-09-040424	Client:	Farallon Consulting, LLC
Date Received:	04/05/24	Project:	3245 158th Ave SE Bellevue WA
Date Collected:	04/04/24	Lab ID:	404097-04 1/5.4
Date Analyzed:	04/06/24	Data File:	040520.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	94	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<6.5	<3.8	1,2-Dichloropropane	<1.2	<0.27
Dichlorodifluoromethane	<5.3	<1.1	1,4-Dioxane	<1.9	<0.54
Chloromethane	<20	<9.7	2,2,4-Trimethylpentane	<25	<5.4
F-114	<11	<1.6	Methyl methacrylate	<22	<5.4
Vinyl chloride	<1.4	<0.54	Heptane	<22	<5.4
1,3-Butadiene	<0.24	<0.11	Bromodichloromethane	0.36	0.054
Butane	38	16	Trichloroethene	<0.58	<0.11
Bromomethane	<21	<5.4	cis-1,3-Dichloropropene	<4.9	<1.1
Chloroethane	<14	<5.4	4-Methyl-2-pentanone	<44	<11
Vinyl bromide	<2.4	<0.54	trans-1,3-Dichloropropene	<2.5	<0.54
Ethanol	<41 k	<22 k	Toluene	<41	<11
Acrolein	<0.62	<0.27	1,1,2-Trichloroethane	<0.29	<0.054
Pentane	<32	<11	2-Hexanone	<22	<5.4
Trichlorofluoromethane	<12	<2.2	Tetrachloroethene	<37	<5.4
Acetone	<26	<11	Dibromochloromethane	<0.46	<0.054
2-Propanol	<46	<19	1,2-Dibromoethane (EDB)	<0.41	<0.054
1,1-Dichloroethene	<2.1	<0.54	Chlorobenzene	<2.5	<0.54
trans-1,2-Dichloroethene	<2.1	<0.54	Ethylbenzene	<2.3	<0.54
Methylene chloride	<190	<54	1,1,2,2-Tetrachloroethane	<0.74	<0.11
t-Butyl alcohol (TBA)	<65	<22	Nonane	<28	<5.4
3-Chloropropene	<17	<5.4	Isopropylbenzene	<53	<11
CFC-113	<8.3	<1.1	2-Chlorotoluene	<28	<5.4
Carbon disulfide	<34	<11	Propylbenzene	<27	<5.4
Methyl t-butyl ether (MTBE)	<39	<11	4-Ethyltoluene	<27	<5.4
Vinyl acetate	<38 k	<11 k	m,p-Xylene	<4.7	<1.1
1,1-Dichloroethane	<2.2	<0.54	o-Xylene	<2.3	<0.54
cis-1,2-Dichloroethene	<2.1	<0.54	Styrene	<4.6	<1.1
Hexane	<19	<5.4	Bromoform	<11	<1.1
Chloroform	3.5	0.71	Benzyl chloride	<0.28 k	<0.054 k
Ethyl acetate	<39	<11	1,3,5-Trimethylbenzene	<27	<5.4
Tetrahydrofuran	<3.2	<1.1	1,2,4-Trimethylbenzene	<27	<5.4
2-Butanone (MEK)	<32	<11	1,3-Dichlorobenzene	<3.2	<0.54
1,2-Dichloroethane (EDC)	<0.22	<0.054	1,4-Dichlorobenzene	<1.2	<0.21
1,1,1-Trichloroethane	<2.9	<0.54	1,2-Dichlorobenzene	<3.2	<0.54
Carbon tetrachloride	<1.7	<0.27	1,2,4-Trichlorobenzene	<4	<0.54
Benzene	<1.7	<0.54	Naphthalene	<1.4	<0.27
Cyclohexane	<37	<11	Hexachlorobutadiene	<1.2	<0.11

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 158th Ave SE Bellevue WA
Date Collected:	Not Applicable	Lab ID:	04-0768 mb
Date Analyzed:	04/06/24	Data File:	040511.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	95	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<1.2	<0.7	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.99	<0.2	1,4-Dioxane	<0.36	<0.1
Chloromethane	<3.7	<1.8	2,2,4-Trimethylpentane	<4.7	<1
F-114	<2.1	<0.3	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	<0.044	<0.02	Bromodichloromethane	<0.067	<0.01
Butane	<4.8	<2	Trichloroethene	<0.11	<0.02
Bromomethane	<3.9	<1	cis-1,3-Dichloropropene	<0.91	<0.2
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<8.2	<2
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5 k	<4 k	Toluene	<7.5	<2
Acrolein	<0.11	<0.05	1,1,2-Trichloroethane	<0.055	<0.01
Pentane	<5.9	<2	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<35	<10	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<3.1	<1	Isopropylbenzene	<9.8	<2
CFC-113	<1.5	<0.2	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<4.9	<1
Methyl t-butyl ether (MTBE)	<7.2	<2	4-Ethyltoluene	<4.9	<1
Vinyl acetate	<7 k	<2 k	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1	<0.2
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052 k	<0.01 k
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<4.9	<1
Tetrahydrofuran	<0.59	<0.2	1,2,4-Trimethylbenzene	<4.9	<1
2-Butanone (MEK)	<5.9	<2	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.23	<0.038
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.31	<0.05	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.32	<0.1	Naphthalene	<0.26	<0.05
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/17/24

Date Received: 04/05/24

Project: 3245 158th Ave SE Bellevue WA 2403-008, F&BI 404097

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 404097-01 1/7.3 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	590	590	0
APH EC9-12 aliphatics	ug/m3	610	600	5
APH EC9-10 aromatics	ug/m3	<180	<180	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	106	70-130
APH EC9-12 aliphatics	ug/m3	67	129	70-130
APH EC9-10 aromatics	ug/m3	67	94	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 04/17/24

Date Received: 04/05/24

Project: 3245 158th Ave SE Bellevue WA 2403-008, F&BI 404097

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: 404097-04 1/5.4 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Propene	ug/m3	<6.5	<6.5	nm
Dichlorodifluoromethane	ug/m3	<5.3	<5.3	nm
Chloromethane	ug/m3	<20	<20	nm
F-114	ug/m3	<11	<11	nm
Vinyl chloride	ug/m3	<1.4	<1.4	nm
1,3-Butadiene	ug/m3	<0.24	<0.24	nm
Butane	ug/m3	38	38	0
Bromomethane	ug/m3	<21	<21	nm
Chloroethane	ug/m3	<14	<14	nm
Vinyl bromide	ug/m3	<2.4	<2.4	nm
Ethanol	ug/m3	<41	<41	nm
Acrolein	ug/m3	<0.62	<0.62	nm
Pentane	ug/m3	<32	<32	nm
Trichlorofluoromethane	ug/m3	<12	<12	nm
Acetone	ug/m3	<26	<26	nm
2-Propanol	ug/m3	<46	<46	nm
1,1-Dichloroethene	ug/m3	<2.1	<2.1	nm
trans-1,2-Dichloroethene	ug/m3	<2.1	<2.1	nm
Methylene chloride	ug/m3	<190	<190	nm
t-Butyl alcohol (TBA)	ug/m3	<65	<65	nm
3-Chloropropene	ug/m3	<17	<17	nm
CFC-113	ug/m3	<8.3	<8.3	nm
Carbon disulfide	ug/m3	<34	<34	nm
Methyl t-butyl ether (MTBE)	ug/m3	<39	<39	nm
Vinyl acetate	ug/m3	<38	<38	nm
1,1-Dichloroethane	ug/m3	<2.2	<2.2	nm
cis-1,2-Dichloroethene	ug/m3	<2.1	<2.1	nm
Hexane	ug/m3	<19	<19	nm
Chloroform	ug/m3	3.5	3.3	6
Ethyl acetate	ug/m3	<39	<39	nm
Tetrahydrofuran	ug/m3	<3.2	<3.2	nm
2-Butanone (MEK)	ug/m3	<32	<32	nm
1,2-Dichloroethane (EDC)	ug/m3	<0.22	<0.22	nm
1,1,1-Trichloroethane	ug/m3	<2.9	<2.9	nm
Carbon tetrachloride	ug/m3	<1.7	<1.7	nm
Benzene	ug/m3	<1.7	<1.7	nm
Cyclohexane	ug/m3	<37	<37	nm
1,2-Dichloropropane	ug/m3	<1.2	<1.2	nm
1,4-Dioxane	ug/m3	<1.9	<1.9	nm
2,2,4-Trimethylpentane	ug/m3	<25	<25	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/17/24

Date Received: 04/05/24

Project: 3245 158th Ave SE Bellevue WA 2403-008, F&BI 404097

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 404097-04 1/5.4 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl methacrylate	ug/m3	<22	<22	nm
Heptane	ug/m3	<22	<22	nm
Bromodichloromethane	ug/m3	0.36	0.40	11
Trichloroethene	ug/m3	<0.58	<0.58	nm
cis-1,3-Dichloropropene	ug/m3	<4.9	<4.9	nm
4-Methyl-2-pentanone	ug/m3	<44	<44	nm
trans-1,3-Dichloropropene	ug/m3	<2.5	<2.5	nm
Toluene	ug/m3	<41	<41	nm
1,1,2-Trichloroethane	ug/m3	<0.29	<0.29	nm
2-Hexanone	ug/m3	<22	<22	nm
Tetrachloroethene	ug/m3	<37	<37	nm
Dibromochloromethane	ug/m3	<0.46	<0.46	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.41	<0.41	nm
Chlorobenzene	ug/m3	<2.5	<2.5	nm
Ethylbenzene	ug/m3	<2.3	<2.3	nm
1,1,2,2-Tetrachloroethane	ug/m3	<0.74	<0.74	nm
Nonane	ug/m3	<28	<28	nm
Isopropylbenzene	ug/m3	<53	<53	nm
2-Chlorotoluene	ug/m3	<28	<28	nm
Propylbenzene	ug/m3	<27	<27	nm
4-Ethyltoluene	ug/m3	<27	<27	nm
m,p-Xylene	ug/m3	<4.7	<4.7	nm
o-Xylene	ug/m3	<2.3	<2.3	nm
Styrene	ug/m3	<4.6	<4.6	nm
Bromoform	ug/m3	<11	<11	nm
Benzyl chloride	ug/m3	<0.28	<0.28	nm
1,3,5-Trimethylbenzene	ug/m3	<27	<27	nm
1,2,4-Trimethylbenzene	ug/m3	<27	<27	nm
1,3-Dichlorobenzene	ug/m3	<3.2	<3.2	nm
1,4-Dichlorobenzene	ug/m3	<1.2	<1.2	nm
1,2-Dichlorobenzene	ug/m3	<3.2	<3.2	nm
1,2,4-Trichlorobenzene	ug/m3	<4	<4	nm
Naphthalene	ug/m3	<1.4	<1.4	nm
Hexachlorobutadiene	ug/m3	<1.2	<1.2	nm

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 04/17/24

Date Received: 04/05/24

Project: 3245 158th Ave SE Bellevue WA 2403-008, F&BI 404097

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Propene	ug/m3	23	115	70-130
Dichlorodifluoromethane	ug/m3	67	98	70-130
Chloromethane	ug/m3	28	75	70-130
F-114	ug/m3	94	97	70-130
Vinyl chloride	ug/m3	35	96	70-130
1,3-Butadiene	ug/m3	30	103	70-130
Butane	ug/m3	32	96	70-130
Bromomethane	ug/m3	52	96	70-130
Chloroethane	ug/m3	36	99	70-130
Vinyl bromide	ug/m3	59	123	70-130
Ethanol	ug/m3	25	104	70-130
Acrolein	ug/m3	31	95	70-130
Pentane	ug/m3	40	108	70-130
Trichlorofluoromethane	ug/m3	76	105	70-130
Acetone	ug/m3	32	96	70-130
2-Propanol	ug/m3	33	100	70-130
1,1-Dichloroethene	ug/m3	54	106	70-130
trans-1,2-Dichloroethene	ug/m3	54	108	70-130
Methylene chloride	ug/m3	94	105	70-130
t-Butyl alcohol (TBA)	ug/m3	41	102	70-130
3-Chloropropene	ug/m3	42	97	70-130
CFC-113	ug/m3	100	107	70-130
Carbon disulfide	ug/m3	42	88	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	99	70-130
Vinyl acetate	ug/m3	48	90	70-130
1,1-Dichloroethane	ug/m3	55	108	70-130
cis-1,2-Dichloroethene	ug/m3	54	104	70-130
Hexane	ug/m3	48	109	70-130
Chloroform	ug/m3	66	106	70-130
Ethyl acetate	ug/m3	49	96	70-130
Tetrahydrofuran	ug/m3	40	97	70-130
2-Butanone (MEK)	ug/m3	40	106	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	111	70-130
1,1,1-Trichloroethane	ug/m3	74	107	70-130
Carbon tetrachloride	ug/m3	85	96	70-130
Benzene	ug/m3	43	103	70-130
Cyclohexane	ug/m3	46	95	70-130
1,2-Dichloropropane	ug/m3	62	105	70-130
1,4-Dioxane	ug/m3	49	96	70-130
2,2,4-Trimethylpentane	ug/m3	63	106	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 04/17/24

Date Received: 04/05/24

Project: 3245 158th Ave SE Bellevue WA 2403-008, F&BI 404097

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Methyl methacrylate	ug/m3	55	98	70-130
Heptane	ug/m3	55	106	70-130
Bromodichloromethane	ug/m3	90	103	70-130
Trichloroethene	ug/m3	73	108	70-130
cis-1,3-Dichloropropene	ug/m3	61	109	70-130
4-Methyl-2-pentanone	ug/m3	55	104	70-130
trans-1,3-Dichloropropene	ug/m3	61	102	70-130
Toluene	ug/m3	51	110	70-130
1,1,2-Trichloroethane	ug/m3	74	110	70-130
2-Hexanone	ug/m3	55	91	70-130
Tetrachloroethene	ug/m3	92	109	70-130
Dibromochloromethane	ug/m3	120	97	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	109	70-130
Chlorobenzene	ug/m3	62	105	70-130
Ethylbenzene	ug/m3	59	108	70-130
1,1,2,2-Tetrachloroethane	ug/m3	93	105	70-130
Nonane	ug/m3	71	109	70-130
Isopropylbenzene	ug/m3	66	112	70-130
2-Chlorotoluene	ug/m3	70	105	70-130
Propylbenzene	ug/m3	66	107	70-130
4-Ethyltoluene	ug/m3	66	105	70-130
m,p-Xylene	ug/m3	120	109	70-130
o-Xylene	ug/m3	59	112	70-130
Styrene	ug/m3	58	107	70-130
Bromoform	ug/m3	140	87	70-130
Benzyl chloride	ug/m3	70	98	70-130
1,3,5-Trimethylbenzene	ug/m3	66	110	70-130
1,2,4-Trimethylbenzene	ug/m3	66	104	70-130
1,3-Dichlorobenzene	ug/m3	81	106	70-130
1,4-Dichlorobenzene	ug/m3	81	105	70-130
1,2-Dichlorobenzene	ug/m3	81	103	70-130
1,2,4-Trichlorobenzene	ug/m3	100	102	70-130
Naphthalene	ug/m3	71	97	70-130
Hexachlorobutadiene	ug/m3	140	100	70-130



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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.

404097

## SAMPLE CHAIN OF CUSTODY

04/05/24

Page # 1 of 1

Report To West PelhamCompany Furadon ConsultingAddress 975 5th Ave NWCity, State, ZIP Issaquah, WA 98027Phone (206) 285-0800 Email gphillips@furadonconsulting.com

SAMPLERS (signature) <u>Angie Brown</u>		PO # <u>2403-008</u>
PROJECT NAME & ADDRESS <u>3245 158th Ave SE, Bellevue</u>		INVOICE TO <u>AP</u>
NOTES:		

TURNAROUND TIME
Standard RUSH
Rush charges authorized by:
SAMPLE DISPOSAL
Default: Clean following final report delivery
Hold (Fee may apply):

SAMPLE INFORMATION										ANALYSIS REQUESTED					
Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. ("Hg)	Field Initial Time	Final Vac. ("Hg)	Field Final Time	TO15 Full Scan	TO15 BTEXN	TO15 cVOCs	APH	Helium	Notes
SG-05-04042024	01	9563	117	IA / (SG)	4/4/24	-30	1139	0	1147	X			X		<del>CONTACT FOR ANALYSIS</del>
SG-11-040424	02	9562	229	IA / (SG)		-28	1236	0	1247	X			X		
SG-10-040424	03	8209	35	IA / (SG)		-30	1326	0	1336	X			X		
SG-09-040424	04	9560	07	IA / (SG)		-27	1445	0	1452	X			X		X-per YP std TAT ME 04/05/24 ME
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											

Friedman &amp; Bruya, Inc.

5500 4th Avenue South

Seattle, WA 98108

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS \COC\COCTO-15.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Angie Brown</u>	Angie Brown	FLN	4/5/24	1039
<u>AP</u>	ANH PHAN	FLB	04/05/24	10:39
Received by:		Samples received at	16	

**APPENDIX E**  
**ECOLOGY CORRESPONDENCE**

REMEDIAL INVESTIGATION AND CLEANUP ACTION PLAN  
3245 158<sup>th</sup> Avenue Southeast  
Bellevue, Washington

Farallon PN: 2403-008

RE: Calculation of Site-Specific TPH Sub-Slab Screening Level - 3245 158th - Message (...)

Search

FileMessageHelpAcrobat

Ignore

Junk

Delete

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Send to OneNote

Actions

Mark Unread

Categorize

Follow Up

Read Aloud

Immersive Reader

Translate

Zoom

RE: Calculation of Site-Specific TPH Sub-Slab Screening Level - 3245 158th

WF

Winslow, Frank (ECY) <fwin461@ECY.WA.GOV>

To

Yusuf Pehlivan

Cc

Suzy Stumpf; John Funderburk; Mitchell, Treasure (ECY)

General\All Employees (unrestricted)

This sender fwin461@ECY.WA.GOV is from outside your organization.

You replied to this message on 7/1/2024 11:55 AM.

Reply

Reply All

Forward

Mon 7/1/2024 9:53 AM

Hi Yusuf,

Thank you for this information.

The general approach and calculations appear to make sense, and we have not identified concerns with respect to development and application of site-specific screening levels for petroleum in soil gas.

Ecology would be reviewing the specific calculations in more detail following enrollment in the expedited VCP process.

