

Remedial Investigation Work Plan

**601 Dexter Site
601 Dexter Avenue North
Seattle, Washington 98109**

**Facility Site ID No. 56257757
Cleanup Site ID No. 15113
Agreed Order No. DE 21102**

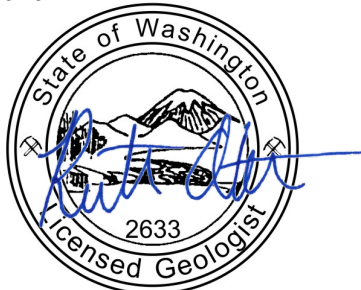
Prepared For:

**ARE-Seattle No. 32, LLC
400 Dexter Avenue North
Seattle, Washington 98109**

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Prepared By:

TRC Environmental Corporation
13810 SE Eastgate Way, Suite 440
Bellevue, WA 98005
(425) 395-0010



RUTH A. OTTEMAN

Prepared by:
Ruth Otteman, L.G.
Senior Geologist



ERIC L. CADDEY

Reviewed and approved by:
Eric Caddey, L.G.
Senior Geologist

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ABBREVIATIONS AND ACRONYMS

Abbreviation/ Acronym	Definition
AMSL	Above mean sea level
AO	Agreed Order No. DE 21102
ARE	ARE-Seattle No. 32, LLC
bgs	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and total xylenes
CB	Catch basin
COC	Contaminant of concern
COPC	Contaminant of potential concern
CSM	Conceptual site model
CUL	Cleanup level
DRO	Diesel-range organics
Ecology	Washington State Department of Ecology
ESA	Environmental Site Assessment
GRO	Gasoline-range organics
µg/L	Micrograms per liter
µg/m ³	Micrograms per cubic meter
mg/kg	Milligrams per kilogram
MTCA	Model Toxics Control Act
NAVD 88	North American Vertical Datum of 1988
No.	Number
ORO	Oil-range organics
RIWP	Remedial Investigation Work Plan
REC	Recognized environmental condition
TRC	TRC Environmental Corporation
UST	Underground storage tank
VI	Vapor intrusion
VOCs	Volatile organic compounds
WAC	Washington Administrative Code

1.0 INTRODUCTION

On behalf of ARE-Seattle No. 32, LLC (ARE), TRC Environmental Corporation (TRC) has prepared this *Final Remedial Investigation Work Plan* (RIWP) for the site known as 601 Dexter Site (Site) generally located at 601 Dexter Avenue North in Seattle, Washington (Property; see Figure 1). This RIWP has been prepared as part of the requirements of Agreed Order Number (No.) DE 21102 (AO or Order) between the state of Washington and ARE.

The Site has the following Washington State Department of Ecology (Ecology) identification numbers:

- Facility Site Identification Number 56257757
- Cleanup Site Identification Number 15113

As defined by the Model Toxics Control Act Regulation (Washington Administrative Code [WAC] 173-340; MTCA) the purpose of a remedial investigation (RI) is to “...collect, develop, and evaluate sufficient information regarding a site to select a cleanup action under WAC 173-340-360 through 173-340-390.” (WAC 173-340-350(1).” The scope of investigation presented in this RIWP fulfills that purpose. Additionally, this RIWP addresses the specific objectives presented in the AO.

2.0 SITE BACKGROUND

The following sections provide details regarding the Site location, development history, locations of subsurface utilities, a brief description of surrounding properties and potential sources of environmental contaminants, and a general description of the planned redevelopment at 601 Dexter Avenue North.

2.1 Property Location

The portion of the Site owned by ARE-Seattle No. 32, LLC includes the property located at 601 Dexter Avenue North in Seattle, Washington, and is assigned King County Parcel No. 224900-0100. The Property corners occur at or about the following surface elevations (North American Vertical Datum of 1988 [NAVD88]), latitude, and longitude coordinates:

Location	Approximate Elevation in Feet Above Mean Sea Level (NAVD88)	Latitude (Degrees)	Longitude (Degrees)
NW Corner	70	47.624978	-122.343449
NE Corner	59	47.624975	-122.342579
ESE Corner	61	47.624791	-122.342581
SSE Corner	61	47.624672	-122.342745
SW Corner	60	47.624680	-122.343451

All elevations presented herein are in feet relative to the NAVD88 Mean Sea Level.

Current entrances to the Property are along Dexter Avenue North and the north-adjacent alley between the Property and 615 Dexter Avenue North. The alley is owned by the City of Seattle and maintained by the Seattle Department of Transportation (SDOT). The Property location and pertinent surrounding properties are depicted on Figure 2.

2.2 Property History and Planned Development

The current building on the Property was constructed in 1919, and expanded to the east in 1941 and 1942, with additional offices constructed in 1962. A boiler was installed in approximately 1928. Historical features on the Property as well as adjacent properties are shown on Figure 2. Former commercial tenants of the Property are summarized below.

Former Tenants at 601 Dexter

Approximate Years of Operation ^a	Tenant	Type of Business
1920	Modern Automobile and Tractor School	Unknown
1925	Dexter Cabinet Works	Cabinet shop
Between 1930 and late 1950s	Sanitary Laundry Company and Sanitary Olympic Laundry- Laundry/cleaner business	Laundry/cleaner business
1930s to 1940s	Fess Oil Burner Co., aka Sunbeam Service Station	Gasoline fueling station
1940 to 1955	Colotyle Corporation	Enamel-coated hardboard
1944	Electrol Oil Burner Co.	Heating Oil
1970	Domestic Supply Company	Electric appliance warehouse
1980	Domestic Supply Company	Electric appliance warehouse
2002 to present	Copiers Northwest	Large-scale printing facility, storage warehouse, and offices

Note:

- a Information summarized from the 2019 Phase I Environmental Site Assessment by Hart Crowser.