**APPENDIX F**  
**SITE-SPECIFIC SOIL GAS SCREENING LEVEL CALCULATIONS**

REMEDIAL INVESTIGATION AND CLEANUP ACTION PLAN  
3245 158<sup>th</sup> Avenue Southeast  
Bellevue, Washington

Farallon PN: 2403-008

Table 1  
Calculation of Site-Specific Indoor Air Cleanup Levels and Soil Gas Screening Levels  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Petroleum Fraction or Compound <sup>1</sup>	Measured Soil Gas or Air Concentration (µg/m <sup>3</sup> )	Fraction of Total Concentration (F <sub>i</sub> )	ABS <sub>i</sub> (unitless)	RfDi <sub>i</sub> (mg/kg-day)	Intermediate Factor (IF) (kg-µg-day/ mg-m <sup>3</sup> )	Total TPH Non-carcinogenic CUL <sub>i</sub> for Indoor Air (µg/m <sup>3</sup> ) (CUL <sub>i</sub> =RfDi <sub>i</sub> x IF/ABS <sub>i</sub> )	F <sub>i</sub> /CUL <sub>i</sub>	Total Site- Specific Indoor Air TPH CUL = 1/Σ(F <sub>i</sub> /CUL <sub>i</sub> ) (µg/m <sup>3</sup> )	Total Site-Specific Soil Gas TPH Screening Level = TPH Air CUL/Attenuation Factor of 0.03 (µg/m <sup>3</sup> )
Ecology Example (Table E-7, Guidance for Evaluating Vapor Intrusion in Washington State) <sup>1</sup>									
Aliphatics EC>5-8	319	0.91	1	1.7	1,600	2.72E+03	3.35E-04		
Aliphatics EC>8-12	12	0.03	1	0.029	1,600	4.64E+01	7.40E-04		
Aromatics EC>9-10	6	0.02	1	0.114	1,600	1.82E+02	9.41E-05		
Benzene	0.2	0.0006	1	0.00855	1,600	1.37E+01	4.18E-05		
Toluene	8	0.02	1	1.4	1,600	2.24E+03	1.02E-05		
Ethylbenzene	1.8	0.01	1	0.286	1,600	4.58E+02	1.12E-05		
Xylenes	2.7	0.01	1	0.029	1,600	4.64E+01	1.66E-04		
Naphthalene	< 0.07	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	349.7	1.00					1.40E-03	715	23,832
Sample: SG-05-040424									
Aliphatics EC>5-8	590	0.49	1	1.7	1,600	2.72E+03	1.81E-04		
Aliphatics EC>8-12	610	0.51	1	0.029	1,600	4.64E+01	1.10E-02		
Aromatics EC>9-10	< 180	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 1.5	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 36	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 2.1	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	< 6.3	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Naphthalene	< 1.3	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	1200	1.00					1.11E-02	90	2,993
Sample: SG-11-040424									
Aliphatics EC>5-8	800	0.45	1	1.7	1,600	2.72E+03	1.66E-04		
Aliphatics EC>8-12	970	0.55	1	0.029	1,600	4.64E+01	1.18E-02		
Aromatics EC>9-10	< 250	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 2.2	0.000	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 51	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 3	0.000	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	< 8.9	0.000	1	0.029	1,600	4.64E+01	0.00E+00		
Naphthalene	< 1.8	0.000	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	1770	1.00					1.20E-02	83	2,783

Table 1  
Calculation of Site-Specific Indoor Air Cleanup Levels and Soil Gas Screening Levels  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Petroleum Fraction or Compound <sup>1</sup>	Measured Soil Gas or Air Concentration (µg/m <sup>3</sup> )	Fraction of Total Concentration (F <sub>i</sub> )	ABS <sub>i</sub> (unitless)	RfDi <sub>i</sub> (mg/kg-day)	Intermediate Factor (IF) (kg-µg-day/ mg-m <sup>3</sup> )	Total TPH Non-carcinogenic CUL <sub>i</sub> for Indoor Air (µg/m <sup>3</sup> ) (CUL <sub>i</sub> =RfDi <sub>i</sub> x IF/ABS <sub>i</sub> )	F <sub>i</sub> /CUL <sub>i</sub>	Total Site- Specific Indoor Air TPH CUL = 1/Σ(F <sub>i</sub> /CUL <sub>i</sub> ) (µg/m <sup>3</sup> )	Total Site-Specific Soil Gas TPH Screening Level = TPH Air CUL/Attenuation Factor of 0.03 (µg/m <sup>3</sup> )
Sample: SG-10-040424									
Aliphatics EC>5-8	580	1.00	1	1.7	1,600	2.72E+03	3.68E-04		
Aliphatics EC>8-12	< 170	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Aromatics EC>9-10	< 170	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 1.5	0.000	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 35	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 2	0.000	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	< 6	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Naphthalene	< 1.2	0.000	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	580	1.00					3.68E-04	2720	90,667
Sample: SG-09-040424									
Aliphatics EC>5-8	870	1.00	1	1.7	1,600	2.72E+03	3.68E-04		
Aliphatics EC>8-12	< 200	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Aromatics EC>9-10	< 200	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 1.7	0.000	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 41	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 2.3	0.000	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	< 7	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Naphthalene	< 1.4	0.000	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	870	1.00					3.68E-04	2720	90,667

NOTES:

<sup>1</sup> Calculation of a site-specific TPH indoor air cleanup level and soil gas screening level is based on the example provided in Tables E-5, E-6, and E-7 of the Washington State Department of Ecology's *Guidance for Evaluating Vapor Intrusion in Washington State*, Publication No. 09-09-047, Final March 2022. The intermediate factor is as provided and explained in Table E-5.

ABS<sub>i</sub> = inhalation absorption fraction for individual petroleum component  
CUL<sub>i</sub> = air cleanup level for individual petroleum component  
F<sub>i</sub> = fraction by weight of individual petroleum component  
IF = intermediate factor (see Note 1)  
kg = kilogram  
µg/m<sup>3</sup> = micrograms per cubic meter  
mg/kg-day = milligrams per kilogram per day  
RfDi<sub>i</sub> = inhalation reference dose for individual petroleum component  
TPH = total petroleum hydrocarbons

Table 1  
Calculation of Site-Specific Indoor Air Cleanup Levels and Soil Gas Screening Levels  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Petroleum Fraction or Compound <sup>1</sup>	Measured Soil Gas or Air Concentration (µg/m <sup>3</sup> )	Fraction of Total Concentration (F <sub>i</sub> )	ABS <sub>i</sub> (unitless)	RfDi <sub>i</sub> (mg/kg-day)	Intermediate Factor (IF) (kg-µg-day/ mg-m <sup>3</sup> )	Total TPH Non-carcinogenic CUL <sub>i</sub> for Indoor Air (µg/m <sup>3</sup> ) (CUL <sub>i</sub> =RfDi <sub>i</sub> x IF/ABS <sub>i</sub> )	F <sub>i</sub> /CUL <sub>i</sub>	Total Site- Specific Indoor Air TPH CUL = 1/Σ(F <sub>i</sub> /CUL <sub>i</sub> ) (µg/m <sup>3</sup> )	Total Site-Specific Soil Gas TPH Screening Level = TPH Air CUL/Attenuation Factor of 0.03 (µg/m <sup>3</sup> )
Ecology Example (Table E-7, Guidance for Evaluating Vapor Intrusion in Washington State) <sup>1</sup>									
Aliphatics EC>5-8	319	0.91	1	1.7	1,600	2.72E+03	3.35E-04		
Aliphatics EC>8-12	12	0.03	1	0.029	1,600	4.64E+01	7.40E-04		
Aromatics EC>9-10	6	0.02	1	0.114	1,600	1.82E+02	9.41E-05		
Benzene	0.2	0.0006	1	0.00855	1,600	1.37E+01	4.18E-05		
Toluene	8	0.02	1	1.4	1,600	2.24E+03	1.02E-05		
Ethylbenzene	1.8	0.01	1	0.286	1,600	4.58E+02	1.12E-05		
Xylenes	2.7	0.01	1	0.029	1,600	4.64E+01	1.66E-04		
Naphthalene	< 0.07	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	349.7	1.00					1.40E-03	715	23,832
Sample: SG-04-071024									
Aliphatics EC>5-8	6,200,000	0.29	1	1.7	1,600	2.72E+03	1.08E-04		
Aliphatics EC>8-12	15,000,000	0.71	1	0.029	1,600	4.64E+01	1.52E-02		
Aromatics EC>9-10	< 750,000	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 9,600	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 230,000	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 13,000	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	< 39,000	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Naphthalene	< 2,200	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	21,200,000	1.00					1.54E-02	65	2,171
Sample: SG-05-071024									
Aliphatics EC>5-8	830	0.64	1	1.7	1,600	2.72E+03	2.35E-04		
Aliphatics EC>8-12	470	0.36	1	0.029	1,600	4.64E+01	7.79E-03		
Aromatics EC>9-10	< 220	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 2.8	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 66	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 3.8	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	< 11.4	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Naphthalene	0.64	0.00	1	0.00086	1,600	1.38E+00	3.58E-04		
Total TPH	1,300.64	1.00					8.38E-03	119	3,978



Table 1  
Calculation of Site-Specific Indoor Air Cleanup Levels and Soil Gas Screening Levels  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Petroleum Fraction or Compound <sup>1</sup>	Measured Soil Gas or Air Concentration (µg/m <sup>3</sup> )	Fraction of Total Concentration (F <sub>i</sub> )	ABS <sub>i</sub> (unitless)	RfDi <sub>i</sub> (mg/kg-day)	Intermediate Factor (IF) (kg-µg-day/ mg-m <sup>3</sup> )	Total TPH Non-carcinogenic CUL <sub>i</sub> for Indoor Air (µg/m <sup>3</sup> ) (CUL <sub>i</sub> =RfDi <sub>i</sub> x IF/ABS <sub>i</sub> )	F <sub>i</sub> /CUL <sub>i</sub>	Total Site- Specific Indoor Air TPH CUL = 1/Σ(F <sub>i</sub> /CUL <sub>i</sub> ) (µg/m <sup>3</sup> )	Total Site-Specific Soil Gas TPH Screening Level = TPH Air CUL/Attenuation Factor of 0.03 (µg/m <sup>3</sup> )
Sample: SG-06-071024									
Aliphatics EC>5-8	1,900	0.66	1	1.7	1,600	2.72E+03	2.41E-04		
Aliphatics EC>8-12	1,000	0.34	1	0.029	1,600	4.64E+01	7.43E-03		
Aromatics EC>9-10	< 240	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 3.1	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 72	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 4.2	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	< 12.5	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Naphthalene	< 0.7	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	2,900	1.00					7.67E-03	130	4,345
Sample: SG-08-070924									
Aliphatics EC>5-8	2,000	0.64	1	1.7	1,600	2.72E+03	2.37E-04		
Aliphatics EC>8-12	1,100	0.35	1	0.029	1,600	4.64E+01	7.63E-03		
Aromatics EC>9-10	< 500	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	8.4	0.00	1	0.00855	1,600	1.37E+01	1.98E-04		
Toluene	< 150	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 8.7	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	< 25.7	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Naphthalene	< 1.5	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	3108.4	1.00					8.06E-03	124	4,135
Sample: SG-09-070924									
Aliphatics EC>5-8	3,100	0.51	1	1.7	1,600	2.72E+03	1.87E-04		
Aliphatics EC>8-12	3,000	0.49	1	0.029	1,600	4.64E+01	1.06E-02		
Aromatics EC>9-10	< 470	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 6.1	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 140	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 8.3	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	< 25.3	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Naphthalene	< 1.4	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	6,100	1.00					1.08E-02	93	3,090

Table 1  
Calculation of Site-Specific Indoor Air Cleanup Levels and Soil Gas Screening Levels  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Petroleum Fraction or Compound <sup>1</sup>	Measured Soil Gas or Air Concentration (µg/m <sup>3</sup> )	Fraction of Total Concentration (F <sub>i</sub> )	ABS <sub>i</sub> (unitless)	RfDi <sub>i</sub> (mg/kg-day)	Intermediate Factor (IF) (kg-µg-day/mg-m <sup>3</sup> )	Total TPH Non-carcinogenic CUL <sub>i</sub> for Indoor Air (µg/m <sup>3</sup> ) (CUL <sub>i</sub> =RfDi <sub>i</sub> x IF/ABS <sub>i</sub> )	F <sub>i</sub> /CUL <sub>i</sub>	Total Site-Specific Indoor Air TPH CUL = 1/Σ(F <sub>i</sub> /CUL <sub>i</sub> ) (µg/m <sup>3</sup> )	Total Site-Specific Soil Gas TPH Screening Level = TPH Air CUL/Attenuation Factor of 0.03 (µg/m <sup>3</sup> )
Sample: SG-10-070924									
Aliphatics EC>5-8	930	0.66	1	1.7	1,600	2.72E+03	2.42E-04		
Aliphatics EC>8-12	480	0.34	1	0.029	1,600	4.64E+01	7.34E-03		
Aromatics EC>9-10	< 230	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 2.9	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 69	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 4	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	< 12	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Naphthalene	< 0.68	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	1,410	1.00					7.58E-03	132	4,398
Sample: SG-11-071024									
Aliphatics EC>5-8	850	0.58	1	1.7	1,600	2.72E+03	2.13E-04		
Aliphatics EC>8-12	620	0.42	1	0.029	1,600	4.64E+01	9.09E-03		
Aromatics EC>9-10	< 230	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 2.9	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 69	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 4	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	< 12	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Naphthalene	< 0.68	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	1,470	1.00					9.30E-03	107	3,583

NOTES:

<sup>1</sup> Calculation of a site-specific TPH indoor air cleanup level and soil gas screening level is based on the example provided in Tables E-5, E-6, and E-7 of the Washington State Department of Ecology's *Guidance for Evaluating Vapor Intrusion in Washington State*, Publication No. 09-09-047, Final March 2022. The intermediate factor is as provided and explained in Table E-5.

ABS<sub>i</sub> = inhalation absorption fraction for individual petroleum component  
CUL<sub>i</sub> = air cleanup level for individual petroleum component  
F<sub>i</sub> = fraction by weight of individual petroleum component  
IF = intermediate factor (see Note 1)  
kg = kilogram  
µg/m<sup>3</sup> = micrograms per cubic meter  
mg/kg-day = milligrams per kilogram per day  
RfDi<sub>i</sub> = inhalation reference dose for individual petroleum component  
TPH = total petroleum hydrocarbons

Table 1  
Calculation of Site-Specific Indoor Air Cleanup Levels and Soil Gas Screening Levels  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Petroleum Fraction or Compound <sup>1</sup>	Measured Soil Gas or Air Concentration (µg/m <sup>3</sup> )	Fraction of Total Concentration (F <sub>i</sub> )	ABS <sub>i</sub> (unitless)	RfDi <sub>i</sub> (mg/kg-day)	Intermediate Factor (IF) (kg-µg-day/ mg-m <sup>3</sup> )	Total TPH Non-carcinogenic CUL <sub>i</sub> for Indoor Air (µg/m <sup>3</sup> ) (CUL <sub>i</sub> =RfDi <sub>i</sub> x IF/ABS <sub>i</sub> )	F <sub>i</sub> /CUL <sub>i</sub>	Total Site- Specific Indoor Air TPH CUL = 1/Σ(F <sub>i</sub> /CUL <sub>i</sub> ) (µg/m <sup>3</sup> )	Total Site-Specific Soil Gas TPH Screening Level = TPH Air CUL/Attenuation Factor of 0.03 (µg/m <sup>3</sup> )
Ecology Example (Table E-7, Guidance for Evaluating Vapor Intrusion in Washington State) <sup>1</sup>									
Aliphatics EC>5-8	319	0.91	1	1.7	1,600	2.72E+03	3.35E-04		
Aliphatics EC>8-12	12	0.03	1	0.029	1,600	4.64E+01	7.40E-04		
Aromatics EC>9-10	6	0.02	1	0.114	1,600	1.82E+02	9.41E-05		
Benzene	0.2	0.0006	1	0.00855	1,600	1.37E+01	4.18E-05		
Toluene	8	0.02	1	1.4	1,600	2.24E+03	1.02E-05		
Ethylbenzene	1.8	0.01	1	0.286	1,600	4.58E+02	1.12E-05		
Xylenes	2.7	0.01	1	0.029	1,600	4.64E+01	1.66E-04		
Naphthalene	< 0.07	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	349.7	1.00					1.40E-03	715	23,832
Sample: SG-04-071024									
Aliphatics EC>5-8	1,200,000	0.24	1	1.7	1,600	2.72E+03	8.99E-05		
Aliphatics EC>8-12	3,700,000	0.75	1	0.029	1,600	4.64E+01	1.62E-02		
Aromatics EC>9-10	< 99,000	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 350	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 8,300	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 480	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	7,200	0.00	1	0.029	1,600	4.64E+01	3.16E-05		
Naphthalene	< 290	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	4,907,200	1.00					1.64E-02	61	2,036
Sample: SG-05-071024									
Aliphatics EC>5-8	530	0.50	1	1.7	1,600	2.72E+03	1.86E-04		
Aliphatics EC>8-12	520	0.50	1	0.029	1,600	4.64E+01	1.07E-02		
Aromatics EC>9-10	< 130	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 1.7	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 40	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 2.3	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	< 6.9	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Naphthalene	< 1.4	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	1,050.00	1.00					1.09E-02	92	3,070

Table 1  
Calculation of Site-Specific Indoor Air Cleanup Levels and Soil Gas Screening Levels  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Petroleum Fraction or Compound <sup>1</sup>	Measured Soil Gas or Air Concentration (µg/m <sup>3</sup> )	Fraction of Total Concentration (F <sub>i</sub> )	ABS <sub>i</sub> (unitless)	RfDi <sub>i</sub> (mg/kg-day)	Intermediate Factor (IF) (kg-µg-day/ mg-m <sup>3</sup> )	Total TPH Non-carcinogenic CUL <sub>i</sub> for Indoor Air (µg/m <sup>3</sup> ) (CUL <sub>i</sub> =RfDi <sub>i</sub> x IF/ABS <sub>i</sub> )	F <sub>i</sub> /CUL <sub>i</sub>	Total Site- Specific Indoor Air TPH CUL = 1/Σ(F <sub>i</sub> /CUL <sub>i</sub> ) (µg/m <sup>3</sup> )	Total Site-Specific Soil Gas TPH Screening Level = TPH Air CUL/Attenuation Factor of 0.03 (µg/m <sup>3</sup> )
<b>Sample: SG-06-071024</b>									
Aliphatics EC>5-8	550	0.41	1	1.7	1,600	2.72E+03	1.52E-04		
Aliphatics EC>8-12	780	0.59	1	0.029	1,600	4.64E+01	1.26E-02		
Aromatics EC>9-10	< 130	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 1.7	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 40	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 2.3	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	< 6.9	0.00	1	0.029	1,600	4.64E+01	0.00E+00		
Naphthalene	< 1.4	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
<b>Total TPH</b>	1,330	1.00					1.28E-02	<b>78</b>	<b>2,606</b>
<b>Sample: SG-08-070924</b>									
Aliphatics EC>5-8	500	0.51	1	1.7	1,600	2.72E+03	1.88E-04		
Aliphatics EC>8-12	470	0.48	1	0.029	1,600	4.64E+01	1.04E-02		
Aromatics EC>9-10	< 130	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 1.7	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 40	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 2.3	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	8.2	0.01	1	0.029	1,600	4.64E+01	1.81E-04		
Naphthalene	< 1.4	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
<b>Total TPH</b>	978.2	1.00					1.07E-02	<b>93</b>	<b>3,108</b>
<b>Sample: SG-09-070924</b>									
Aliphatics EC>5-8	970	0.47	1	1.7	1,600	2.72E+03	1.72E-04		
Aliphatics EC>8-12	1,100	0.53	1	0.029	1,600	4.64E+01	1.14E-02		
Aromatics EC>9-10	< 130	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 1.7	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 39	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 2.3	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	7	0.00	1	0.029	1,600	4.64E+01	7.26E-05		
Naphthalene	< 1.4	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
<b>Total TPH</b>	2,077	1.00					1.17E-02	<b>86</b>	<b>2,859</b>

Table 1  
Calculation of Site-Specific Indoor Air Cleanup Levels and Soil Gas Screening Levels  
3245 158th Avenue Southeast  
Bellevue, Washington  
Farallon PN: 2403-008

Petroleum Fraction or Compound <sup>1</sup>	Measured Soil Gas or Air Concentration (µg/m <sup>3</sup> )	Fraction of Total Concentration (F <sub>i</sub> )	ABS <sub>i</sub> (unitless)	RfDi <sub>i</sub> (mg/kg-day)	Intermediate Factor (IF) (kg-µg-day/mg-m <sup>3</sup> )	Total TPH Non-carcinogenic CUL <sub>i</sub> for Indoor Air (µg/m <sup>3</sup> ) (CUL <sub>i</sub> =RfDi <sub>i</sub> x IF/ABS <sub>i</sub> )	F <sub>i</sub> /CUL <sub>i</sub>	Total Site-Specific Indoor Air TPH CUL = 1/Σ(F <sub>i</sub> /CUL <sub>i</sub> ) (µg/m <sup>3</sup> )	Total Site-Specific Soil Gas TPH Screening Level = TPH Air CUL/Attenuation Factor of 0.03 (µg/m <sup>3</sup> )
Sample: SG-10-070924									
Aliphatics EC>5-8	710	0.44	1	1.7	1,600	2.72E+03	1.62E-04		
Aliphatics EC>8-12	890	0.55	1	0.029	1,600	4.64E+01	1.19E-02		
Aromatics EC>9-10	< 140	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 1.8	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 41	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 2.4	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	6.8	0.00	1	0.029	1,600	4.64E+01	9.12E-05		
Naphthalene	< 1.4	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	1,607	1.00					1.22E-02	82	2,734
Sample: SG-11-071024									
Aliphatics EC>5-8	610	0.43	1	1.7	1,600	2.72E+03	1.57E-04		
Aliphatics EC>8-12	810	0.57	1	0.029	1,600	4.64E+01	1.22E-02		
Aromatics EC>9-10	< 130	0.00	1	0.114	1,600	1.82E+02	0.00E+00		
Benzene	< 1.7	0.00	1	0.00855	1,600	1.37E+01	0.00E+00		
Toluene	< 41	0.00	1	1.4	1,600	2.24E+03	0.00E+00		
Ethylbenzene	< 2.3	0.00	1	0.286	1,600	4.58E+02	0.00E+00		
Xylenes	6.3	0.00	1	0.029	1,600	4.64E+01	9.52E-05		
Naphthalene	< 1.4	0.00	1	0.00086	1,600	1.38E+00	0.00E+00		
Total TPH	1,426	1.00					1.25E-02	80	2,668

NOTES:

<sup>1</sup> Calculation of a site-specific TPH indoor air cleanup level and soil gas screening level is based on the example provided in Tables E-5, E-6, and E-7 of the Washington State Department of Ecology's *Guidance for Evaluating Vapor Intrusion in Washington State*, Publication No. 09-09-047, Final March 2022. The intermediate factor is as provided and explained in Table E-5.

ABS<sub>i</sub> = inhalation absorption fraction for individual petroleum component  
CUL<sub>i</sub> = air cleanup level for individual petroleum component  
F<sub>i</sub> = fraction by weight of individual petroleum component  
IF = intermediate factor (see Note 1)  
kg = kilogram  
µg/m<sup>3</sup> = micrograms per cubic meter  
mg/kg-day = milligrams per kilogram per day  
RfDi<sub>i</sub> = inhalation reference dose for individual petroleum component  
TPH = total petroleum hydrocarbons

**APPENDIX G**  
**LABORATORY DISCUSSION REGARDING SOIL GAS SAMPLE RESULTS**

REMEDIAL INVESTIGATION AND CLEANUP ACTION PLAN  
3245 158<sup>th</sup> Avenue Southeast  
Bellevue, Washington

Farallon PN: 2403-008

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
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June 5, 2024

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027


Dear Mr Pehlivan:

Included are the amended results from the testing of material submitted on March 1, 2024 from the 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024 project. The case narrative was expanded.

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  
FLN0314R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

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March 14, 2024

Yusuf Pehlivan, Project Manager  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

Dear Mr Pehlivan:

Included are the results from the testing of material submitted on March 1, 2024 from the 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024 project. There are 25 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  
FLN0314R.DOC



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on March 1, 2024 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
403024 -01	SG-04-022824
403024 -02	SG-09-022824
403024 -03	SG-05-022824
403024 -04	SG-11-022824
403024 -05	SG-10-022824
403024 -06	SG-08-022824
403024 -07	SG-06-022824

Non-petroleum compounds identified in the air phase hydrocarbon (APH) ranges were subtracted per the MA-APH method.

The MA-APH concentrations in samples F&B 403204-02 through -07 were qualified due to contamination. The samples were pressurized and screened in order after receipt by the laboratory. Carryover from the source level concentrations observed in sample 403024-01 likely affected the remaining samples in the data set and the affected concentrations were qualified accordingly.

The TO-15 calibration standard for ethanol exceeded the acceptance criteria. The compound was not detected, therefore this did not represent an out of control condition, and were qualified with a "k" qualifier.

All quality control requirements were acceptable.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-04-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-01 1/1100
Date Analyzed:	03/06/24	Data File:	030521.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	100	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	1,200,000
APH EC9-12 aliphatics	3,700,000
APH EC9-10 aromatics	99,000

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-09-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-02 1/5.2
Date Analyzed:	03/14/24	Data File:	031317.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	96	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	970 lc
APH EC9-12 aliphatics	1,100 lc
APH EC9-10 aromatics	<130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-05-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-03 1/5.3
Date Analyzed:	03/05/24	Data File:	030519.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	99	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	530 lc
APH EC9-12 aliphatics	520 lc
APH EC9-10 aromatics	<130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-11-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-04 1/5.4
Date Analyzed:	03/05/24	Data File:	030518.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	610 lc
APH EC9-12 aliphatics	810 lc
APH EC9-10 aromatics	<130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-10-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-05 1/5.5
Date Analyzed:	03/05/24	Data File:	030517.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	96	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	710 lc
APH EC9-12 aliphatics	890 lc
APH EC9-10 aromatics	<140

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-08-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-06 1/5.3
Date Analyzed:	03/05/24	Data File:	030516.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	98	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	500 lc
APH EC9-12 aliphatics	470 lc
APH EC9-10 aromatics	<130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-06-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-07 1/5.3
Date Analyzed:	03/05/24	Data File:	030515.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	99	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	550 lc
APH EC9-12 aliphatics	780 lc
APH EC9-10 aromatics	<130



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	Not Applicable	Lab ID:	04-0498 mb
Date Analyzed:	03/05/24	Data File:	030511.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	96	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	<75
APH EC9-12 aliphatics	<25
APH EC9-10 aromatics	<25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-04-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-01 1/1100
Date Analyzed:	03/06/24	Data File:	030521.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates:			
4-Bromofluorobenzene	100	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<1,300	<770	1,2-Dichloropropane	<250	<55
Dichlorodifluoromethane	<1,100	<220	1,4-Dioxane	<400	<110
Chloromethane	<4,100	<2,000	2,2,4-Trimethylpentane	37,000	7,900
F-114	<2,300	<330	Methyl methacrylate	<4,500	<1,100
Vinyl chloride	<280	<110	Heptane	<4,500	<1,100
1,3-Butadiene	<49	<22	Bromodichloromethane	<74	<11
Butane	<5,200	<2,200	Trichloroethene	<120	<22
Bromomethane	<4,300	<1,100	cis-1,3-Dichloropropene	<1,000	<220
Chloroethane	<2,900	<1,100	4-Methyl-2-pentanone	<9,000	<2,200
Vinyl bromide	<480	<110	trans-1,3-Dichloropropene	<500	<110
Ethanol	<8,300 k	<4,400 k	Toluene	<8,300	<2,200
Acrolein	<130	<55	1,1,2-Trichloroethane	<60	<11
Pentane	<6,500	<2,200	2-Hexanone	<4,500	<1,100
Trichlorofluoromethane	<2,500	<440	Tetrachloroethene	<7,500	<1,100
Acetone	<5,200	<2,200	Dibromochloromethane	<94	<11
2-Propanol	<9,500	<3,800	1,2-Dibromoethane (EDB)	<85	<11
1,1-Dichloroethene	<440	<110	Chlorobenzene	<510	<110
trans-1,2-Dichloroethene	<440	<110	Ethylbenzene	<480	<110
Methylene chloride	<38,000	<11,000	1,1,2,2-Tetrachloroethane	<150	<22
t-Butyl alcohol (TBA)	<13,000	<4,400	Nonane	<5,800	<1,100
3-Chloropropene	<3,400	<1,100	Isopropylbenzene	<11,000	<2,200
CFC-113	<1,700	<220	2-Chlorotoluene	<5,700	<1,100
Carbon disulfide	<6,900	<2,200	Propylbenzene	6,400	1,300
Methyl t-butyl ether (MTBE)	<7,900	<2,200	4-Ethyltoluene	11,000	2,300
Vinyl acetate	<7,700	<2,200	m,p-Xylene	7,200	1,600
1,1-Dichloroethane	<450	<110	o-Xylene	<480	<110
cis-1,2-Dichloroethene	<440	<110	Styrene	<940	<220
Hexane	<3,900	<1,100	Bromoform	<2,300	<220
Chloroform	<54	<11	Benzyl chloride	<57	<11
Ethyl acetate	<7,900	<2,200	1,3,5-Trimethylbenzene	<5,400	<1,100
Tetrahydrofuran	<650	<220	1,2,4-Trimethylbenzene	29,000	5,900
2-Butanone (MEK)	<6,500	<2,200	1,3-Dichlorobenzene	<660	<110
1,2-Dichloroethane (EDC)	<45	<11	1,4-Dichlorobenzene	<250	<42
1,1,1-Trichloroethane	<600	<110	1,2-Dichlorobenzene	<660	<110
Carbon tetrachloride	<350	<55	1,2,4-Trichlorobenzene	<820	<110
Benzene	<350	<110	Naphthalene	<290	<55
Cyclohexane	<7,600	<2,200	Hexachlorobutadiene	<230	<22

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-09-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-02 1/5.2
Date Analyzed:	03/14/24	Data File:	031317.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	99	70	130

Compounds:	Concentration		Compounds:	Concentration	
	ug/m3	ppbv		ug/m3	ppbv
Propene	<6.3	<3.6	1,2-Dichloropropane	<1.2	<0.26
Dichlorodifluoromethane	<5.1	<1	1,4-Dioxane	<1.9	<0.52
Chloromethane	<19	<9.4	2,2,4-Trimethylpentane	27	5.8
F-114	<11	<1.6	Methyl methacrylate	<21	<5.2
Vinyl chloride	<1.3	<0.52	Heptane	<21	<5.2
1,3-Butadiene	<0.23	<0.1	Bromodichloromethane	2.8	0.42
Butane	28	12	Trichloroethene	<0.56	<0.1
Bromomethane	<20	<5.2	cis-1,3-Dichloropropene	<4.7	<1
Chloroethane	<14	<5.2	4-Methyl-2-pentanone	<43	<10
Vinyl bromide	<2.3	<0.52	trans-1,3-Dichloropropene	<2.4	<0.52
Ethanol	<39	<21	Toluene	<39	<10
Acrolein	<0.6	<0.26	1,1,2-Trichloroethane	<0.28	<0.052
Pentane	<31	<10	2-Hexanone	<21	<5.2
Trichlorofluoromethane	<12	<2.1	Tetrachloroethene	<35	<5.2
Acetone	<25	<10	Dibromochloromethane	0.93	0.11
2-Propanol	<45	<18	1,2-Dibromoethane (EDB)	<0.4	<0.052
1,1-Dichloroethene	<2.1	<0.52	Chlorobenzene	<2.4	<0.52
trans-1,2-Dichloroethene	<2.1	<0.52	Ethylbenzene	<2.3	<0.52
Methylene chloride	<180	<52	1,1,2,2-Tetrachloroethane	<0.71	<0.1
t-Butyl alcohol (TBA)	<63	<21	Nonane	<27	<5.2
3-Chloropropene	<16	<5.2	Isopropylbenzene	<51	<10
CFC-113	<8	<1	2-Chlorotoluene	<27	<5.2
Carbon disulfide	<32	<10	Propylbenzene	<26	<5.2
Methyl t-butyl ether (MTBE)	<37	<10	4-Ethyltoluene	<26	<5.2
Vinyl acetate	<37	<10	m,p-Xylene	7.0	1.6
1,1-Dichloroethane	<2.1	<0.52	o-Xylene	<2.3	<0.52
cis-1,2-Dichloroethene	<2.1	<0.52	Styrene	<4.4	<1
Hexane	<18	<5.2	Bromoform	<11	<1
Chloroform	12	2.4	Benzyl chloride	<0.27 k	<0.052 k
Ethyl acetate	<37	<10	1,3,5-Trimethylbenzene	<26	<5.2
Tetrahydrofuran	<3.1	<1	1,2,4-Trimethylbenzene	<26	<5.2
2-Butanone (MEK)	<31	<10	1,3-Dichlorobenzene	<3.1	<0.52
1,2-Dichloroethane (EDC)	<0.21	<0.052	1,4-Dichlorobenzene	<1.2	<0.2
1,1,1-Trichloroethane	<2.8	<0.52	1,2-Dichlorobenzene	<3.1	<0.52
Carbon tetrachloride	<1.6	<0.26	1,2,4-Trichlorobenzene	<3.9	<0.52
Benzene	<1.7	<0.52	Naphthalene	<1.4	<0.26
Cyclohexane	<36	<10	Hexachlorobutadiene	<1.1	<0.1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SG-05-022824	Client: Farallon Consulting, LLC
Date Received: 03/01/24	Project: 3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected: 02/28/24	Lab ID: 403024-03 1/5.3
Date Analyzed: 03/05/24	Data File: 030519.D
Matrix: Air	Instrument: GCMS8
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	99	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<6.4	<3.7	1,2-Dichloropropane	<1.2	<0.26
Dichlorodifluoromethane	<5.2	<1.1	1,4-Dioxane	<1.9	<0.53
Chloromethane	<20	<9.5	2,2,4-Trimethylpentane	<25	<5.3
F-114	<11	<1.6	Methyl methacrylate	<22	<5.3
Vinyl chloride	<1.4	<0.53	Heptane	<22	<5.3
1,3-Butadiene	<0.23	<0.11	Bromodichloromethane	<0.36	<0.053
Butane	<25	<11	Trichloroethene	<0.57	<0.11
Bromomethane	<21	<5.3	cis-1,3-Dichloropropene	<4.8	<1.1
Chloroethane	<14	<5.3	4-Methyl-2-pentanone	<43	<11
Vinyl bromide	<2.3	<0.53	trans-1,3-Dichloropropene	<2.4	<0.53
Ethanol	<40 k	<21 k	Toluene	<40	<11
Acrolein	<0.61	<0.26	1,1,2-Trichloroethane	<0.29	<0.053
Pentane	<31	<11	2-Hexanone	<22	<5.3
Trichlorofluoromethane	<12	<2.1	Tetrachloroethene	<36	<5.3
Acetone	<25	<11	Dibromochloromethane	<0.45	<0.053
2-Propanol	<46	<19	1,2-Dibromoethane (EDB)	<0.41	<0.053
1,1-Dichloroethene	<2.1	<0.53	Chlorobenzene	<2.4	<0.53
trans-1,2-Dichloroethene	<2.1	<0.53	Ethylbenzene	<2.3	<0.53
Methylene chloride	<180	<53	1,1,2,2-Tetrachloroethane	<0.73	<0.11
t-Butyl alcohol (TBA)	<64	<21	Nonane	<28	<5.3
3-Chloropropene	<17	<5.3	Isopropylbenzene	<52	<11
CFC-113	<8.1	<1.1	2-Chlorotoluene	<27	<5.3
Carbon disulfide	<33	<11	Propylbenzene	<26	<5.3
Methyl t-butyl ether (MTBE)	<38	<11	4-Ethyltoluene	<26	<5.3
Vinyl acetate	<37	<11	m,p-Xylene	<4.6	<1.1
1,1-Dichloroethane	<2.1	<0.53	o-Xylene	<2.3	<0.53
cis-1,2-Dichloroethene	<2.1	<0.53	Styrene	<4.5	<1.1
Hexane	<19	<5.3	Bromoform	<11	<1.1
Chloroform	0.28	0.058	Benzyl chloride	<0.27	<0.053
Ethyl acetate	<38	<11	1,3,5-Trimethylbenzene	<26	<5.3
Tetrahydrofuran	3.5	1.2	1,2,4-Trimethylbenzene	<26	<5.3
2-Butanone (MEK)	<31	<11	1,3-Dichlorobenzene	<3.2	<0.53
1,2-Dichloroethane (EDC)	<0.21	<0.053	1,4-Dichlorobenzene	<1.2	<0.2
1,1,1-Trichloroethane	<2.9	<0.53	1,2-Dichlorobenzene	<3.2	<0.53
Carbon tetrachloride	<1.7	<0.26	1,2,4-Trichlorobenzene	<3.9	<0.53
Benzene	<1.7	<0.53	Naphthalene	<1.4	<0.26
Cyclohexane	<36	<11	Hexachlorobutadiene	<1.1	<0.11