In 1997, four underground storage tanks (USTs) were removed from the alley directly north of the Property, though no formal closure documentation was available for review. The four USTs included three 1,000-gallon heating oil USTs and one 1,000-gallon bunker oil UST. A ground-penetrating radar (GPR) survey was performed in October 2021, which did not detect any signatures indicating the presence of any USTs in the alley.

The Property building is scheduled for demolition in the first quarter of 2025 and redeveloped as a 10-story commercial office space/laboratory with a 4-story subgrade parking garage. The development will be property line to property line with no setback.

2.3 Subsurface Utilities

The Property is served by multiple subsurface utilities. The utility alignments are discussed within the following subsections and the alignments with known locations are depicted on Figure 3.

2.3.1 Electric Power

Electric power is supplied to the current Property building via a utility pole located on the north side of the building. Additionally, there is a subgrade electrical junction box located beneath the paved parking area in the eastern portion of the Property.

2.3.2 Natural Gas

Natural gas service to the Property is from a west-east trending subsurface pipeline originating beneath Dexter Avenue North. The placement of the natural gas line has not been fully documented and is only partially depicted on Figure 3.

2.3.3 Telecommunications

Telecommunication service to the Property is via an underground conduit originating in the Dexter Avenue North right of way. The placement of the subsurface telecommunications utility is not fully documented and is not shown on Figure 3.

2.3.4 Potable Water

One municipal water service line (reportedly copper) enters the Property from Aurora Avenue North.

2.3.5 Sanitary Sewer

A two sanitary sewer side-sewer (SS) lines exit the Property as follows:

- SS No. 1 originates in the northwest portion of the Property building, generally traversing east to west and exits the Property at a depth of approximately 4 feet below ground surface (bgs) toward Aurora Avenue;
- SS No. 2 originates in the eastern portion of the Property building, generally traversing northeast and exits the Property at an unknown depth.

2.3.6 Stormwater and Local Catch Basins

A total of five catch basins (CBs) are in the vicinity of the Property. Two CBs are located in the easternmost portion of Aurora Avenue. Two CBs are located in the sidewalk adjacent to the southeastern portion of the Property. The final CB is located east-adjacent to the Property along Dexter Avenue North. None of the CBs are located within the Property boundaries and only two CBs are shown on Figure 3.

Surface stormwater at the Property primarily drains to the east.

2.4 Surrounding Properties and Potential Off-Property Sources of Contaminants

Surrounding properties include the following:

- The Property is bounded on the north by the City of Seattle alley. Farther to the north is the 615 Dexter parcel.
- East of the Property is Dexter Avenue North. Farther to the east is the 800 Mercer parcel.
- South of the Property is Mercer Street, a 6-lane east-west thoroughfare owned by the City of Seattle.
- West of the Property is Aurora Avenue, a 6-lane north-south thoroughfare also known as Highway 99.

Adjoining streets, adjoining properties (i.e., properties with a shared property boundary), adjacent properties (i.e., parcels located directly across public streets from the 601 Dexter Site), and nearby sites are described in greater detail in the following subsections. Site names referenced herein are based on a review of Ecology records.

2.4.1 North of Property

Adjoining the Property to the north is a City of Seattle single-lane paved alley that allows limited access to the Property and the north-adjacent property, 615 Dexter Avenue North (Seattle DOT Dexter Parcel Site).

The Seattle DOT Dexter Parcel Site is primarily located across the alley at 615 Dexter Avenue North (King Co. Parcel No. 224900-0120). The Seattle DOT Dexter Parcel Site has the following Ecology and/or Washington State regulatory identification numbers:

- Facility Site Identification Number 81735
- Cleanup Site Identification Number 14785

The Seattle DOT Dexter Parcel Site is currently under a Prospective Purchaser Consent Decree (No. 22-2-02699). According to Ecology's Cleanup Site Details report generated on February 9, 2023, contaminants of concern (COCs) for the Seattle DOT Dexter Parcel Site include the following:

- Non-halogenated organics (benzene) in groundwater
- Gasoline-range organics (GRO) in groundwater
- Diesel-range organics (DRO) in soil and groundwater

Shallow groundwater flow is reportedly to the northeast.

Based on information submitted to Ecology (Hart Crowser 2022), the Seattle DOT Dexter Parcel Site is the source or one of the sources of petroleum compound environmental contaminants beneath a portion of the Property. Contaminant migration from Seattle DOT Dexter Parcel Site to the 601 Dexter Site has occurred in shallow soils, groundwater, and/or in soil vapor.

2.4.2 East of Property

The Property is bound to the east by Dexter Avenue North, which is a four-lane City of Seattle paved public thoroughfare.

The Seattle DOT Mercer Parcels Site is located across Dexter Avenue North at 714 West Mercer Street (King County Parcel No. 224900-0055) and at 800-816 Mercer Street (King County Parcel No. 224900-0006). The Seattle DOT Mercer Parcels Site has the following Ecology and/or Washington State regulatory identification numbers:

- Facility Site Identification Number 27913
- Cleanup Site Identification Number 14784

The Seattle DOT Mercer Parcels Site is currently under formal Ecology oversight. According to Ecology's records obtained on February 9, 2023, the following COCs are either confirmed or suspected at this site:

- Petroleum hydrocarbons including GRO, DRO, and oil-range organics (ORO) in soil and/or shallow groundwater;
- Benzene in groundwater; and
- Metals including lead in soil.