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-11-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-04 1/5.4
Date Analyzed:	03/05/24	Data File:	030518.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<6.5	<3.8	1,2-Dichloropropane	<1.2	<0.27
Dichlorodifluoromethane	<5.3	<1.1	1,4-Dioxane	<1.9	<0.54
Chloromethane	<20	<9.7	2,2,4-Trimethylpentane	<25	<5.4
F-114	<11	<1.6	Methyl methacrylate	<22	<5.4
Vinyl chloride	<1.4	<0.54	Heptane	<22	<5.4
1,3-Butadiene	<0.24	<0.11	Bromodichloromethane	1.6	0.24
Butane	<26	<11	Trichloroethene	<0.58	<0.11
Bromomethane	<21	<5.4	cis-1,3-Dichloropropene	<4.9	<1.1
Chloroethane	<14	<5.4	4-Methyl-2-pentanone	<44	<11
Vinyl bromide	<2.4	<0.54	trans-1,3-Dichloropropene	<2.5	<0.54
Ethanol	<41 k	<22 k	Toluene	<41	<11
Acrolein	<0.62	<0.27	1,1,2-Trichloroethane	<0.29	<0.054
Pentane	<32	<11	2-Hexanone	<22	<5.4
Trichlorofluoromethane	<12	<2.2	Tetrachloroethene	<37	<5.4
Acetone	<26	<11	Dibromochloromethane	0.60	0.070
2-Propanol	<46	<19	1,2-Dibromoethane (EDB)	<0.41	<0.054
1,1-Dichloroethene	<2.1	<0.54	Chlorobenzene	<2.5	<0.54
trans-1,2-Dichloroethene	<2.1	<0.54	Ethylbenzene	<2.3	<0.54
Methylene chloride	<190	<54	1,1,2,2-Tetrachloroethane	<0.74	<0.11
t-Butyl alcohol (TBA)	<65	<22	Nonane	<28	<5.4
3-Chloropropene	<17	<5.4	Isopropylbenzene	<53	<11
CFC-113	<8.3	<1.1	2-Chlorotoluene	<28	<5.4
Carbon disulfide	<34	<11	Propylbenzene	<27	<5.4
Methyl t-butyl ether (MTBE)	<39	<11	4-Ethyltoluene	<27	<5.4
Vinyl acetate	<38	<11	m,p-Xylene	6.3	1.5
1,1-Dichloroethane	<2.2	<0.54	o-Xylene	<2.3	<0.54
cis-1,2-Dichloroethene	<2.1	<0.54	Styrene	<4.6	<1.1
Hexane	<19	<5.4	Bromoform	<11	<1.1
Chloroform	6.4	1.3	Benzyl chloride	<0.28	<0.054
Ethyl acetate	<39	<11	1,3,5-Trimethylbenzene	<27	<5.4
Tetrahydrofuran	<3.2	<1.1	1,2,4-Trimethylbenzene	<27	<5.4
2-Butanone (MEK)	<32	<11	1,3-Dichlorobenzene	<3.2	<0.54
1,2-Dichloroethane (EDC)	<0.22	<0.054	1,4-Dichlorobenzene	<1.2	<0.21
1,1,1-Trichloroethane	<2.9	<0.54	1,2-Dichlorobenzene	<3.2	<0.54
Carbon tetrachloride	<1.7	<0.27	1,2,4-Trichlorobenzene	<4	<0.54
Benzene	<1.7	<0.54	Naphthalene	<1.4	<0.27
Cyclohexane	<37	<11	Hexachlorobutadiene	<1.2	<0.11

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-10-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-05 1/5.5
Date Analyzed:	03/05/24	Data File:	030517.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	7.9	4.6	1,2-Dichloropropane	<1.3	<0.28
Dichlorodifluoromethane	<5.4	<1.1	1,4-Dioxane	<2	<0.55
Chloromethane	<20	<9.9	2,2,4-Trimethylpentane	<26	<5.5
F-114	<12	<1.6	Methyl methacrylate	<23	<5.5
Vinyl chloride	<1.4	<0.55	Heptane	<23	<5.5
1,3-Butadiene	<0.24	<0.11	Bromodichloromethane	2.8	0.42
Butane	<26	<11	Trichloroethene	<0.59	<0.11
Bromomethane	<21	<5.5	cis-1,3-Dichloropropene	<5	<1.1
Chloroethane	<15	<5.5	4-Methyl-2-pentanone	<45	<11
Vinyl bromide	<2.4	<0.55	trans-1,3-Dichloropropene	<2.5	<0.55
Ethanol	<41 k	<22 k	Toluene	<41	<11
Acrolein	<0.63	<0.28	1,1,2-Trichloroethane	<0.3	<0.055
Pentane	<32	<11	2-Hexanone	<23	<5.5
Trichlorofluoromethane	<12	<2.2	Tetrachloroethene	<37	<5.5
Acetone	<26	<11	Dibromochloromethane	1.5	0.18
2-Propanol	<47	<19	1,2-Dibromoethane (EDB)	<0.42	<0.055
1,1-Dichloroethene	<2.2	<0.55	Chlorobenzene	<2.5	<0.55
trans-1,2-Dichloroethene	<2.2	<0.55	Ethylbenzene	<2.4	<0.55
Methylene chloride	<190	<55	1,1,2,2-Tetrachloroethane	<0.76	<0.11
t-Butyl alcohol (TBA)	<67	<22	Nonane	<29	<5.5
3-Chloropropene	<17	<5.5	Isopropylbenzene	<54	<11
CFC-113	<8.4	<1.1	2-Chlorotoluene	<28	<5.5
Carbon disulfide	<34	<11	Propylbenzene	<27	<5.5
Methyl t-butyl ether (MTBE)	<40	<11	4-Ethyltoluene	<27	<5.5
Vinyl acetate	<39	<11	m,p-Xylene	6.8	1.6
1,1-Dichloroethane	<2.2	<0.55	o-Xylene	<2.4	<0.55
cis-1,2-Dichloroethene	<2.2	<0.55	Styrene	<4.7	<1.1
Hexane	<19	<5.5	Bromoform	<11	<1.1
Chloroform	9.9	2.0	Benzyl chloride	<0.28	<0.055
Ethyl acetate	<40	<11	1,3,5-Trimethylbenzene	<27	<5.5
Tetrahydrofuran	<3.2	<1.1	1,2,4-Trimethylbenzene	<27	<5.5
2-Butanone (MEK)	<32	<11	1,3-Dichlorobenzene	<3.3	<0.55
1,2-Dichloroethane (EDC)	<0.22	<0.055	1,4-Dichlorobenzene	<1.3	<0.21
1,1,1-Trichloroethane	<3	<0.55	1,2-Dichlorobenzene	<3.3	<0.55
Carbon tetrachloride	<1.7	<0.28	1,2,4-Trichlorobenzene	<4.1	<0.55
Benzene	<1.8	<0.55	Naphthalene	<1.4	<0.28
Cyclohexane	<38	<11	Hexachlorobutadiene	<1.2	<0.11

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-08-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-06 1/5.3
Date Analyzed:	03/05/24	Data File:	030516.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<6.4	<3.7	1,2-Dichloropropane	<1.2	<0.26
Dichlorodifluoromethane	<5.2	<1.1	1,4-Dioxane	<1.9	<0.53
Chloromethane	<20	<9.5	2,2,4-Trimethylpentane	<25	<5.3
F-114	<11	<1.6	Methyl methacrylate	<22	<5.3
Vinyl chloride	<1.4	<0.53	Heptane	<22	<5.3
1,3-Butadiene	<0.23	<0.11	Bromodichloromethane	4.0	0.60
Butane	<25	<11	Trichloroethene	<0.57	<0.11
Bromomethane	<21	<5.3	cis-1,3-Dichloropropene	<4.8	<1.1
Chloroethane	<14	<5.3	4-Methyl-2-pentanone	<43	<11
Vinyl bromide	<2.3	<0.53	trans-1,3-Dichloropropene	<2.4	<0.53
Ethanol	68 ca	36 ca	Toluene	<40	<11
Acrolein	<0.61	<0.26	1,1,2-Trichloroethane	<0.29	<0.053
Pentane	<31	<11	2-Hexanone	<22	<5.3
Trichlorofluoromethane	<12	<2.1	Tetrachloroethene	<36	<5.3
Acetone	<25	<11	Dibromochloromethane	2.3	0.26
2-Propanol	<46	<19	1,2-Dibromoethane (EDB)	<0.41	<0.053
1,1-Dichloroethene	<2.1	<0.53	Chlorobenzene	<2.4	<0.53
trans-1,2-Dichloroethene	<2.1	<0.53	Ethylbenzene	<2.3	<0.53
Methylene chloride	<180	<53	1,1,2,2-Tetrachloroethane	<0.73	<0.11
t-Butyl alcohol (TBA)	<64	<21	Nonane	<28	<5.3
3-Chloropropene	<17	<5.3	Isopropylbenzene	<52	<11
CFC-113	<8.1	<1.1	2-Chlorotoluene	<27	<5.3
Carbon disulfide	<33	<11	Propylbenzene	<26	<5.3
Methyl t-butyl ether (MTBE)	<38	<11	4-Ethyltoluene	<26	<5.3
Vinyl acetate	<37	<11	m,p-Xylene	5.7	1.3
1,1-Dichloroethane	<2.1	<0.53	o-Xylene	2.5	0.58
cis-1,2-Dichloroethene	<2.1	<0.53	Styrene	<4.5	<1.1
Hexane	<19	<5.3	Bromoform	<11	<1.1
Chloroform	14	2.9	Benzyl chloride	<0.27	<0.053
Ethyl acetate	<38	<11	1,3,5-Trimethylbenzene	<26	<5.3
Tetrahydrofuran	<3.1	<1.1	1,2,4-Trimethylbenzene	<26	<5.3
2-Butanone (MEK)	<31	<11	1,3-Dichlorobenzene	<3.2	<0.53
1,2-Dichloroethane (EDC)	<0.21	<0.053	1,4-Dichlorobenzene	<1.2	<0.2
1,1,1-Trichloroethane	<2.9	<0.53	1,2-Dichlorobenzene	<3.2	<0.53
Carbon tetrachloride	<1.7	<0.26	1,2,4-Trichlorobenzene	<3.9	<0.53
Benzene	<1.7	<0.53	Naphthalene	<1.4	<0.26
Cyclohexane	<36	<11	Hexachlorobutadiene	<1.1	<0.11

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-06-022824	Client:	Farallon Consulting, LLC
Date Received:	03/01/24	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	02/28/24	Lab ID:	403024-07 1/5.3
Date Analyzed:	03/05/24	Data File:	030515.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	98	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<6.4	<3.7	1,2-Dichloropropane	<1.2	<0.26
Dichlorodifluoromethane	<5.2	<1.1	1,4-Dioxane	<1.9	<0.53
Chloromethane	<20	<9.5	2,2,4-Trimethylpentane	<25	<5.3
F-114	<11	<1.6	Methyl methacrylate	<22	<5.3
Vinyl chloride	<1.4	<0.53	Heptane	<22	<5.3
1,3-Butadiene	<0.23	<0.11	Bromodichloromethane	<0.36	<0.053
Butane	<25	<11	Trichloroethene	<0.57	<0.11
Bromomethane	<21	<5.3	cis-1,3-Dichloropropene	<4.8	<1.1
Chloroethane	<14	<5.3	4-Methyl-2-pentanone	<43	<11
Vinyl bromide	<2.3	<0.53	trans-1,3-Dichloropropene	<2.4	<0.53
Ethanol	<40 k	<21 k	Toluene	<40	<11
Acrolein	<0.61	<0.26	1,1,2-Trichloroethane	<0.29	<0.053
Pentane	<31	<11	2-Hexanone	<22	<5.3
Trichlorofluoromethane	<12	<2.1	Tetrachloroethene	<36	<5.3
Acetone	<25	<11	Dibromochloromethane	<0.45	<0.053
2-Propanol	<46	<19	1,2-Dibromoethane (EDB)	<0.41	<0.053
1,1-Dichloroethene	<2.1	<0.53	Chlorobenzene	<2.4	<0.53
trans-1,2-Dichloroethene	<2.1	<0.53	Ethylbenzene	<2.3	<0.53
Methylene chloride	<180	<53	1,1,2,2-Tetrachloroethane	<0.73	<0.11
t-Butyl alcohol (TBA)	<64	<21	Nonane	<28	<5.3
3-Chloropropene	<17	<5.3	Isopropylbenzene	<52	<11
CFC-113	<8.1	<1.1	2-Chlorotoluene	<27	<5.3
Carbon disulfide	<33	<11	Propylbenzene	<26	<5.3
Methyl t-butyl ether (MTBE)	<38	<11	4-Ethyltoluene	<26	<5.3
Vinyl acetate	<37	<11	m,p-Xylene	<4.6	<1.1
1,1-Dichloroethane	<2.1	<0.53	o-Xylene	<2.3	<0.53
cis-1,2-Dichloroethene	<2.1	<0.53	Styrene	<4.5	<1.1
Hexane	<19	<5.3	Bromoform	<11	<1.1
Chloroform	<0.26	<0.053	Benzyl chloride	<0.27	<0.053
Ethyl acetate	<38	<11	1,3,5-Trimethylbenzene	<26	<5.3
Tetrahydrofuran	3.8	1.3	1,2,4-Trimethylbenzene	<26	<5.3
2-Butanone (MEK)	<31	<11	1,3-Dichlorobenzene	<3.2	<0.53
1,2-Dichloroethane (EDC)	<0.21	<0.053	1,4-Dichlorobenzene	<1.2	<0.2
1,1,1-Trichloroethane	<2.9	<0.53	1,2-Dichlorobenzene	<3.2	<0.53
Carbon tetrachloride	<1.7	<0.26	1,2,4-Trichlorobenzene	<3.9	<0.53
Benzene	<1.7	<0.53	Naphthalene	<1.4	<0.26
Cyclohexane	<36	<11	Hexachlorobutadiene	<1.1	<0.11



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	3245 154th Ave SE, Bellevue, WA 2403-008
Date Collected:	Not Applicable	Lab ID:	04-0498 mb
Date Analyzed:	03/05/24	Data File:	030511.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	96	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<1.2	<0.7	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.99	<0.2	1,4-Dioxane	<0.36	<0.1
Chloromethane	<3.7	<1.8	2,2,4-Trimethylpentane	<4.7	<1
F-114	<2.1	<0.3	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	<0.044	<0.02	Bromodichloromethane	<0.067	<0.01
Butane	<4.8	<2	Trichloroethene	<0.11	<0.02
Bromomethane	<3.9	<1	cis-1,3-Dichloropropene	<0.91	<0.2
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<8.2	<2
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5 k	<4 k	Toluene	<7.5	<2
Acrolein	<0.11	<0.05	1,1,2-Trichloroethane	<0.055	<0.01
Pentane	<5.9	<2	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<35	<10	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<3.1	<1	Isopropylbenzene	<9.8	<2
CFC-113	<1.5	<0.2	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<4.9	<1
Methyl t-butyl ether (MTBE)	<7.2	<2	4-Ethyltoluene	<4.9	<1
Vinyl acetate	<7	<2	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1	<0.2
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052	<0.01
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<4.9	<1
Tetrahydrofuran	<0.59	<0.2	1,2,4-Trimethylbenzene	<4.9	<1
2-Butanone (MEK)	<5.9	<2	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.23	<0.038
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.31	<0.05	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.32	<0.1	Naphthalene	<0.13 j	<0.025 j
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