Shallow groundwater flow direction is reportedly to the north and northeast.

Based on information submitted to Ecology (Hart Crowser 2022), the Seattle DOT Mercer Parcels Site is not a source of COCs at or beneath the Property. Additional sampling is not proposed in this RIWP related to the Seattle DOT Mercer Parcels Site.

2.4.3 South of Property

The Property is bounded to the south by Mercer Street, a City of Seattle six-lane paved street.

Farther to the south are multi-story mixed-use residential and commercial buildings. Based on a review of available public records and surface topography in this area, these properties are not a potential source of reported environmental contaminants located at the 601 Dexter Site.

2.4.4 West of Property

The Property is bounded to the west by Aurora Avenue North, a six-lane paved thoroughfare also known as Washington State Highway 99.

Across Aurora Avenue North are several properties including the following:

- 703 Aurora Avenue North (King Co. Parcel No. 224900-0190), which is currently vacant land owned by the SDOT. Review of available Ecology records does not reveal environmental concerns associated with this property.
- 708 5th Avenue North (King County Parcel Nos. 224900-0195 and 224900-0200), which is currently developed as a multi-tenant residential building owned by T-C Uptown Apartments LLC. Review of available Ecology records does not reveal environmental concerns associated with this property.

Based on a review of available public records and a review of surface topography in this area, these properties are not a potential source of COCs reported at the Site.

2.5 Property Planned Redevelopment

The Property is scheduled for redevelopment starting in the first quarter of 2025. After the demolition of the current structure, the Property will be redeveloped with a 10-story mixed-use commercial building with a 4-story subgrade parking garage. TRC understands that the redevelopment will have no property line setback on any side.

3.0 PREVIOUS ENVIRONMENTAL AND GEOTECHNICAL ASSESSMENTS

Four previous assessments have been conducted for the Property. Additionally, the remedial investigation of the Seattle DOT Dexter Parcel Site advanced soil borings and constructed monitoring wells at the Property to characterize the extent of the petroleum compounds released at the Seattle DOT Dexter Parcel. Since these data are relevant to the environmental condition of the Property, the Remedial Investigation Report for the Seattle DOT Dexter Parcel Site is included in this discussion.

A general summary of each report, in chronological order, is provided in the following subsections. The reviewer is directed to the source documents for additional details. Tables 1 through 11 summarize analytical results from these previous assessments.

3.1 Hart Crowser Phase I ESA – May 2019

Hart Crowser completed the *Phase I Environmental Site Assessment Report* (ESA) of the Property for Alexandria Real Estate Equities, Inc. on May 23, 2019 (Hart Crowser 2019). This report provides a development history of the Property and a thorough review of historical records and environmental databases for both the Property and nearby properties.

This Phase I ESA describes several recognized environmental concerns (RECs) for the Property as follows:

- A boiler using an unknown fuel reportedly operated at the Property as early as 1928. The potential for the fuel to have been a refined petroleum product and for a historical release(s) to have occurred exists.
- Sanitary Laundry Co. and Sanitary Olympic Laundry reportedly operated at the Property between the 1930s to the 1950s (exact dates unknown). There are no records indicating if dry-cleaner solvents were used during this operation but the potential for a historical release(s) of dry-cleaner liquids (petroleum-based and/or halogenated solvents) exists.
- An automotive fuel station reportedly operated at the Property in the 1940s to 1950s (exact dates unknown). The potential for a historical release(s) of refined petroleum fuel and/or petroleum-based lubricating oil exists.
- Colotyle Corporation reportedly occupied both the on-Property building and the north-adjacent property building between the 1940s and 1950s. At unspecified dates after 1950, Colfantile Products (varnish manufacturer) occupied the Property. The potential for historical release(s) of petroleum-based and organic carbon-based compounds exists.
- The adjacent property to the east (King County Parcels No. 2249000080 and 2249000055) had three former gas stations with USTs. Lead and GRO are reported in soil. Both GRO and DRO are reported in groundwater.
- Historical operations at 705 Mercer Street include Mutual Laundry and an oil and gas structure. These historical operations were deemed a REC due to the potential risk of past releases from laundry cleaners and gas station operations.
- Historical releases from laundry, dry-cleaning, and refined petroleum fuel dispensing operations at 700 Dexter Avenue North (King County Parcel No. 2249000285) have impacted soil, groundwater, and soil vapor. This is the source property for the American Linen

Supply Company Dexter Ave Site. The documented releases at this site include chlorinated solvents and petroleum compounds, which have the potential to impact the Property.

A Phase II ESA was recommended to assess whether on- and off-Property historical uses and releases have impacted the Property.

3.2 Hart Crowser Phase II ESA – May 2019

Hart Crowser completed the *Final Phase II ESA* (Phase II) of the Property in May 2019 (Hart Crowser 2019). The assessment included advancing six hollow-stem auger (HSA) borings (HC-1 through HC-5 and MW-1) to terminal depths ranging from 6 to 50 feet. A total of 25 soil samples were submitted for chemical analysis. A groundwater monitoring well was constructed at HC-4 and carries the same name. Additionally, a reconnaissance groundwater sample was collected from HC-1.

3.2.1 Soil

Soil analytical results were generally compared to their respective MTCA Method A Cleanup Levels (CULs). If not established for a given chemical, MTCA Method B CULs were compared to the analytical results. Of the detected compounds, only GRO exceeded the Method A CUL. This was at boring HC-1 at a depth of 25 feet.

Other compounds and elements were detected, but the concentrations were less than either the Method A or B CUL. These compounds are generally petroleum-related, a potential lab contaminant (e.g., acetone), or naturally occurring (e.g., chromium and lead).

3.2.2 Groundwater

As previously stated, a groundwater monitoring well was constructed at boring HC-4 and carries the same name. This well was developed and a representative groundwater sample collected on April 12, 2019. A reconnaissance groundwater sample was collected from boring HC-1 on April 11, 2019.

Groundwater analytical results were compared to their respective MTCA Method A and B CULs. Of the detected compounds, only GRO exceeded the CUL at boring HC-1.

Other petroleum-related compounds and elements were detected but the concentrations were less than either the MTCA Method A or B CUL.

3.2.3 Soil Vapor

Two sub-slab soil vapor samples (SV-1 and SV-2) were collected beneath the concrete floor of the Property building. Additionally, two crawl-space air samples (CSE-1 and CSE-2) were collected from

between the ground surface and the bottom of the floor of the easternmost portion of the Property building. The crawl space air samples are not soil vapor samples.

Sub-slab soil vapor analytical results were compared to their respective MTCA Method B Screening Levels (SLs). Of the detected compounds, only acrolein and naphthalene exceeded the SLs at both locations.

Crawl-space soil vapor analytical results were compared to their respective MTCA Method B Indoor Air CULs. The following compounds had concentrations that exceeded their Indoor Air CULs:

- 1,3-Butadiene
- Acrolein
- Carbon tetrachloride
- Naphthalene
- Total petroleum hydrocarbons (TPH)

3.3 Hart Crowser Remedial Investigation, Seattle DOT Dexter Parcel Site – February 2022

Hart Crowser completed a *Remedial Investigation Report* (RI Report) for the Seattle DOT Dexter Parcel Site in February 2022 based on data collected from 2019 through 2021. While this remedial investigation was conducted on the Seattle DOT Dexter Parcel Site to characterize the extent of environmental impacts to soil and groundwater, two soil borings were advanced in the northeastern portion of the Property, which is technically part of the Seattle DOT Dexter Parcel Site. Groundwater monitoring wells were constructed once terminal depths were reached (DMW-10S and DMW-11S). Additionally, 11 soil borings were advanced in the alley between the Property and 615 Dexter Avenue North. Six of the 11 boring locations were used to construct groundwater monitoring wells (DMW-9S, DMW-4S, DMW-12S, DMW-13S, DMW-14S, DMW-5IA).

Soil and groundwater samples collected from the remedial investigation borings and wells at the Property and alley are pertinent to the remedial investigation of the Property and are discussed here. Additional data for the Seattle DOT Dexter Parcel Site can be found within the RI Report submitted to Ecology (Hart Crowser 2022).

3.3.1 Soil

Soil samples were collected at borings DMW-10s and DMW-11s at the Property. Samples were collected at intervals of 5 feet (e.g. 5, 10, 15, etc.) to the terminal depth of 55 feet bgs, which corresponds to elevations of 4.4 feet and 6.1 feet above mean sea level (AMSL). Samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), GRO, DRO, ORO, and polychlorinated biphenyls (PCBs). Analytical results indicate only one detection of ethylbenzene at less than the CUL at DMW-11S at approximately 26 feet AMSL. There were no other analytes detected.

Soil samples were collected at borings DMW-4S, DMW-9S, DMW-12S, DMW-13S, DMW-14S, DMW-5IA, DGW-4, GP-5, GP-6, GP-7, and HC-1, which are all within the alley between the Property and 615 Dexter Ave North. Samples were analyzed for different compounds depending on the location. Generally, soil samples collected from the alley were analyzed for BTEX, GRO, DRO, and ORO. Samples collected in the vicinity of the reported former locations of the USTs were also analyzed for volatile organic compounds (VOCs). Several samples were also analyzed for polycyclic aromatic hydrocarbons (PAHs) and metals.

Concentrations of petroleum-related VOCs were detected at multiple locations both on the Property and in the alley. Additionally, ORO and metals (arsenic, chromium, and lead) were also detected. Of the detected compounds, only GRO had a concentration at one location greater than the MTCA Method A CUL. At location HC-1, a GRO concentration of 250 milligrams per kilogram (mg/kg) was reported at approximately 37.3 feet AMSL in 2019.

Based on the 2022 RI Report for the Seattle DOT Dexter Parcel Site, the lone reported contaminant of potential concern (COPC) for soil was GRO.

3.3.2 Groundwater

Groundwater samples were collected from temporary and permanent wells during the remedial investigation at the Seattle DOT Dexter Parcel Site in 2019 through 2021. Collection of groundwater samples directly from soil borings or temporary wells is referred to as reconnaissance samples. While they are useful for determining the placement of permanent groundwater monitoring wells, analytical results of these samples are often inaccurate and/or biased high due to sediment load within the sample. Due to the potential inaccuracies of the reconnaissance groundwater sample results, they should be viewed as qualitative results and not quantitative.

Analytical results reported in the RI Report for the Seattle DOT Dexter Parcel Site indicate detections of petroleum-related compounds in groundwater. Of the reported analytical results, the following compounds exceeded their respective CULs at the locations shown:

- 1,3,5-Trimethylbenzene (HC-1, grab reconnaissance sample from the soil boring in 2019)
- 1,2,4-Trimethylbenzene (HC-1)
- GRO (HC-1)
- DRO (DMW-4S)

The RI Report for the Seattle DOT Dexter Parcel Site indicates the following as COCs: benzene (not located at the Property), GRO, and DRO.