Date Extracted: 03/14/24

Date Analyzed: 03/14/24

**RESULTS FROM THE ANALYSIS OF AIR SAMPLES  
FOR HELIUM USING METHOD ASTM D1946**

Results Reported as % Helium

<u>Sample ID</u> Laboratory ID	<u>Helium</u>
SG-04-022824 403024-01	<0.6
SG-09-022824 403024-02	<0.6
SG-05-022824 403024-03	<0.6
SG-11-022824 403024-04	<0.6
SG-10-022824 403024-05	<0.6
SG-08-022824 403024-06	<0.6
SG-06-022824 403024-07	<0.6
Method Blank 04-0526 MB	<0.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 403045-01 1/5.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	2,900	3,000	3
APH EC9-12 aliphatics	ug/m3	610	580	5
APH EC9-10 aromatics	ug/m3	<140	<140	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	81	70-130
APH EC9-12 aliphatics	ug/m3	67	111	70-130
APH EC9-10 aromatics	ug/m3	67	102	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 403045-01 1/5.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Propene	ug/m3	190	190	0
Dichlorodifluoromethane	ug/m3	<5.6	<5.6	nm
Chloromethane	ug/m3	<21	<21	nm
F-114	ug/m3	<12	<12	nm
Vinyl chloride	ug/m3	1.7	1.7	0
1,3-Butadiene	ug/m3	34	34	0
Butane	ug/m3	140	130	7
Bromomethane	ug/m3	<22	<22	nm
Chloroethane	ug/m3	<15	<15	nm
Vinyl bromide	ug/m3	<2.5	<2.5	nm
Ethanol	ug/m3	<43	<43	nm
Acrolein	ug/m3	0.85	0.91	7
Pentane	ug/m3	78	81	4
Trichlorofluoromethane	ug/m3	22	19	15
Acetone	ug/m3	57	59	3
2-Propanol	ug/m3	<49	<49	nm
1,1-Dichloroethene	ug/m3	<2.3	<2.3	nm
trans-1,2-Dichloroethene	ug/m3	<2.3	<2.3	nm
Methylene chloride	ug/m3	<200	<200	nm
t-Butyl alcohol (TBA)	ug/m3	<69	<69	nm
3-Chloropropene	ug/m3	<18	<18	nm
CFC-113	ug/m3	<8.7	<8.7	nm
Carbon disulfide	ug/m3	<36	<36	nm
Methyl t-butyl ether (MTBE)	ug/m3	<41	<41	nm
Vinyl acetate	ug/m3	<40	<40	nm
1,1-Dichloroethane	ug/m3	<2.3	<2.3	nm
cis-1,2-Dichloroethene	ug/m3	<2.3	<2.3	nm
Hexane	ug/m3	50	48	4
Chloroform	ug/m3	1.3	1.3	0
Ethyl acetate	ug/m3	<41	<41	nm
Tetrahydrofuran	ug/m3	<3.4	<3.4	nm
2-Butanone (MEK)	ug/m3	<34	<34	nm
1,2-Dichloroethane (EDC)	ug/m3	<0.23	<0.23	nm
1,1,1-Trichloroethane	ug/m3	6.2	5.9	5
Carbon tetrachloride	ug/m3	<1.8	<1.8	nm
Benzene	ug/m3	25	25	0
Cyclohexane	ug/m3	<39	<39	nm
1,2-Dichloropropane	ug/m3	<1.3	<1.3	nm
1,4-Dioxane	ug/m3	<2.1	<2.1	nm
2,2,4-Trimethylpentane	ug/m3	350	350	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 403045-01 1/5.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl methacrylate	ug/m3	<23	<23	nm
Heptane	ug/m3	28	28	0
Bromodichloromethane	ug/m3	<0.38	<0.38	nm
Trichloroethene	ug/m3	0.67	0.67	0
cis-1,3-Dichloropropene	ug/m3	<5.2	<5.2	nm
4-Methyl-2-pentanone	ug/m3	<47	<47	nm
trans-1,3-Dichloropropene	ug/m3	<2.6	<2.6	nm
Toluene	ug/m3	63	63	0
1,1,2-Trichloroethane	ug/m3	<0.31	<0.31	nm
2-Hexanone	ug/m3	<23	<23	nm
Tetrachloroethene	ug/m3	<39	<39	nm
Dibromochloromethane	ug/m3	<0.49	<0.49	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.44	<0.44	nm
Chlorobenzene	ug/m3	<2.6	<2.6	nm
Ethylbenzene	ug/m3	2.5	2.5	0
1,1,2,2-Tetrachloroethane	ug/m3	<0.78	<0.78	nm
Nonane	ug/m3	<30	<30	nm
Isopropylbenzene	ug/m3	<56	<56	nm
2-Chlorotoluene	ug/m3	<30	<30	nm
Propylbenzene	ug/m3	<28	<28	nm
4-Ethyltoluene	ug/m3	<28	<28	nm
m,p-Xylene	ug/m3	<5	<5	nm
o-Xylene	ug/m3	<2.5	<2.5	nm
Styrene	ug/m3	<4.9	<4.9	nm
Bromoform	ug/m3	<12	<12	nm
Benzyl chloride	ug/m3	<0.3	<0.3	nm
1,3,5-Trimethylbenzene	ug/m3	<28	<28	nm
1,2,4-Trimethylbenzene	ug/m3	<28	<28	nm
1,3-Dichlorobenzene	ug/m3	<3.4	<3.4	nm
1,4-Dichlorobenzene	ug/m3	<1.3	<1.3	nm
1,2-Dichlorobenzene	ug/m3	<3.4	<3.4	nm
1,2,4-Trichlorobenzene	ug/m3	<4.2	<4.2	nm
Naphthalene	ug/m3	<1.5	<1.5	nm
Hexachlorobutadiene	ug/m3	<1.2	<1.2	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Propene	ug/m3	23	111	70-130
Dichlorodifluoromethane	ug/m3	67	117	70-130
Chloromethane	ug/m3	28	91	70-130
F-114	ug/m3	94	106	70-130
Vinyl chloride	ug/m3	35	101	70-130
1,3-Butadiene	ug/m3	30	105	70-130
Butane	ug/m3	32	102	70-130
Bromomethane	ug/m3	52	103	70-130
Chloroethane	ug/m3	36	103	70-130
Vinyl bromide	ug/m3	59	116	70-130
Ethanol	ug/m3	25	140 vo	70-130
Acrolein	ug/m3	31	113	70-130
Pentane	ug/m3	40	103	70-130
Trichlorofluoromethane	ug/m3	76	105	70-130
Acetone	ug/m3	32	116	70-130
2-Propanol	ug/m3	33	115	70-130
1,1-Dichloroethene	ug/m3	54	110	70-130
trans-1,2-Dichloroethene	ug/m3	54	110	70-130
Methylene chloride	ug/m3	94	104	70-130
t-Butyl alcohol (TBA)	ug/m3	41	103	70-130
3-Chloropropene	ug/m3	42	100	70-130
CFC-113	ug/m3	100	112	70-130
Carbon disulfide	ug/m3	42	107	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	100	70-130
Vinyl acetate	ug/m3	48	99	70-130
1,1-Dichloroethane	ug/m3	55	110	70-130
cis-1,2-Dichloroethene	ug/m3	54	107	70-130
Hexane	ug/m3	48	98	70-130
Chloroform	ug/m3	66	111	70-130
Ethyl acetate	ug/m3	49	99	70-130
Tetrahydrofuran	ug/m3	40	97	70-130
2-Butanone (MEK)	ug/m3	40	105	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	114	70-130
1,1,1-Trichloroethane	ug/m3	74	112	70-130
Carbon tetrachloride	ug/m3	85	113	70-130
Benzene	ug/m3	43	104	70-130
Cyclohexane	ug/m3	46	108	70-130
1,2-Dichloropropane	ug/m3	62	111	70-130
1,4-Dioxane	ug/m3	49	112	70-130
2,2,4-Trimethylpentane	ug/m3	63	105	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Methyl methacrylate	ug/m3	55	108	70-130
Heptane	ug/m3	55	101	70-130
Bromodichloromethane	ug/m3	90	115	70-130
Trichloroethene	ug/m3	73	112	70-130
cis-1,3-Dichloropropene	ug/m3	61	107	70-130
4-Methyl-2-pentanone	ug/m3	55	100	70-130
trans-1,3-Dichloropropene	ug/m3	61	113	70-130
Toluene	ug/m3	51	109	70-130
1,1,2-Trichloroethane	ug/m3	74	115	70-130
2-Hexanone	ug/m3	55	106	70-130
Tetrachloroethene	ug/m3	92	113	70-130
Dibromochloromethane	ug/m3	120	113	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	114	70-130
Chlorobenzene	ug/m3	62	108	70-130
Ethylbenzene	ug/m3	59	111	70-130
1,1,2,2-Tetrachloroethane	ug/m3	93	115	70-130
Nonane	ug/m3	71	112	70-130
Isopropylbenzene	ug/m3	66	113	70-130
2-Chlorotoluene	ug/m3	70	118	70-130
Propylbenzene	ug/m3	66	111	70-130
4-Ethyltoluene	ug/m3	66	109	70-130
m,p-Xylene	ug/m3	120	113	70-130
o-Xylene	ug/m3	59	116	70-130
Styrene	ug/m3	58	102	70-130
Bromoform	ug/m3	140	109	70-130
Benzyl chloride	ug/m3	70	128	70-130
1,3,5-Trimethylbenzene	ug/m3	66	111	70-130
1,2,4-Trimethylbenzene	ug/m3	66	107	70-130
1,3-Dichlorobenzene	ug/m3	81	113	70-130
1,4-Dichlorobenzene	ug/m3	81	111	70-130
1,2-Dichlorobenzene	ug/m3	81	111	70-130
1,2,4-Trichlorobenzene	ug/m3	100	104	70-130
Naphthalene	ug/m3	71	111	70-130
Hexachlorobutadiene	ug/m3	140	111	70-130

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ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/24

Date Received: 03/01/24

Project: 3245 154th Ave SE, Bellevue, WA 2403-008, F&BI 403024

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR HELIUM  
USING METHOD ASTM D1946**

Laboratory Code: 403024-07 (Duplicate)

Analyte	Sample Result (%)	Duplicate Result (%)	Relative Percent Difference	Acceptance Criteria
Helium	0	0	nm	0-20



**Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, 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.

**APPENDIX H  
ECOLOGY TEE FORM**

REMEDIAL INVESTIGATION AND CLEANUP ACTION PLAN  
3245 158<sup>th</sup> Avenue Southeast  
Bellevue, Washington

Farallon PN: 2403-008



# 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: 3245 158<sup>th</sup> Avenue Southeast

Facility/Site Address: 3245 158<sup>th</sup> Avenue Southeast

Facility/Site No: NA

VCP Project No.: NA

#### Step 2: IDENTIFY EVALUATOR

Please identify below the person who conducted the evaluation and their contact information.

Name: Yusuf Pehlivan

Title: Senior Geologist

Organization: Farallon Consulting, LLC

Mailing address: 13555 SE 36<sup>th</sup> Street, Suite 320

City: Bellevue

State: WA

Zip code: 98006

Phone: 949-351-6163

Fax:

E-mail: [ypehlivan@farallonconsulting.com](mailto:ypehlivan@farallonconsulting.com)

### Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

#### A. Exclusion from further evaluation.

##### 1. Does the Site qualify for an exclusion from further evaluation?

- ☒ Yes    *If you answered "YES," then answer **Question 2**.*
- ☐ No or Unknown    *If you answered "NO" or "UNKNOWN," then skip to **Step 3B** of this form.*

##### 2. What is the basis for the exclusion? Check all that apply. Then skip to **Step 4** of this form.

Point of Compliance: WAC 173-340-7491(1)(a)

- ☐ All soil contamination is, or will be,\* at least 15 feet below the surface.
- ☐ All soil contamination is, or will be,\* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

- ☐ All contaminated soil, is or will be,\* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

- ☐ There is less than 0.25 acres of contiguous# undeveloped± land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.
- ☒ For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous# undeveloped± land on or within 500 feet of any area of the Site.

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?**

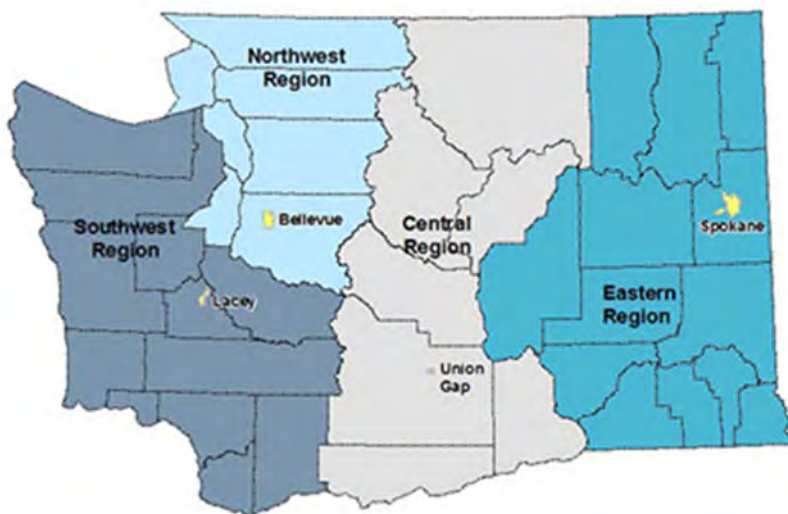
- ☐ Confirmed there was no problem.
- ☐ Confirmed there was a problem and established site-specific cleanup levels.

**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.



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

If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call 877-833-6341.

**APPENDIX I**  
**VAPOR BARRIER SPECIFICATIONS**

REMEDIAL INVESTIGATION AND CLEANUP ACTION PLAN  
3245 158<sup>th</sup> Avenue Southeast  
Bellevue, Washington

Farallon PN: 2403-008





# DRAGO® WRAP VAPOR INTRUSION BARRIER

## SUMMARY OF PERMEATION AND ATTENUATION TESTING

### BACKGROUND

From October 2015 through August 2018, Drago Wrap Vapor Intrusion Barrier was subjected to a series of diffusion and sorption tests to obtain the film's diffusion, partitioning, and permeation characteristics. This testing was designed and overseen by an expert in the permeation of volatile organic compounds (VOCs) at a prominent university. The results of this testing, combined with further modeling and analysis, have been used to empirically determine the attenuation efficacy of Drago Wrap against various hydrocarbons and chlorinated solvents. The purpose of this document is to briefly discuss the theory behind diffusive vapor intrusion (VI); summarize and explain the robust testing protocol utilized; and relay the results of the testing and analysis.

### CHEMICALS TESTED

Drago Wrap has been tested with regard to permeation of the following chemicals: Trichloroethylene (TCE); Perchloroethylene (PCE); the BTEX family: Benzene, Toluene, Ethylbenzene, Xylene; Dichloromethane; 1,4 Dichlorobenzene; Methyl tert-butyl ether (MTBE) and Naphthalene. This list was chosen based on a survey of the most often found chemicals on brownfield projects.

### THEORY

The practical purpose behind obtaining permeation, diffusion, and partitioning coefficients is to apply them to the equations governing mass flux per Fick's laws during design of VI mitigation systems. The following briefly explains the theory and physics behind Fick's First Law.

The diffusion coefficient,  $D_g$  (units expressed in  $[m^2/s]$ ), is the parameter defining the membrane's resistance to the diffusive mass flux  $[g/m^2s]$  transported within the membrane as governed by Fick's First Law:

$$f = -D_g \frac{dc_g}{dz} \quad (\text{Eq. 1})$$

due to a concentration gradient  $dc_g/dz$   $[g/m^4]$  in the membrane layer. If the contaminant source is an aqueous solution adjacent to the membrane, the concentration of the contaminant in the membrane can be related to that in the fluid (at equilibrium) by the partitioning coefficient,  $S_{gf}$  (where  $S_{gf}$  is analogous to a Henry's coefficient). It is given by Equation 2 and depends on the solubility of the contaminant in the material:

$$S_{gf} = \frac{c_g}{c_f} \quad (\text{Eq. 2})$$

where  $c_f$  is the concentration of the contaminant in the fluid, adjacent to and in equilibrium with, the concentration,  $c_g$ , in the membrane.

Thus, the mass flux ( $f$ ) from the fluid on one side of the membrane to the fluid on the other side (at steady state) is given by:

$$f = S_{gf} D_g \frac{dc_g}{dz} = \frac{P_g}{l} \Delta C \quad (\text{Eq. 3})$$

Stego is involved in the research, design, development, production and distribution of the highest quality construction products in the industry. Stego's technical department offers technical advice and additional information regarding the specific properties of all Stego products. Based on the department's experience, understanding of relevant scientific principles, and knowledge of current industry expert recommendations, Stego can advise on issues related to utility versus cost in order to assist in creating installation best practices. However, Stego does not employ design professionals. Therefore, Stego cannot interpret ASTM installation standards (E1643) and must defer to the project's assigned design professional on final design decisions. Version 1.3 | Last Update: February 1, 2019 | Created: September 12, 2017

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# DRAGO® WRAP VAPOR INTRUSION BARRIER

## SUMMARY OF PERMEATION AND ATTENUATION TESTING

where  $l$  is the thickness of the film/membrane, and  $\Delta C$  is the difference in concentration between the two sides of the film/membrane at steady state, and the product of the two parameters ( $S_{gf} D_g$ ) is called the permeation coefficient,  $P_g$  ( $m^2/s$ ):

$$P_g = S_{gf} D_g \quad (\text{Eq. 4})$$

It can be gleaned from Equations 1-4 that the diffusion coefficient,  $D_g$ , is not enough to characterize the film's mass transfer properties for contaminants moving from below the membrane to above it. Diffusive mass transfer through an intact geomembrane is a 3-step process: partitioning into the geomembrane; diffusion through the geomembrane; and partitioning out of the geomembrane. Both  $D_g$  and  $S_{gf}$  (or simply  $P_g$ ) must be known in order to effectively utilize Fick's steady state mass transfer equations. Therefore, to allow for full and complete analysis, Drago Wrap's permeation was fully characterized with all three values (permeation, diffusion, and partitioning coefficients) for each chemical tested. Those values are contained in Table 2. It is also imperative to understand the differences in methodologies between lab and site-specific field-testing setups. If such differences exist, the addition of the phase transition coefficient between water and air, Henry's coefficient (H), may also be required in the analysis. A deeper discussion on accounting for these differences is beyond the scope of this summary. Please contact the Stego Industries' Technical Department for additional assistance.

## TESTING METHODOLOGY

Two types of tests and subsequent modeling have been employed in characterizing Drago Wrap's relevant characteristics: diffusion testing, sorption testing, and the finite layer modeling and analysis program, POLLUTE v7 (Rowe and Booker 2004).

The diffusion testing setup used stainless steel double-compartment cells (Figure 1), such that source and receptor volumes were separated by the Drago Wrap membrane. The cell was screwed together, with the membrane secured using two Viton rings (Figure 2) to prevent the loss of contaminant at the connection between each compartment and the membrane. Both the source and receptor were filled with double deionized (DDI) water, and a septum was inserted into the sampling ports to prevent losses. A stock solution of contaminants was added to the source compartment to form a dilute aqueous solution with a known concentration. Before assembly, and after disassembly, the mass of the membrane was recorded.

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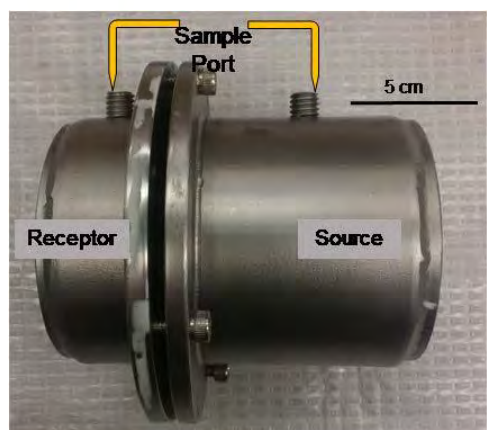


Figure 1: Double Compartment Cell

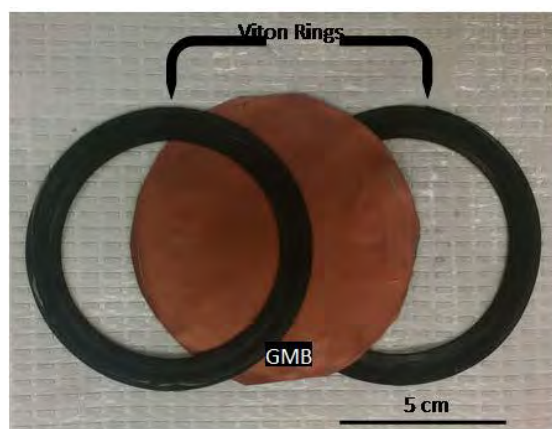


Figure 2: Membrane and Viton Rings

Sorption testing was also performed to directly measure the partitioning coefficients for each chemical. The sorption testing was conducted using 20-ml vials where a specimen was placed in double deionized water. The mass of the specimen was recorded beforehand. The vials were filled with double deionized water so that there was no airspace in the vial. Known masses of contaminants were added and 50  $\mu$ l samples were taken daily from the vials for analysis and replaced with double deionized water until equilibrium was reached. The chemical analysis of these specimens was performed in the same manner as chemical analysis of the diffusion tests. This analysis is described in Appendix B.

The results from the diffusion and sorption tests were transduced and analyzed using the finite layer modeling and analysis program, POLLUTE v7, to create the results seen in Table 2.

In addition to whole-film testing, the discrete layers that make up Drago Wrap were tested to determine their respective permeation, diffusion and partitioning coefficients. The results obtained from the mathematical modeling of these tests do not necessarily equate to the values obtained from whole-film permeation testing. In other words, the full membrane benefits from a synergistic effect: the whole is greater than the sum of its parts. Due to its unique design, the testing demonstrated a very important feature to Drago Wrap: its ability to degrade chlorinated solvents like TCE. The results show about a 50-day half-life for TCE when the membrane is installed in its intended orientation. The results in Table 2 come from the most conservative approach to analyzing the results and do not consider these synergies.