3.4 TRC Subsurface Exploration – 2023

In advance of preparing this RIWP, TRC conducted a subsurface exploration to confirm reported and suspected environmental conditions at the Property in 2023. More specifically, the purpose of this exploration was to assess the following potential conditions:

- Historical operations at the Property released chemicals to the subsurface;
- Historical USTs located within the north-adjacent alley had releases to the subsurface; and
- Further characterize impacts from the release of petroleum compounds from the Seattle DOT Dexter Parcel Site.

Newly installed soil borings, monitoring wells, and soil vapor points are shown on Figure 3. Boring logs are included as Attachment B. The 2023 subsurface exploration included the following:

- Angled soil borings (TASB-1 through TASB-2) were advanced using a track-mounted roto-sonic drilling rig (sonic rig) and were located adjacent to and directed beneath the eastern portion of the Property building. The eastern portion of the Property building was constructed with a crawl space and the floor of the building in this area cannot support the weight of drilling equipment. The purpose of these borings was to collect soil samples from intervals beneath the previously inaccessible portions of the Property building to assess for the presence and concentration of chemicals reportedly used during historical operations at the Property. Additionally, these borings further characterized impacts from the release of petroleum fuels from the Seattle DOT Dexter Parcel Site.

The angled borings were advanced 30 degrees from vertical to depths ranging from 45 to 50 feet bgs, which correlates to approximate elevations of 12.5 to 18.8 feet AMSL.

- Vertical soil borings (TSB-3 through TSB-7) were advanced using the same sonic rig. These borings were advanced in the Property's paved parking area and within the western portion of the building. The floor of the western portion of the building is concrete and was able to support the weight of the sonic rig. The vertical soil borings were advanced to the terminal depth of 45 feet, which correlates to approximate elevations ranging between 17.5 and 21.2 feet AMSL.
- Groundwater monitoring wells were constructed at soil borings TASB-2 (TMW-1), TSB-3 (TMW-2), and TSB-4 (TMW-3). The purpose of these monitoring wells was to provide reliable and repeatable locations to assess shallow groundwater elevations and chemical concentrations at the Property. The rationale for these locations was to locate the monitoring wells where historical operations occurred and/or to further characterize the historical petroleum release from the Seattle DOT Dexter Parcel Site. Screened intervals for each well were placed so that the uppermost portion of the shallow groundwater could be sampled. The total depths of these monitoring wells are approximately 39 feet, which corresponds to

approximate elevations of 21.88, 22.36, and 26.63 at TMW-1, TMW-2, and TMW-3, respectively.

- Soil vapor monitoring points were constructed in soil borings TASB-1 (TSV-1) and TSB-5 (TSV-2). The purpose of the soil vapor monitoring points is to provide reliable and repeatable locations to collect soil vapor samples.

4.0 PHYSICAL SETTING AND KNOWN SUBSURFACE CONDITIONS

The Site is located within the Puget Lowland physiographic setting, which is a broad, relatively lower elevation region occurring between the Cascade Mountain Range to the east and the Olympic Mountain Range to the west. The Puget Lowlands are characterized by glacially formed or modified hills and ridges bisected by alluvial valleys and plains.

More locally, the Site is located on the southeastern flank of Queen Anne Hill in the South Lake Union District to the south of Lake Union and north of downtown Seattle.

4.1 Topography

Locally, the vicinity of the Site generally slopes from west to east and eventually toward Lake Union to the northeast. The area has been altered over the last 120 years by anthropogenic regrades, filling, and development for originally residential and then commercial and industrial structures and enterprises.

Currently, surface elevations at the Property are highest to the northwest (approximately 70 feet AMSL on the NAVD88 vertical datum and lowest along the eastern property boundary (approximately 60 feet AMSL).

4.2 Climate

The Pacific Northwest climate is dominated by air masses originating over the Pacific Ocean to the west. Climate specific to the Puget Sound Lowland is generally characterized by cool, damp, and generally mild weather from autumn, winter, and spring seasons (collectively October through June) with warm and generally dry conditions during the summer (July through September).

The average annual precipitation in Seattle is about 37 inches, mostly falling between October and June. Average monthly high temperatures are approximately 45 degrees Fahrenheit in January (lowest) to approximately 75 degrees in July and August (highest). Average monthly low temperatures range from a low of approximately 35 degrees in January to a high of 55 degrees in July and August. The year-round prevailing wind direction is from the south.

4.3 Surface Water

The Site is located within the Cedar-Sammamish Watershed, which is bound to the north by the southern portions of the City of Everett, to the east by the Cascade Mountain Range, to the south by Seattle, and to the west by the Puget Sound, which is the southeastern-most portion of the Salish Sea. The Cedar-Sammamish Watershed is also known to Ecology as the Water Resource Inventory Area Eight (WRIA 8). Major water bodies within this watershed include the Cedar River, Lake Sammamish and its tributaries (Issaquah Creek, Bear Creek, and Cottage Lake Creek), Sammamish River, Lake Washington, and Lake Union. The closest surface water body to the Property is Lake Union, located approximately 1,110 feet to the northeast.

4.4 Regional Geology

The Site is in the southern portion of the Puget Sound Lowlands region, which is a broad glacial drift plain dissected by a network of multiple north-south trending embayments. The ground surface is generally characterized by a thick accumulation of Quaternary age sediment of glacial and alluvial origin. The shallowest naturally deposited sediments in this area are interlayered units of riverine, terrace, lacustrine, and fan deposits on top of recessional Pleistocene glacial deposits.

The Site is in a region of Seattle between Queen Anne Hill and the Lake Union Depression where extensive anthropogenic excavation and filling occurred between the late 1800s and about 1925. Review of historical documents indicates that the substantial removal of Denny Hill to the southwest and filling of the southern portion of Lake Union resulted in fill deposits up to 25 feet thick in some locations.

Review of geologic characterizations in the vicinity of the Site suggests naturally occurring unconsolidated deposits in the area is more than 2,700 feet total thickness (Vaccaro et al. 1998). Geological units mapped in the vicinity include, from youngest to oldest (Booth et al. 2009):

- Quaternary lacustrine deposits in the immediate vicinity and east of the Site;
- Quaternary Vashon recessional lacustrine and ice contact deposits to the south and southwest;
- Quaternary Vashon till and advance outwash deposits to the west; and
- Quaternary Vashon lacustrine and pre-Vashon deposits to the north.

The Seattle Fault Zone, a seismically active area consisting of multiple faults trending east-west, is located approximately 2 miles south of the Site.

4.5 Regional Hydrogeology

Aquifers in the Puget Sound Lowlands are generally in glacial drift and sporadically and less consistently, within sedimentary residuum and underlying bedrock along the foothills in the eastern portion of the Cedar River-Sammamish Watershed. Since aquifers within sedimentary rock and residuum are not present in the vicinity of the Site, they will not be discussed further here.

Water table, semi-confined, and confined aquifers occur within glacial drift and alluvial deposits within the Puget Sound Lowlands. These deposits and associated aquifers extend more than 1,000 feet bgs. In the more local Puget Sound area, the shallow water table aquifers generally mimic the surface topography with groundwater flowing from topographic highs to topographic lower elevations. Deeper semi-confined and confined aquifers are more influenced by aquifer geometry and discharge locations (Vaccaro et al. 1998).

Shallow aquifers such as those observed at the Site are typically low-yield and are not laterally continuous over large areas. These localized shallow aquifers may be present within anthropogenic fill materials or within more permeable beds layered within the dense glacial till matrix. These saturated interbeds can vary in depth and thickness and when encountered with monitoring wells or piezometers, may provide the appearance of a piezometric surface. Experience within the area of the Site indicates that such units are laterally discontinuous, have low hydraulic permeability and transmissivity, and have a corresponding low yield under pumping. It is not uncommon for such units to yield less than 0.5 gallons per minute (gpm).

4.6 Water Supply Wells

A review of the state of Washington Well Records database suggests that the nearest “water” wells are located along Alaska Way in areas adjacent to Elliott Bay. The six “water” wells were reportedly constructed between 30 to 32 feet bgs and the associated well logs indicate the proposed use is “UIC,” which typically stands for Underground Injection Control. Based on the reported locations, terminal depths, and proposed use, these wells do not appear to be used for potable water and based on the distance from the 601 Dexter Site, it is highly unlikely that there is any hydrogeologic communication between the Site and these wells.

No other potential water supply wells appear to be located less than 1 mile from the Site.

5.0 SUMMARY OF PROPERTY CONDITIONS

Summaries of previously reported Property-specific geology, hydrogeology, and COPCs are presented in Sections 5.1 through 5.3. These summaries were developed from a review of previous assessments and geotechnical exploration reports summarized above.

5.1 Geology

Based on the review of published investigations conducted at and adjacent to the Property, the subsurface lithology consists of silty sand anthropogenic fill varying in depth and thickness from 4 feet to 15 feet.

The fill is underlain by naturally-placed silty sand with varying but minor units of graded sand, silt, sandy silt, and silty gravel. Material density is relatively loose near the ground surface (i.e., fill) and increases

with depth to very dense. The naturally placed deposits are consistent with the glacial, inter-glacial, and post-glacial deposits common to this area of Seattle.

5.2 Hydrogeology

Review of available investigative reports suggests the presence of several shallow discontinuous water-bearing zones in the vicinity of the Site. The shallowest zone of groundwater occurrence appears to occur near the base of the anthropogenic fill material and extends into the less dense and more recent naturally placed glacial deposits. Review of published reports for nearby sites suggests deeper water-bearing zones may be present (PES 2019, Hart Crowser 2019). These saturated zones have been termed Intermediate Zone A and Intermediate Zone B. As noted in the discussions above, shallow water-bearing zones in the area of the Site can be laterally discontinuous and not present over a widely distributed area.

Groundwater elevations in the shallow depth wells range from approximately 24 to 39 feet AMSL and 27 to 34 feet AMSL in the intermediate depth wells (Table 6). Groundwater flow direction for the shallow and intermediate depth wells is generally to the southeast and east as shown on Figures 4 through 7. The inferred groundwater flow direction is consistent with topographic gradient and the flow direction observed in adjacent sites (Hart Crowser 2022).

Observed groundwater elevation at well DMW-4S located in the alley between 601 Dexter Ave N and 615 Dexter Ave N, is higher than other similarly screened wells and represents an anomaly. Potential reasons from this anomaly include proximity to former UST backfill associated with the former fuel station, possible potable water line leaks, possible sewer leaks, and/or naturally occurring heterogeneous soil conditions associated with glacial depositional environments.

5.3 Contaminants of Potential Concern

Analytical data from previous investigations at the Site indicate the presence of the following COPCs within the indicated media:

5.3.1 Soil

The soil analytical results are summarized in Tables 1 through 5. These tables include information from the 2023 remedial investigation activities as well as relevant previous investigations. Sample locations and analytical results are depicted on Figures 8 and 9. Copies of the laboratory analytical reports are provided in Attachment A.