## RESULTS

As described earlier, the values displayed in Table 2 result from a conservative approach to the analysis of data generated from several phases and years of testing, and subsequent numerical modeling. The preferred methodology for obtaining accurate results requires an aqueous-to-aqueous testing scenario. Table 2 depicts these results. There exist scenarios where mass flux design with Drago Wrap requires additional consideration of phase-change analysis beyond what is offered in Table 2. Please contact the Stego Industries' Technical Department for assistance should the need arise.

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# DRAGO® WRAP VAPOR INTRUSION BARRIER

## SUMMARY OF PERMEATION AND ATTENUATION TESTING

Table 1 – Descriptions of the Tested Chemicals

Chemical	Abbreviation	Family	Use
Benzene	Btex	Aromatic Hydrocarbon	Gasoline byproduct
Toluene	bTex	Aromatic Hydrocarbon	Gasoline byproduct
Ethylbenzene	btEx	Aromatic Hydrocarbon	Gasoline byproduct
M&P-Xylenes	bteX	Aromatic Hydrocarbon	Gasoline byproduct
O-Xylene	bteX	Aromatic Hydrocarbon	Gasoline byproduct
Trichloroethylene	TCE	Chlorinated Hydrocarbon	Dry Cleaning and Solvent
Tetrachloroethylene	PCE	Chlorinated Hydrocarbon	Dry Cleaning and Solvent
Methyl tert-butyl ether	MTBE	Oxygenate	Octane-increasing additive to fuel
Dichloromethane	DCM	Chlorinated Hydrocarbon	Paint Stripper, Decaffeinate, Aerosol propellant
Naphthalene	Naphthalene	Polycyclic Aromatic Hydrocarbon	Fumigant, Pyrotechnics, Wetting Agent
1,4-Dichlorobenzene	1,4-DCB	Chlorinated Hydrocarbon	Pesticide, Disinfectant, Deodorant

Table 2 – Aqueous Coefficients

Chemical	Diffusion, $D_g$ [ $\times 10^{-15} \text{ m}^2/\text{s}$ ]	Partitioning, $S_{gf}$ [-]	Permeation, $P_g$ [ $\times 10^{-13} \text{ m}^2/\text{s}$ ]
Benzene	2.6	171	4.5
Toluene	1.5	339	5.1
Ethylbenzene	0.41	764	3.1
M&P-Xylenes	0.4	743	2.9
O-Xylene	0.4	670	2.7
TCE	3.9	251	9.8
PCE	1.1	610	6.6
MTBE	1	1	0.01
DCM	0.95	475	4.5
Naphthalene	0.014	1710	0.25
1,4-DCB	0.94	760	7.1

## CONCLUSION

Drago Wrap has proven to be a superior barrier to standard geomembranes like HDPE (by a factor of about 10 to 200 – See Appendix A) for all contaminants where comparisons could be made to HDPE and has remarkably low values for BTEX, TCE; PCE; MTBE; Naphthalene; DCM; and 1,4 DCB with permeation coefficients of the order of magnitude of  $10^{-13}$  –  $10^{-14} \text{ m}^2/\text{s}$ . In addition, the testing has shown that chlorinated solvents experience degradation while permeating through the membrane with a half-life of 50 days for TCE when the film is correctly oriented relative to the contaminant source.

Stego is involved in the research, design, development, production and distribution of the highest quality construction products in the industry. Stego's technical department offers technical advice and additional information regarding the specific properties of all Stego products. Based on the department's experience, understanding of relevant scientific principles, and knowledge of current industry expert recommendations, Stego can advise on issues related to utility versus cost in order to assist in creating installation best practices. However, Stego does not employ design professionals. Therefore, Stego cannot interpret ASTM installation standards (E1643) and must defer to the project's assigned design professional on final design decisions. Version 1.3 | Last Update: February 1, 2019 | Created: September 12, 2017

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# DRAGO® WRAP VAPOR INTRUSION BARRIER

## SUMMARY OF PERMEATION AND ATTENUATION TESTING

### APPENDIX A – COMPARISON TO HDPE (WHERE AVAILABLE)

	Permeation Coefficients- 20-mil Drago Wrap			Permeation Coefficients – 80-mil HDPE <sup>1</sup>			
	D <sub>g</sub> (m <sup>2</sup> /s)	S <sub>gf</sub> (-)	P <sub>g</sub> (m <sup>2</sup> /s)	D <sub>g</sub> (m <sup>2</sup> /s)	S <sub>gf</sub> (-)	P <sub>g</sub> (m <sup>2</sup> /s)	Ratio (P <sub>gDrago</sub> /P <sub>gHDPE</sub> )
Benzene	2.6x10 <sup>-15</sup>	171	4.5x10 <sup>-13</sup>	3.5x10 <sup>-13</sup>	30	1.05 x10 <sup>-11</sup>	23
Toluene	1.5x10 <sup>-15</sup>	339	5.1x10 <sup>-13</sup>	3.0 x10 <sup>-13</sup>	100	3.0 x10 <sup>-11</sup>	60
Ethylbenzene	4.1x10 <sup>-16</sup>	764	3.0x10 <sup>-13</sup>	1.8 x10 <sup>-13</sup>	285	5.1 x10 <sup>-11</sup>	170
<i>m&amp;p</i> -Xylenes	4.0x10 <sup>-16</sup>	743	2.9x10 <sup>-13</sup>	1.7 x10 <sup>-13</sup>	347	5.9 x10 <sup>-11</sup>	200
<i>o</i> -Xylene	4.0x10 <sup>-16</sup>	670	2.7x10 <sup>-13</sup>	1.5 x10 <sup>-13</sup>	240	3.6 x10 <sup>-11</sup>	130
TCE	3.9x10 <sup>-15</sup>	251	9.8x10 <sup>-13</sup>	4.0 x10 <sup>-13</sup>	85	3.4 x10 <sup>-11</sup>	35
PCE	1.1x10 <sup>-15</sup>	610	6.6x10 <sup>-13</sup>	-	-	-	-
MTBE	1.0x10 <sup>-15</sup>	1	1.0x10 <sup>-15</sup>	-	-	-	-
DCM	9.5x10 <sup>-16</sup>	475	4.5x10 <sup>-13</sup>	6.5 x10 <sup>-13</sup>	6	3.9 x10 <sup>-12</sup>	9
Naphthalene	1.4x10 <sup>-17</sup>	1710	2.5x10 <sup>-14</sup>	-	-	-	-
1,4-DCB	9.4 x10 <sup>-16</sup>	760	7.1x10 <sup>-13</sup>	-	-	-	-

<sup>1</sup>Sangam & Rowe (2001)

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# DRAGO® WRAP VAPOR INTRUSION BARRIER

## SUMMARY OF PERMEATION AND ATTENUATION TESTING

### APPENDIX B– CHEMICAL ANALYSIS

The cells were sampled at regular time intervals. During each sampling event, 10 ul to 100 ul was removed from the cell, and that volume was replaced with DDI water so there was no airspace in the cell.

The samples were added to a vial containing 0.4 ml of methanol, 0.01 ml internal standard, and water was added so the total fluid volume in the vial was 1.6 ml. A Solid Phase Micro Extraction (SPME) fiber was inserted into vial headspace and the volatile compounds sorbed onto the fiber. This fiber was analyzed using gas chromatography (GC), and results compared to a certified laboratory standard calibration curve for the contaminant in question. Two types of detectors were used (depending on the cell in question); namely, a mass selective detector and a flame ionization detector. A quality assurance certified lab standard (from a different source to the calibration standards) was assessed during each sampling event.

All laboratory testing was conducted in a Canadian Association for Laboratory Accreditation (CALA) lab and followed CALA methods. This means that rigorous quality assurance practices were followed during chemical analysis. CALA frequently reviews the methods used and the accreditation is renewed every two years.

### REFERENCES

Rowe, R. K., and Booker, J. R. (2004). "POLLUTE V.7 - 1D Pollutant Migration through a Non-homogenous Soil." GAEA Environmental Engineering Ltd.

Sangam, H. P., and Rowe, R. K. (2001). "Migration of dilute aqueous organic pollutants through HDPE geomembranes." Geotextiles and Geomembranes, 19(6), 329–357.

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# DRAGO® WRAP VAPOR INTRUSION BARRIER

## RESISTANCE TO DEGRADATION – ADDITIONAL CONSIDERATIONS

Drago Wrap Vapor Intrusion Barrier, and the technologies that underlie this game-changing vapor intrusion protection product, has undergone extensive testing to determine its ability to attenuate VOCs and other relevant material properties. These tests exposed Drago Wrap to a host of deleterious chemicals that may exist at or below a project site, including various petroleum distillates, chlorinated solvents, etc. The results of these tests are positive and telling; they show that Drago Wrap is extremely impermeable to a wide range of chemical vapors and, more importantly for our current considerations, maintains such impermeability over the course of years of exposure to these deleterious compounds.

While the results of such testing speak extensively to Drago Wrap's ability to resist degradation in extreme exposure conditions, we wished to pursue multiple exposure scenarios to further increase the confidence project team members should have in Drago Wrap as a critical component of the vapor intrusion systems they utilize on their projects. The following pages detail these measures. The conclusions indicate that there were no significant changes in mass or volume of Drago Wrap when exposed to direct contact with soils contaminated with benzene, toluene, ethylbenzene, xylene (collectively known as BTEX), trichloroethylene (TCE), perchloroethylene (PCE, or tetrachloroethylene), cis-1,2-dichloroethylene (C-DCE), trans-1,2-dichloroethylene (T-DCE), and sulfates. Additionally, we tested the post-exposure samples to determine their tensile strength (ASTM E882) and permeance to water vapor (F1249), and we observed that Drago Wrap maintains its ability to meet each corresponding performance threshold for high-performance water vapor barriers: for D882, Drago Wrap remains a Class A Vapor Barrier per ASTM E1745; for F1249, Drago Wrap maintains a permeance well below 0.01 perms.

If additional questions remain regarding any aspect of Drago Wrap, please be sure to contact the Stego Technical Department. We are happy to help and look forward to the opportunity to provide an effective and economical solution to your barrier needs.

Regards,

Dan Marks CSI CDT **LEED Green Associate**  
Technical Director | Stego Industries, LLC  
O: (949) 325-2035 | F: (949) 325-2062  
[danmarks@stegoindustries.com](mailto:danmarks@stegoindustries.com)



# DRAGO® WRAP VAPOR INTRUSION BARRIER TESTING

## SIMULATED HYDROCARBON (BTEX) CONDITION

### SETUP

To simulate a hydrocarbon contaminated brownfield site, a senior chemist at a research and testing lab prepared contaminated water to contain 1,000 ppb of each benzene, toluene, ethylbenzene, and xylene (BTEX). Two liters of this mixture were placed in a chamber, 49 cm x 23.5 cm wide by 27 cm tall. ASTM C778 standard 20-30 sand was added to the vessel until it was 5 cm above the original water line. At this level, the sand was damp with no free-standing water. Drago Wrap samples were placed on top of the damp sand, and the entire surface of the membrane were weighted down with sand-filled plastic bags to ensure full contact of the Drago Wrap with the damp sand. The test vessel was covered and sealed. After 30 days of exposure under ambient laboratory conditions (21-25°C), the samples were removed for evaluation.

Simply stated:

We took relatively large amounts of often-seen hydrocarbons resulting from fuel spills and old service station sites and put them into a water table just 2 inches below a sample of Drago Wrap. This can be considered an extreme situation in that water tables are not typically that close to the slab and vapor barrier membrane. After a 30-day exposure, the mass and volume changes were analyzed, and we subsequently tested the material for its water vapor permeance rating and tensile strength.

### RESULTS

#### Mass and Volume

The chemist conducted mass and volume measurements before and after exposure. The following comes directly from her report: *"All of the test coupons exhibited slight changes in mass and volume, no matter what their exposure conditions were. Statistical analysis by the two-tailed t-test showed that the changes for the BTEX-exposed coupons were not significantly different from the changes for the control-exposed coupons."*

Conclusion: In other words, Drago Wrap mass and volume were not significantly affected by the BTEX exposure.

#### Tensile Strength

Samples were sent by the lab to our in-house lab and tested per ASTM E882 in both the machine and transverse directions. After the 30-day extreme BTEX solvent exposure, the results were 50.2 lbf/in and 49.6 lbf/in for machine and transverse directions respectively. These results were not significantly different than the water-exposed control samples (48.7 lbf/in, 48.5 lbf/in) or the unexposed samples (48.5 lbf/in, 46.8 lbf/in). For another point of comparison, consider that to be labeled as Class A per ASTM E1745, new-material tensile need only test at 45 lbf/in.

Conclusion: BTEX exposure has little to no effect on Drago Wrap's physical integrity in below-slab applications.

#### Water Vapor Permeance

The testing lab then sent exposed and control samples to our in-house lab where they were subsequently tested per ASTM F1249. The results were very positive. The permeance of the sample exposed to the BTEX solution (0.00733 perms) increased minimally compared to the control (0.00614 perms), both staying well below the threshold of 0.01 perms.

Conclusion: BTEX exposure had minimal effect on Drago Wrap's ability to retard water vapor.





# DRAGO® WRAP VAPOR INTRUSION BARRIER TESTING

## SIMULATED CHLORINATED SOLVENT CONDITION

### SETUP

To simulate a dry-cleaning brownfield site, a senior chemist at a research and testing lab prepared contaminated water to contain 3,600 ppb perchloroethylene (PCE), 12,500 PPB trichloroethylene (TCE), 16,200 PPB CIS-1,2-dichloroethylene (C-DCE), AND 1,700 PPB trans-1,2-dichloroethylene (T-DCE). Two liters of this mixture were placed in a chamber, 49 cm x 23.5 cm wide and 27 cm tall. ASTM C778 standard 20-30 sand was added to the vessel until it was 5 cm above the original water line. At this level, the sand was damp with no free-standing water. Drago Wrap samples were placed on top of the damp sand, and the entire surface of the vapor barrier was weighted down with sand-filled plastic bags to ensure full contact of the Drago Wrap with the damp sand. The test vessel was covered and sealed. After 30 days of exposure under ambient laboratory conditions (21-25°C), the samples were removed for evaluation.

Simply stated:

We took an actual soils report from an old dry cleaning site and recreated the conditions, roughly. In the actual scenario the water table was 20 feet below the vapor barrier. In our setup, we created a contaminated water table just 2 inches below Drago Wrap. After a 30-day exposure, the mass and volume changes were analyzed, and we subsequently tested the material for its water vapor permeance rating and tensile strength.

### RESULTS

#### Mass and Volume

The chemist conducted mass and volume measurements before and after exposure. The following comes directly from her report: *"All of the test coupons exhibited slight changes in mass and volume, no matter what their exposure conditions were. Statistical analysis by the two-tailed t-test showed that the changes for the chlorinated solvent-exposed coupons were not significantly different from the changes for the control-exposed coupons."*

Conclusion: Drago Wrap's mass and volume were not significantly affected by the chlorinated solvent exposure.

#### Tensile Strength

Samples were sent by the lab to our in-house lab and tested per ASTM E882 in both the machine and transverse directions. After the 30-day extreme chlorinated solvent exposure, the results were 51.2 lbf/in and 49.7 lbf/in for machine and transverse directions respectively. These results were not significantly different than the water-exposed control samples (48.7 lbf/in, 48.5 lbf/in) or the unexposed samples (48.5 lbf/in, 46.8 lbf/in). For another point of comparison, consider that to be labeled as Class A per ASTM E1745, new-material tensile need only test at 45 lbf/in.

Conclusion: Chlorinated solvent exposure has little to no effect on Drago Wrap's physical integrity in below-slab applications.

#### Water Vapor Permeance

The testing lab then sent exposed and control samples to our in-house lab where they were subsequently tested per ASTM F1249. The results were very positive. The permeance of the sample exposed to the BTEX solution (0.00713 perms) increased minimally compared to the control (0.00614 perms), both staying well below the threshold of 0.01 perms.

Conclusion: Chlorinated solvent exposure had minimal effect on Drago Wrap's ability to retard water vapor.



# DRAGO® WRAP VAPOR INTRUSION BARRIER TESTING

## SIMULATED SULFATE EXPOSURE CONDITION

### SETUP

To simulate the worst possible sulfate exposure, a senior chemist at a research and testing lab prepared water contaminated with 10,000 PPM of SO<sub>4</sub> (sulfate.) This sulfate concentration was chosen because it was rated as “very severe” (the highest or worst classification) by UC Berkeley professors conducting research for the Caltrans Long Life Pavement Rehabilitation Strategy (LLPRS) Program. The Chemist took this worst-case scenario concentration and soaked samples of Drago Wrap in it for 28 days. Upon removal, the samples were analyzed for changes in mass and volume, and subsequently the exposed product was tested to determine its tensile strength and water vapor permeance rate.

### RESULTS

#### Mass & Volume

The chemist conducted mass and volume measurements before and after exposure. The following comes directly from her report: *“All of the test coupons exhibited slight changes in mass and volume, no matter what their exposure conditions were. Statistical analysis by the two-tailed t-test showed that the changes for the sulfate-exposed coupons were not significantly different from the changes for the control-exposed coupons.”*

Conclusion: In other words, Drago Wrap’s mass and volume were not significantly affected by the sulfate exposure.

#### Tensile

Samples were sent by the lab to our in-house lab and tested per ASTM E882 in both the machine and transverse directions. After the 28-day extreme sulfate exposure, the results were 49.6 lbf/in and 52.3 lbf/in for machine and transverse directions respectively. These results were not significantly different than the water-exposed control samples (48.7 lbf/in, 50.8 lbf/in) or the unexposed samples (48.5 lbf/in, 46.8 lbf/in). For another point of comparison, consider that to be labeled as Class A per ASTM E1745, new-material tensile need only test at 45 lbf/in.

Conclusion: Sulfate exposure has little to no effect on Drago Wrap’s physical integrity in below-slab applications.

#### Water Vapor Permeance

The testing lab then sent exposed and control samples to our in-house lab where they were subsequently tested per ASTM F1249. The results were very positive. The permeance of the sample exposed to the sulfate solution (0.00734 perms) increased minimally compared to the control (0.00698 perms), both staying well below the threshold of 0.01 perms.

Conclusion: Sulfate exposure had no significant effect on Drago Wrap’s ability to retard water vapor.



# DRAGO® WRAP VAPOR INTRUSION BARRIER

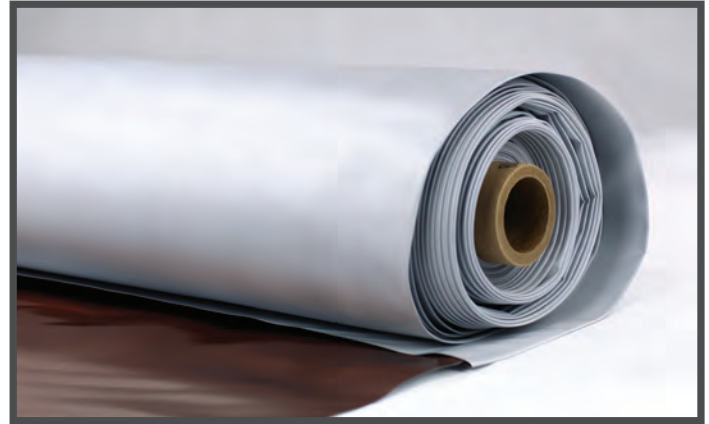
A STEGO TECHNOLOGY, LLC INNOVATION | VAPOR RETARDERS 07 26 00, 03 30 00 | VERSION: 2/22/2019

## 1. PRODUCT NAME

**DRAGO WRAP VAPOR INTRUSION BARRIER**

## 2. MANUFACTURER

c/o Stego® Industries, LLC\*  
216 Avenida Fabricante, Suite 101  
San Clemente, CA 92672  
Sales, Technical Assistance  
Ph: (877) 464-7834  
Fx: (949) 257-4113  
www.stegoindustries.com



## 3. PRODUCT DESCRIPTION

**USES:** Drago Wrap is specifically engineered to attenuate volatile organic compounds (VOCs) and serve as a below-slab moisture vapor barrier.

**COMPOSITION:** Drago Wrap is a multi-layered plastic extrusion that combines uniquely designed materials with only high grade, prime, virgin resins.

**ENVIRONMENTAL FACTORS:** Drago Wrap can be used in systems for the control of various VOCs including hydrocarbons, chlorinated solvents, radon, methane, soil poisons, and sulfates.

## 4. TECHNICAL DATA

**TABLE 4.1: PHYSICAL PROPERTIES OF DRAGO WRAP VAPOR INTRUSION BARRIER**

PROPERTY	TEST	RESULTS
Under Slab Vapor Retarders	ASTM E1745 – Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs	ASTM E1745 Compliant
Water Vapor Permeance	ASTM F1249 – Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor	0.0069 perms
Push-Through Puncture	ASTM D4833 – Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products	183.9 Newtons
Tensile Strength	ASTM D882 – Test Method for Tensile Properties of Thin Plastic Sheeting	53.5 lbf/in
Permeance After Conditioning (ASTM E1745 Sections 7.1.2 - 7.1.5)	ASTM E154 Section 8, F1249 – Permeance after wetting, drying, and soaking ASTM E154 Section 11, F1249 – Permeance after heat conditioning ASTM E154 Section 12, F1249 – Permeance after low temperature conditioning ASTM E154 Section 13, F1249 – Permeance after soil organism exposure	0.0073 perms 0.0070 perms 0.0062 perms 0.0081 perms
Hydrocarbon Attenuation Factors	Contact Stego Industries' Technical Department	
Chlorinated Solvent Attenuation Factors	Contact Stego Industries' Technical Department	
Methane Transmission Rate	ASTM D1434 – Test Method for Determining Gas Permeability Characteristics of Plastic Film and Sheeting	7.0 GTR** (mL(STP)/m <sup>2</sup> *day)
Radon Diffusion Coefficient	K124/02/95	9.8 x 10 <sup>-14</sup> m <sup>2</sup> /second
Thickness		20 mil
Roll Dimensions		14' x 105' or 1,470 ft <sup>2</sup>
Roll Weight		150 lb

Note: perm unit = grains/(ft<sup>2</sup>\*hr\*in-Hg) \*\* GTR = Gas Transmission Rate

Continued...

Note – legal notice on page 2.

# DRAGO® WRAP VAPOR INTRUSION BARRIER

A STEGO TECHNOLOGY, LLC INNOVATION | VAPOR RETARDERS 07 26 00, 03 30 00 | VERSION: 2/22/2019

## 5. INSTALLATION

**UNDER SLAB:** Unroll Drago Wrap over a tamped aggregate, sand, or earth base. Overlap all seams a minimum of 12 inches and tape using Drago® Tape. All penetrations must be sealed using a combination of Drago Wrap and Drago Accessories.

Review Drago Wrap's complete installation instructions prior to installation.

## 6. AVAILABILITY & COST

Drago Wrap is available nationally through our network of building supply distributors. For current cost information, contact your local Drago distributor or Stego Industries' Sales Representative.

## 7. WARRANTY

Stego Industries, LLC believes to the best of its knowledge, that specifications and recommendations herein are accurate and reliable. However, since site conditions are not within its control, Stego Industries does not guarantee results from the use of the information provided and disclaims all liability from any loss or damage. Stego Technology, LLC does offer a limited warranty on Drago Wrap. Please see [www.stegoindustries.com/legal](http://www.stegoindustries.com/legal).

## 8. MAINTENANCE

Store Drago Wrap in a dry and temperate area.

## 9. TECHNICAL SERVICES

Technical advice, custom CAD drawings, and additional information can be obtained by contacting Stego Industries or by visiting the website.

**Contact Number:** (877) 464-7834

**Website:** [www.stegoindustries.com](http://www.stegoindustries.com)

## 10. FILING SYSTEMS

- [www.stegoindustries.com](http://www.stegoindustries.com)

(877) 464-7834 | [www.stegoindustries.com](http://www.stegoindustries.com)

DATA SHEETS ARE SUBJECT TO CHANGE. FOR MOST CURRENT VERSION, VISIT [WWW.STEGOINDUSTRIES.COM](http://WWW.STEGOINDUSTRIES.COM)





# DRAGO® WRAP LIMITED WARRANTY

## ISSUER: STEGO TECHNOLOGY, LLC ("Stego Tech")



Applicable Date: January 1, 2018 | Revision Date: October 30, 2018 | Version Number: 2.0

P1 of 3

This Drago Wrap Limited Warranty ("the Warranty") commences on the Effective Date and applies to Drago Wrap Vapor Intrusion Barrier (for the purposes of this Warranty "Drago Wrap").

Stego Tech recommends installation of Drago Wrap per ASTM E1643, its published installation instructions, and in accordance with all site-specific recommendations of the project's design team. Drago Wrap is specifically engineered to be installed in conjunction with its proprietary accessories, including Drago® Tape, DragoTack™ Tape, Drago® Sealant, and Drago® Sealant Form. Additionally, to avoid puncturing Drago Wrap and comply with ASTM E1643, Stego Tech recommends utilizing the Beast® Screed system of vapor barrier-safe accessories.

## WARRANTY TERMS AND CONDITIONS

### 1 DRAGO WRAP WARRANTY

Stego Tech recognizes the most current version of ASTM E1745 (at the time of the material purchase) as the governing standard specification for under-slab vapor retarders. Subject to the limitations set forth below, for the Life of the Building™ Stego Tech warrants that Drago Wrap:

- (a) meets all of the requirements for its designated ASTM E1745 classification;
- (b) has been tested in accordance with each of the following ASTM test methods:
  - i. ASTM E1745 – *Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs*
  - ii. ASTM F1249 – *Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor*
  - iii. ASTM D1709 – *Test Methods for Impact Resistance of Plastic Film by Free-Falling Dart Method*
  - iv. ASTM D882 – *Test Method for Tensile Properties of Thin Plastic Sheeting*
  - v. ASTM E154 – *Sections 8, 11, 12, 13 – Permeance After Conditioning*<sup>1</sup>
  - vi. ASTM D1434 – *Standard Test Method for Determining Gas Permeability Characteristics of Plastic Film and Sheeting*
  - vii. ASTM D4833 – *Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products*
- (c) will be free from Manufacturing Composition Defects;
- (d) eligible for input on project-specific installation best practices by a Stego Tech-authorized representative during the preconstruction phase upon reasonable notice, in-person or remotely; and
- (e) eligible for Site Review by a Stego Tech-authorized representative, in-person or digitally, for input on installation prior to concrete placement upon reasonable notice.
- (f) will meet or exceed its published product literature for **a period not less than two (2) years from the Date of Installation.**

This Warranty is the sole Warranty given by Stego Tech or its Affiliates as to Drago Wrap. All installations or uses of Drago Wrap automatically activate this Warranty. If you do not wish to be bound by the terms of this Warranty, please return the Drago Wrap for a full Refund. Otherwise, all installations will be presumed to have agreed to the terms herein.

### 2 NOTICE AND CLAIMS

Any Claim pursuant to this Warranty must be Certified and must be made within sixty (60) days of the date discovered or the date it should reasonably have been discovered in order for Stego Tech to evaluate the Claim and replace the Drago Wrap. Claims may be made at any time during the Life of the Building. Such replacement (or at Stego Tech's option, Refund of the verified purchase price) shall be your sole and exclusive remedy for any such Claim.

<sup>1</sup> Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover.



# DRAGO® WRAP LIMITED WARRANTY

## ISSUER: STEGO TECHNOLOGY, LLC ("Stego Tech")



Applicable Date: January 1, 2018 | Revision Date: October 30, 2018 | Version Number: 2.0

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### 3 WARRANTY AND CONDITIONS TO COVERAGE

This Warranty excludes any defect or damage caused by: (a) faulty or improper installation of the Drago Wrap, including the failure to comply with published specification and installation recommendations in effect at the time of installation; (b) improper use, storage or site conditions (e.g noncompliance with the terms of the Drago Wrap Material Safety Data Sheet); (c) any below-concrete slab or similar activity, and any other maintenance, repair, alteration or new installation to the Building that occurs after the completion of the original installation that impacts the Drago Wrap; (d) damage caused by non-Stego Tech materials; (e) factors beyond the reasonable control of Stego Tech or its Affiliates, including, but not limited to, natural disasters such as lightning, floods, windstorms, seismic disturbances, hurricanes, tornadoes, or impact of foreign objects or other violent storms or casualty; (f) damage resulting from any form of misuse, abuse or negligence; (g) structural defects or failures in the Building to which the Drago Wrap is installed.

**Your sole remedy under this Warranty is, at Stego Tech's option: (a) Refund of the purchase price paid; or (b) replacement of so much of the Drago Wrap as Stego Tech deems necessary.**

### 4 WARRANTY EXCLUSIONS

Except where prohibited by law, this Warranty and the remedies expressly stated herein are the exclusive warranties and remedies provided to you with respect to the Drago Wrap and supersede any prior, contrary or additional representations, whether oral or written. No representative, distributor, dealer or any other person is authorized to make, or makes any warranty, representation, condition or promise with respect to the Drago Wrap. **ALL OTHER WARRANTIES ARE DISCLAIMED AND EXCLUDED – WHETHER EXPRESS, IMPLIED, OR STATUTORY – INCLUDING ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY IMPLIED WARRANTIES OTHERWISE ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE, OR USAGE OF TRADE.**

In no event shall Stego Tech or its Affiliates be liable for any incidental, special, indirect, consequential damages, including but not limited to lost income or loss of use. This exclusion applies regardless of whether such damages are sought for breach of warranty, breach of contract, negligence, or strict liability in tort or any other legal or equitable theory.

### 5 SEVERANCE

If any provision in this Warranty is found to be invalid or unenforceable, then the remainder shall have full force and effect, and the invalid provision shall be modified or partially enforced to the maximum extent permitted by law to effectuate the purpose of the Warranty.

### 6 DISPUTE RESOLUTION

It is the intention of the parties to use their reasonable best efforts to informally resolve, where possible, any dispute, claim, demand or controversy arising out of the performance of this Warranty by mutual negotiation and cooperation. In the event that the parties are unable to informally resolve a dispute, the Parties agree that such disputes shall be completely and finally settled by submission to arbitration before a single arbitrator under the Judicial Arbitration and Mediation Services (JAMS) Arbitration Rules then in effect. Good faith mediation shall be a condition precedent to initiating arbitration. Unless the parties agree otherwise, the arbitration shall take place in Orange County, California, U.S.A. The award of the arbitrator shall be in writing, shall be final and binding upon the parties, shall not be appealed from or contested in any court and may, in appropriate circumstances, include injunctive relief. Judgment on such award may be entered in any court of appropriate jurisdiction, or application may be made to that court for a judicial acceptance of the award and an order of enforcement, as the party seeking to enforce that award may elect. The prevailing party shall be entitled to recover its attorney fees and costs. This Agreement shall be governed in all respects by the laws of the State of California without regard to the conflict of law provisions thereof. Neither party will consolidate, or seek class treatment for any action unless previously agreed to in writing by all parties.

*Continued...*

*Note - legal notice on last page.*





# DRAGO® WRAP LIMITED WARRANTY

## ISSUER: STEGO TECHNOLOGY, LLC ("Stego Tech")



Applicable Date: January 1, 2018 | Revision Date: October 30, 2018 | Version Number: 2.0

P3 of 3

### DEFINITIONS

**"Affiliates"** means Stego Tech affiliated entities, partners, joint venturers, suppliers, vendors, subcontractors, representatives, and agents.

**"Applicable Date"** means the Limited Warranty applies to material sold on or after January 1, 2018.

**"Building"** means the building above which Drago Wrap was installed, as verified by Stego Tech.

**"Certified"** means that you have investigated whether a breach of this Warranty occurred and obtained and provided a qualified inspector report confirming evidence exists of such a Defect. Stego Tech reserves the right to independently verify any Claims.

**"Claim"** means a claim for relief under the Warranty.

**"Date of Installation"** means the date Drago Wrap was installed, as verified by Stego Tech.

**"Effective Date"** means date of first sale as verified.

**"Life of the Building"** means the duration of which the building originally installed atop of the Drago Wrap is in good and working condition.

**"Manufacturing Composition Defect"** means any condition of the Drago Wrap that does not meet the material's intended design and is disclosed to Stego Tech during the Life of the Building.

**"Refund"** means Stego Tech providing a monetary return in the amount verified to be the cost of the Drago Wrap subject to the Claim.

**"Site Review"** means a review of representative portions of the Drago Wrap installation (digitally or in-person, when possible, and as determined by Stego Tech authorized representative) prior to concrete placement to help ensure compliance with governing installation standard, ASTM E1643, Stego Tech's installation instructions, and/or, if applicable, the design team's recommendations (e.g. contract documents). Site Reviews are not a full site inspection.

**"Stego Tech"** means Stego Technology, LLC, a California limited liability company with its principal place of business located at 216 Avenida Fabricante, #101, San Clemente, California 92672. Stego Industries, LLC is the exclusive representative of Drago Wrap and accessory products, owned by Stego Technology, LLC, a wholly independent company.

**"Warranty"** means this Drago Wrap Limited Warranty.





Revision Date: July 30, 2018 | Date of Issue: June 1, 2017 | Version Number: 2.0

## SECTION 1: IDENTIFICATION

### Product Identifier

**Product Name:** Drago Wrap

### Intended Use of the Product

Vapor Intrusion Barrier

### Company Name, Address, and Telephone of the Responsible Party

Stego Technology, LLC or C/O Stego® Industries, LLC\*  
216 Avenida Fabricante #101  
San Clemente, CA 92672

### Emergency Telephone Number

**Emergency Number:** 1 (800) 424-9300 (24 Hrs.) CHEMTREC

**Main Contact Number:** (877) 464-7834

## SECTION 2: HAZARDS IDENTIFICATION

**Classification:** This product is not classified as hazardous in accordance with 29 C.F.R. § 1910.1200.

**Signal word:** None.

**Pictogram(s):** None.

**Hazard statement(s):** None.

**Precautionary statement(s):** None.

**Hazards not otherwise classified:** Polymer film can burn if exposed to excessive temperatures beyond the normal use of the product.

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS Number	% by WT.
Copper	Proprietary*	<10%*

The selections marked with an '\*' are proprietary and considered to be Trade Secrets. This is the reason that they are listed as such, or provided as a range.

## SECTION 4: FIRST AID MEASURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Inhalation:** Not a respirable film. If exposed to fumes from combustion, move subject to fresh air; if breathing is difficult, give oxygen and get medical attention; if victim has stopped breathing, give artificial respiration and get medical attention.

**Eye Contact:** Not a probable route of exposure. If exposed to fumes from overheating or from combustion, move subject to fresh air. Flush with plenty of water; if irritation continues, get medical attention.

**Skin Contact:** No treatment necessary. For thermal burns, cool molten materials with water and get medical attention.

**Ingestion:** Not a probable route of exposure.

**Continued...**

*Note - legal notice on page 5*





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## SECTION 5: FIRE-FIGHTING MEASURES

**Unusual Hazards:** Polymer film can burn if exposed to excessive temperature beyond the normal use of the product.

**Extinguishing Agents:** Use extinguishing media appropriate for surrounding fire: carbon dioxide, foam, dry chemical, and water fog.

**Personal Protective:** Equipment unnecessary unless resin is burned, which is not an intended use of the product. If resin is burning, wear self-contained breathing apparatus (pressure-demand MSHA/NIOSH approved or equivalent) and full protective gear.

**Note:** See Section 10 for hazardous combustion and thermal decomposition information.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Protection:** None necessary.

**Procedures:** None necessary.

## SECTION 7: HANDLING AND STORAGE

**Storage Conditions:** Cool, dry storage recommended. Indoor storage recommended.

Avoid storing films in areas containing aromatic hydrocarbons, halogenated compounds, chlorinated compounds, oxidative agents, solvents or other known polyethylene solubilizers, prodegradants, as they may impact the product performance and/or service life.

**Handling Procedures:** Avoid direct sunlight. Avoiding direct UV exposure of product. Avoid contact with incompatible materials.

**Installation Temperature Range:** Below 110°F (ambient). Please also see technical and safety data sheets for accessory products installation/application temperature ranges.

**In-Service Temperature Range:** Below 85°F (soil and slab temperature, beginning 28 days following slab placement). Please also see technical and safety data sheets for accessory products installation/application temperature ranges.

**Exposure to Ultraviolet Radiation/Weather Events:** The amount of time between when Stego Wrap is installed and when concrete is placed or other complete protection from sunlight and weather events is provided should be minimized while not exceeding 7 days.

Please review the remainder of the SDS and this wrap's technical data sheet for storage and additional information. If any of the conditions cited above pose a problem for the typical installation of Drago Wrap, please contact Stego Industries for additional information and solutions.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient	OSHA PEL	ACGIH TWA
Copper	0.1 mg/m <sup>3</sup> (Cu fume)	0.2 mg/m <sup>3</sup> (Cu fume)

**Respiratory Protection:** None required during handling. Local exhaust to remove fumes from heat sealing and hot wire cutting areas of packaging or bag converting for worker comfort.