The following is a summary of the analytical results for soil samples collected at the Site:

- GRO was detected in one sample in 2019 at a concentration of 250 mg/kg, exceeding the CUL of 100 mg/kg.
- All other soil samples were either less than laboratory detection limits or less than the respective MTCA CULs for all chemicals analyzed.

5.3.2 Groundwater

Groundwater analytical results are summarized in Tables 7 through 11. These tables include information from all relevant previous investigations. Well locations and relevant results are depicted on Figures 10 through 12. Laboratory reports are included in Attachment A.

The following is a summary of analytical results for groundwater samples collected in 2023:

- Carbon tetrachloride was detected in one sample (DMW-14S) at a concentration of 0.65 micrograms per liter ($\mu\text{g/L}$), exceeding the MTCA Method B CUL in May 2023. This compound was not detected during subsequent sample analysis in July 2023. The source of this detection has not been determined.
- 1,3,5-Trimethylbenzene and 1,2,4-trimethylbenzene were detected in one sample (DMW-4S) at a concentration of 84 $\mu\text{g/L}$ and 130 $\mu\text{g/L}$ respectively, exceeding the MTCA Method B CUL in May 2023. This exceedance is most likely from the former gasoline station located on the 615 Dexter Property to the north as it is limited to the alley and are comingled with other petroleum constituents.
- The carcinogenic PAH Toxic Equivalency Factor (cPAH TEF) at well DMW-11S exceeded the MTCA Method B CUL in May 2023. The source of this detection is attributed to the historical release of petroleum compounds associated with former fuel station operations.
- GRO was detected in three samples at concentrations exceeding the MTCA Method A CUL in May 2023 (TMW-2, DMW-4S, and DMW-11S). These exceedances are most likely from the former gasoline station located on the 615 Dexter Property to the north.
- DRO was detected in three samples at concentrations ranging from 520 to 4,300 $\mu\text{g/L}$, exceeding the MTCA Method A CULs in May 2023. In July 2023, DRO with silica gel cleanup was not detected in one sample, TMW-3, at a concentration exceeding laboratory detection limits. This finding indicates possible interference from naturally occurring organics or degraded diesel concentrations related to the documented petroleum release at the Seattle DOT Dexter Parcel Site.

5.3.3 Soil Vapor

Soil vapor and ambient air analytical results are summarized in Table 12 and shown on Figure 13. Laboratory reports are included in Attachment A. The following is a summary of soil vapor concentrations and the ambient air sample collected in 2023 that are greater than the MTCA SLs:

- Acrolein was detected in both soil vapor and ambient air samples at concentrations ranging from 0.73 to 1 micrograms per cubic meter $\mu\text{g/m}^3$. These concentrations exceed the MTCA Method B Soil Gas Screening Level (SG_{SL}) of 0.3 $\mu\text{g/m}^3$. Previous discussions with Ecology indicate that acrolein may be a laboratory contaminant and the presence in both soil vapor

and ambient samples suggests this may be the case in this circumstance. Additionally, acrolein has been reported in sewer gases at concentrations that exceed the SG_{SL} (Pennell 2013).

- Carbon tetrachloride was detected in both soil vapor and the ambient air sample at concentrations ranging from 30 to 790 $\mu\text{g}/\text{m}^3$, which exceed the SG_{SL} of 14 $\mu\text{g}/\text{m}^3$. This compound was formerly used in fire extinguishers and its presence could be related to the historical fire that occurred on the 615 Dexter Avenue North parcel. Additionally, this compound may be associated with sewer gas, either through poorly vented piping or a subsurface pipeline breach (Pennell 2013). The presence of the compound in ambient air may also suggest a sampling or laboratory error. An additional soil vapor sample should be analyzed to better determine the presence of this compound.
- Chloroform was detected in both soil vapor and the ambient air sample at concentrations ranging from 1.3 $\mu\text{g}/\text{m}^3$ (ambient air) to 23 $\mu\text{g}/\text{m}^3$. Both of the soil vapor sample concentrations exceed the SG_{SL} of 3.6 $\mu\text{g}/\text{m}^3$. Chloroform is commonly present in chlorinated municipal water supply and therefore also commonly present in sewer gases (Pennell 2013).

To be clear, other VOCs were detected in the soil vapor and ambient air samples. None of the other detected compounds were at concentrations that exceeded their respective SG_{SL} s. The presence of the above compounds suggests that either their presence is related to a breached sewer pipeline, laboratory or sampling error, or perhaps a combination of both of these circumstances. The absence of repeatable detections of these compounds in either soil or groundwater samples analyzed from the Site indicate that their presence in soil vapor is not related to the Site.

6.0 PRELIMINARY CONCEPTUAL SITE MODEL

A preliminary Conceptual Site Model (CSM) has been prepared for the Site based on review of previous investigations. The CSM will be updated as additional data from the work described herein has been collected and evaluated.

6.1 Contaminant Sources

Historical operations at the Property and the north-adjacent the Seattle DOT Dexter Parcel Site include the following that have the potential for releases of compounds that can negatively impact human health and the environment: automotive fuel station(s), laundry services, and printing services. Evaluations of analytical data from previous investigations both at the Property and on the north-adjacent property indicate that sources for known impacts at the Property include the historical fueling station formerly located on the north-adjacent parcel.

The soil and groundwater analytical data from those previous investigations establish that historically reported laundry services reported at the Property did not include or involve the use and/or release of chlorinated solvents (i.e., tetrachloroethene).

6.2 Affected Media

The current dataset for the Property and evaluation of data presented for adjacent and nearby sites indicates that media affected at the Site includes soil, soil vapor, and groundwater. There are no indications of sediment or surface water impacts or the realistic potential for such media to be affected in the future.