**Eye Protection:** None necessary.

**Hand Protection:** None necessary.

**Engineering Controls (Ventilation):** Use local exhaust ventilation when routinely heat sealing this product. Recommended ventilation is with a minimum capture velocity of 100 ft/min. (30 m/min.) at the point of vapor evolution. Refer to the current edition of *Industrial Ventilation: A Manual of Recommended Practice* published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

**Continued...**

*Note - legal notice on page 5*



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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES *Continued...*

**General Physical Form:** Solid plastic film.

### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Plastic film
<b>Color:</b>	Copper and Gray
<b>State:</b>	Solid
<b>Odor Characteristics:</b>	None
<b>Odor Threshold:</b>	None
<b>pH:</b>	Not Applicable
<b>Melting Point/Freezing Point:</b>	Not Applicable
<b>Initial Boiling Point and Boiling Point Range:</b>	Not Applicable
<b>Flash Point:</b>	Not Applicable
<b>Evaporation Rate:</b>	Not Applicable
<b>Flammability (solid, gas):</b>	Not Applicable
<b>Upper flammability:</b>	Not Applicable
<b>Lower Flammability:</b>	Not Applicable
<b>Vapor Pressure:</b>	Not Applicable
<b>Vapor Density:</b>	Not Applicable
<b>Relative Density:</b>	Not Applicable
<b>Solubility:</b>	Not Applicable
<b>Partition Coefficient: n-octanol/water:</b>	Not Applicable
<b>Auto ignition-temperature:</b>	Not Applicable
<b>Decomposition temperature:</b>	>325°C (617°F)
<b>Viscosity:</b>	Not Applicable

## SECTION 10: STABILITY AND REACTIVITY

**Instability:** This material is considered stable. Thermal decomposition is dependent on time and temperature.

### HAZARDOUS DECOMPOSITION PRODUCTS

Substance	Condition
Hydrocarbons	Combustion by-product
Carbon Monoxide	Combustion by-product
Carbon Dioxide	Combustion by-product
Copper Fume	Combustion by-product

**Hazardous Polymerization:** Product will not undergo hazardous polymerization. Product does not decompose at ambient temperatures.

**Incompatibility:** Lead azide and lead stiphante commonly used in high explosive detonators react violently with copper.

**Reactivity:** Reacts and binds with polar gases such as Hydrogen sulfide (H<sub>2</sub>S), Ozone (O<sub>3</sub>), Carbonyl sulfide (COS), Sulfur Dioxide (SO<sub>2</sub>), Hydrogen chloride (HCl), Formic Acid, Acetic Acid.

**Hazardous Decomposition:** Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

*Continued...*

*Note - legal notice on page 5*



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## SECTION 11: TOXICOLOGICAL INFORMATION

This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

**Acute Data:** No Toxicity data are available for this material.

### PRIMARY ROUTES OF EXPOSURE

**Skin Contact:** Only if burned.

**Eye Contact:** Only if burned.

**Respiratory Contact:** Only if burned.

### ACUTE EFFECTS OF EXPOSURE

**Ingestion:** Not a probable route of exposure.

**Inhalation:** No inhalation risk unless product is heated to point of burning, which in normal applications does not occur. Fumes from combustion are unlikely to be produced during heat shrinking. Local ventilation should be used for comfort. Testing data shows copper/polymer particulate count at approximately 0.007mg/m<sup>3</sup>, which is well below OSHA PEL of 0.1 mg/m<sup>3</sup>.

**Eye Contact:** No eye exposure risk during all product usage except during heating if plastic is heated to point of combustion, which does not occur during the intended use of the product. Fumes from combustion, which have a low toxicity, may be produced during hot wire cutting or heat sealing. Fumes are unlikely to be produced during heat shrinking when used as directed.

**Skin Contact:** Not irritating when used as directed. Hot polymer created during heat shrinking, wire cutting, or heat sealing, may produce thermal burns.

**Chronic Effects of Exposure:** None known when used as directed.

**Carcinogenicity:** None known when used as directed.

## SECTION 12: ECOLOGICAL INFORMATION

This material is insoluble in water and not expected to present any environmental problems in normal application, however areas containing aromatic hydrocarbons, halogenated compounds, chlorinated compounds, pH extremities, oxidative agents, solvents or other known polyethylene solubilizers, prodegradants, etc. may impact the product performance and/or service life.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Procedure:** Reclaim if feasible. If product can't be reclaimed, no special requirements are necessary; dispose of as ordinary solid waste. Pick up film for good "housekeeping" and to prevent a slipping hazard. Incineration or landfill in compliance with federal, state and local regulations. *Since regulations vary, consult applicable regulations or authorities before disposal.*

## SECTION 14: TRANSPORT INFORMATION

**US DOT Hazard Class:** Not regulated.

**Continued...**

*Note - legal notice on page 5*



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## SECTION 15: REGULATORY INFORMATION

**Workplace Classification:** This product is not considered hazardous under the OSHA Hazard Communication Standard (29 C.F.R. § 1910.1200).

**CERCLA Information (40 C.F.R. 302.4):** Because of the form in which copper is contained within the resin, releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

**Waste Classification:** When this product becomes a waste, it is classified as a non-hazardous waste under criteria of the Resource Conservation and Recovery Act (40 C.F.R. 261).

## SECTION 16: OTHER INFORMATION

### HAZARD RATING

Health: 0 | Flammability: 1 | Reactivity: 0 | Special Hazards: None

*Scale: 4 = Extreme | 3 = High | 2 = Moderate | 1 = Slight | 0 = Insignificant*

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material, but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

*Rating are based on internal supplier's guidelines, and they are intended for internal use only.*

### ABBREVIATIONS

ACGIH = American Conference of Governmental Industrial Hygienists

OSHA = Occupational Safety and Health Administration

TLV = Threshold Limit Value

PEL = Permissible Exposure Limit

TWA = Time Weighted Average

STEL = Short-Term Exposure Limit

**Disclaimer:** The information contained herein relates only to the specific material identified. Stego Technology, LLC believes that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. Stego Technology, LLC urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.

**Please read the product statements for all Drago® products by navigating here:**  
<http://www.stegoindustries.com/legal>



# DRAGO<sup>®</sup> WRAP

## VAPOR INTRUSION BARRIER

# INSTALLATION INSTRUCTIONS

Engineered protection to create a healthy built environment.

# DRAGO® WRAP VAPOR INTRUSION BARRIER INSTALLATION INSTRUCTIONS



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**IMPORTANT:** Please read these installation instructions completely, prior to beginning any Drago Wrap installation. The following installation instructions are generally based on ASTM E1643 – *Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs*. There are specific instructions in this document that go beyond what is stated in ASTM E1643 to take into account vapor intrusion mitigation. If project specifications call for compliance with ASTM E1643, then be sure to review the specific installation sections outlined in the standard along with the techniques referenced in these instructions.

## UNDER-SLAB INSTRUCTIONS:

1. Drago Wrap has been engineered to be installed over a tamped aggregate, sand, or earth base. It is not typically necessary to have a cushion layer or sand base, as Drago Wrap is tough enough to withstand rugged construction environments.

**NOTE: Drago Wrap must be installed with the gray facing the subgrade.**

Fig.1: UNDER-SLAB INSTALLATION



2. Unroll Drago Wrap over the area where the slab is to be placed. Drago Wrap should completely cover the concrete placement area. All joints/seams should be overlapped a minimum of 12 inches and taped using Drago® Tape. (Fig. 1). If additional protection is needed, install DragoTack™ Tape in between the overlapped seam in combination with Drago Tape on top of the seam.

**NOTE: The area of adhesion should be free from dust, dirt, moisture, and frost to allow maximum adhesion of the pressure-sensitive tape. Ensure that all seams are taped with applied pressure to allow for maximum and continuous adhesion of the pressure-sensitive Drago Tape. Adhesives should be installed above 40°F. In temperatures below 40°F, take extra care to remove moisture/frost from the area of adhesion.**

3. ASTM E1643 requires sealing the perimeter of the slab. Extend vapor retarder over footings and seal to foundation wall or grade beam at an elevation consistent with the top of the slab or terminate at impediments such as waterstops or dowels. Consult the structural and environmental engineer of record before proceeding.

### SEAL TO PERIMETER WALL OR FOOTING WITH DRAGOTACK TAPE: (Fig. 2a and 2b)

- a. Make sure area of adhesion is free of dust, dirt, debris, moisture, and frost to allow maximum adhesion.
- b. Remove release liner on one side and stick to desired surface.
- c. When ready to apply Drago Wrap, remove the exposed release liner and press firmly against DragoTack Tape to secure.
- d. If a mechanical seal is needed, fasten a termination bar over the top of the Drago Wrap inline with the DragoTack Tape.

**NOTE: If sealing to the footing, the footing should receive a hand float finish to allow for maximum adhesion.**

Fig.2a: SEAL TO PERIMETER WALL

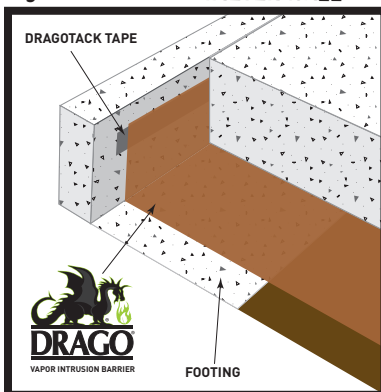
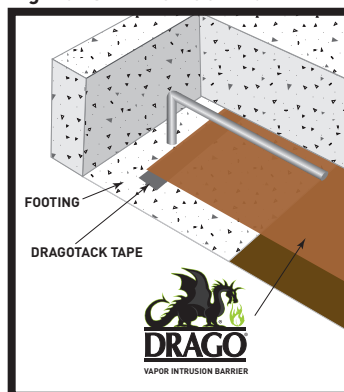
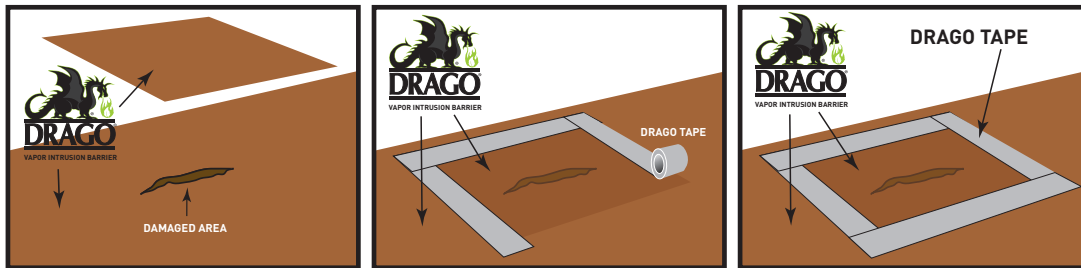


Fig. 2b: SEAL TO FOOTING



4. In the event that Drago Wrap is damaged during or after installation, repairs must be made. Cut a piece of Drago Wrap to a size and shape that covers any damage by a minimum of 6 inches in all directions. Clean all adhesion areas of dust, dirt, moisture, and frost. Tape down all edges using Drago Tape. (Fig. 3)

Fig. 3: SEALING DAMAGED AREAS



5. **IMPORTANT: ALL PENETRATIONS MUST BE SEALED.** All pipe, ducting, rebar, and block outs should be sealed using Drago Wrap, Drago Tape, and/or Drago® Sealant and Drago® Sealant Form. (Fig. 4a). Drago accessories should be sealed directly to the penetrations.

Fig. 4a: PIPE PENETRATION SEALING



Fig. 4b: DETAIL PATCH FOR PIPE PENETRATION SEALING



#### DETAIL PATCH FOR PIPE PENETRATION SEALING: (Fig. 4b)

- a. Install Drago Wrap around pipe penetrations by slitting/cutting material as needed. Try to minimize void space created.
- b. If Drago Wrap is close to pipe and void space is minimized, proceed to step d.
- c. If void space exists, then
  - i. Cut a detail patch to a size and shape that creates a 6-inch overlap on all edges around the void space at the base of the pipe.
  - ii. Cut an "X" slightly smaller than the size of the pipe diameter in the center of the detail patch and slide tightly over pipe.
  - iii. Tape the edges of the detail patch using Drago Tape.
- d. Seal around the base of the pipe using Drago Tape and/or Drago Sealant and Drago Sealant Form.
  - i. If Drago Sealant is used to seal around pipe, make sure Drago Wrap is flush with the base of the penetration prior to pouring Drago Sealant.



# DRAGO® WRAP VAPOR INTRUSION BARRIER INSTALLATION INSTRUCTIONS



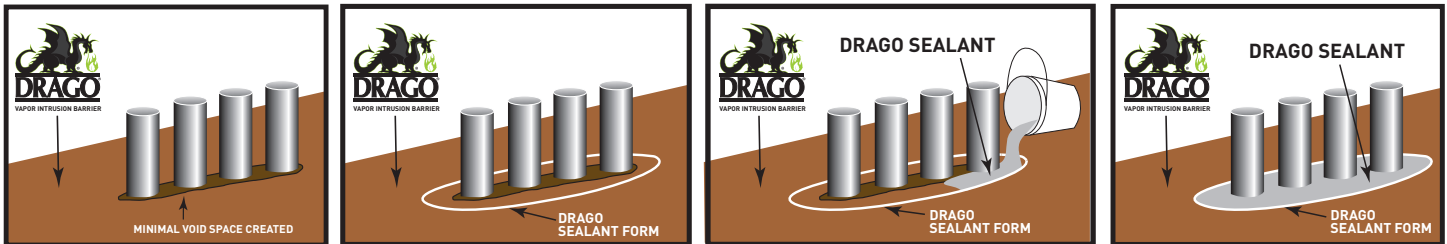
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## MULTIPLE PIPE PENETRATION SEALING: (Fig. 5)

**NOTE:** Multiple pipe penetrations in close proximity may be most efficiently sealed using Drago Wrap, Drago Sealant, and Drago Sealant Form for ease of installation.

- Cut a hole in Drago Wrap such that the membrane fits over and around the base of the pipes as closely as possible, ensuring that it is flush with the base of the penetrations.
- Install Drago Sealant Form continuously around the entire perimeter of the group of penetrations and at least 1 inch beyond the terminating edge of Drago Wrap.
- Pour Drago Sealant inside of Drago Sealant Form to create a seal around the penetrations.
- If the void space between Drago Wrap and the penetrations is not minimized and/or the base course allows for too much drainage of sealant, a second coat of Drago Sealant may need to be poured after the first application has cured.

Fig. 5: MULTIPLE PIPE PENETRATION SEALING



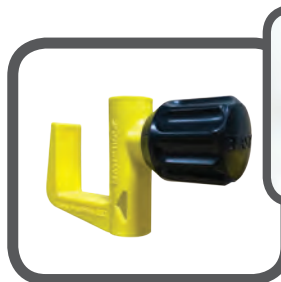
## BEAST® CONCRETE ACCESSORIES - VAPOR BARRIER SAFE

Stego Industries\* recommends the use of BEAST vapor barrier-safe concrete accessories, to help eliminate the use of non-permanent penetrations in Drago Wrap installations.



BEAST® SCREED

*Improve efficiency and maintain concrete floor levelness with the BEAST SCREED SYSTEM!*



BEAST® HOOK

*Locate it and lock it down!*



BEAST® FORM STAKE

*The Stego barrier-safe forming system that prevents punctures in the vapor barrier.*

**IMPORTANT:** AN INSTALLATION COMPLETED PER THESE INSTRUCTIONS SHOULD CREATE A MONOLITHIC MEMBRANE BETWEEN ALL INTERIOR INTRUSION PATHWAYS AND VAPOR SOURCES BELOW THE SLAB AS WELL AS AT THE SLAB PERIMETER. THE UNDERLYING SUBBASE SHOULD NOT BE VISIBLE IN ANY AREA WHERE CONCRETE WILL BE PLACED. IF REQUIRED BY THE DESIGN ENGINEER, ADDITIONAL INSTALLATION VALIDATION CAN BE DONE THROUGH SMOKE TESTING.

**NOTE:** While Drago Wrap installation instructions are based on ASTM E1643 - *Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs*, these instructions are meant to be used as a guide, and do not take into account specific job site situations. Consult local building codes and regulations along with the building owner or owner's representative before proceeding. If you have any questions regarding the above-mentioned installation instructions or products, please call us at 877-464-7834 for technical assistance. While Stego Industries' employees and representatives may provide technical assistance regarding the utility of a specific installation practice or Stego product, they are not authorized to make final design decisions.





**APPENDIX J**  
**ENGINEERING QA/QC INSPECTION CHECKLISTS**

REMEDIAL INVESTIGATION AND CLEANUP ACTION PLAN  
3245 158<sup>th</sup> Avenue Southeast  
Bellevue, Washington

Farallon PN: 2403-008

**Site Name**  
**System Installation**  
**QC Checklist**  
**Vapor Barrier Installation**

<b>Facility:</b>	<b>Farallon PN:</b>	<b>Date:</b>
------------------	---------------------	--------------

**WORK LOCATION:**

Requirement	Assessment
1. Geotextile protection has been installed below all vapor barrier material.	<input type="checkbox"/> Yes <input type="checkbox"/> No (Describe Deficiency)
2. Vapor barrier overlap joints are a minimum of 12" and sealed in-between with 2-sided Drago Tack Tape. Verify Drago Tape applied to outside seam.	<input type="checkbox"/> Yes <input type="checkbox"/> No (Describe Deficiency)
3. Concrete surfaces have been primed, cleaned, and are dry prior to applying 2-sided Drago Tack Tape.	<input type="checkbox"/> Yes <input type="checkbox"/> No (Describe Deficiency)
4. Pipe penetrations have been properly sealed with a pipe boot or fabricated pipe boot according to manufacturer's details. Verify that barrier is detailed directly to pipe and not to protective piping wrap.	<input type="checkbox"/> Yes <input type="checkbox"/> No (Describe Deficiency)
5. All holes and openings in the vapor barrier have been repaired and sealed using 12" Drago Tape.	<input type="checkbox"/> Yes <input type="checkbox"/> No (Describe Deficiency)
6. Vapor barrier seals to the edge of walls, footings, and grade beams.	<input type="checkbox"/> Yes <input type="checkbox"/> No (Describe Deficiency)
7. Photo documentation of proper seals and installation.	<input type="checkbox"/> Yes <input type="checkbox"/> No (Describe Deficiency)
8. Smoke test	<input type="checkbox"/> Yes <input type="checkbox"/> No (Describe Deficiency)

**Comments:**

<b><u>PREPARED BY:</u></b>	<b><u>SIGNATURE:</u></b>