Petroleum hydrocarbons have been detected in soil and groundwater samples collected in the northeastern portion of the Property. These detections correlate to a source located on the north-adjacent property and are likely related to a release(s) of gasoline and/or diesel from the Seattle DOT Dexter Parcel Site.

Analytical results for soil vapor on the Property indicate the presence of several VOCs. Of these detections, acrolein, carbon tetrachloride, and chloroform concentrations exceed their respective MTCA Method B Screening Levels. Each of these compounds were also detected in a reference ambient air sample that was collected simultaneously. Sampling or laboratory errors may have contributed to these detections.

6.3 Current and Future Land and Groundwater Use

Currently, the Property is predominately covered with pavement and a commercial building. The Property is used as temporary office space for construction-related matters.

Groundwater is not currently used at the Site as a drinking water source but technically remains a potential source in the future. Aquifer testing (i.e., aquifer pumping test) may confirm a low yield (less than 0.5 gpm) or that the groundwater contains high levels of naturally occurring inorganics, either of which would designate that this water is not potable as long as it does not have any hydrological connection to a potable water source per WAC 173-340-720(2).

6.4 Exposure Pathways and Receptors

Completed or potentially completed exposure pathways include the following:

- **Direct-Contact:** There are not currently any exposure pathways at the Site. The Site is fully capped with concrete or asphalt. There is the potential for direct-contact exposure to soil and/or groundwater by construction workers during redevelopment. After redevelopment, there would be no potential for direct-contact exposure to either soil or groundwater.
- **Vapor Intrusion:** Potential vapor intrusion (VI) or inhalation pathways exist at the Property. If soil vapor impacts are confirmed, there is the potential for inhalation of volatile COCs during construction; however, such a potential exposure is mitigated by the fact that the redevelopment site will be open to the atmosphere and atmospheric circulation. If impacts to soil gas are identified at depth that will remain after the completion of development at

concentrations exceeding soil gas screening levels, there could be a potential for future VI exposures and mitigation measures may be necessary.

There are no current or future completed or potentially completed exposure pathways related to ingestion of groundwater, surface water, or sediment at the Property.

7.0 DATA GAPS

Data gaps for affected media are discussed in the following paragraphs.

7.1 Soil

The reported concentrations of GRO appear to be primarily in the northeastern portion of the Property, which correlates to the source being petroleum release(s) from the historical operation of the automotive fueling on the Seattle DOT Dexter Parcel Site. Evaluation of the existing body of data indicates that this has been characterized as shown on Figure 9.

7.2 Groundwater

VOCs have been detected in groundwater. The detected VOCs are common to petroleum fuel releases and correlate to release(s) from the Seattle DOT Dexter Parcel Site. There do not appear to be historical sources for those compounds on the Property.

Evaluation of the existing body of data indicates that these impacts to groundwater are substantially characterized, at least on the Property.

7.3 Soil Vapor

Carbon tetrachloride has been detected sporadically in building crawlspace air, soil vapor, and/or groundwater at concentrations in excess of their respective CULs / screening levels. Other COCs have been detected in soil vapor but accompanying impacts have not been observed in soil or groundwater. The source of soil vapor impacts and the potential for those impacts to affect the redeveloped property are data gaps.

The repeatability of the prior soil vapor results, using higher-quality data collection methods is also a data gap. The potential for soil vapor migration from surrounding or adjacent properties also presents a data gap as it relates to future redevelopment. Collection of high-quality samples from existing monitoring points using appropriate quality control will help to address the uncertainty in prior data.

8.0 REMEDIAL INVESTIGATION

Based on the evaluation of the body of data for the Property and evaluation of the data for the Seattle DOT Dexter Parcel Site, the following data gaps are present:

- Inconsistent and sporadic detectable concentrations of carbon tetrachloride in crawlspace, soil vapor, and groundwater. The source of carbon tetrachloride is also a data gap.
- Potential interference from naturally occurring organics in DRO and ORO concentrations in groundwater.

The following actions will provide information that may close these data gaps:

1. Collect representative soil vapor samples from TSV-1 and TSV-2 for VOCs analysis (Method TO-15).
2. Collect additional groundwater elevation measurements from on-Property and adjacent groundwater monitoring wells located in the north-adjacent alley.
3. Collect representative groundwater samples from wells TWM-1 and DMW-14S for carbon tetrachloride analysis (Method 8260).
4. Collect representative groundwater samples from wells TMW-2, TMW-3, and DMW-4S for GRO, DRO, and ORO analysis (NWTPH-Gx and NWTPH-Dx methods). NWTPH-Dx analysis will be both with and without silica gel cleanup to better determine the presence of potential naturally occurring organics. Additionally, the sample from TMW-3 will also be analyzed for Total Organic Carbon (TOC).
5. Depending on soil vapor and groundwater sample results, additional monitoring well locations may be needed.

The Property is scheduled for redevelopment with a subgrade parking structure. Excavation for the subgrade parking structure will reach depths that will remove petroleum-impacted soil from the Property and it is not anticipated that additional remedial action will be necessary. A conceptual *Interim Remedial Action Plan* was included as an exhibit to the AO.

9.0 BIBLIOGRAPHY

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Tables

Table 1 Soil Analytical Results – Volatile Organic Compounds ^a Remedial Investigation Work Plan 601 Dexter Site 601 Dexter Avenue North, Seattle, Washington																																			
Location	Sample ID	Sample Depth (feet)	Approximate Elevation (AMSL)	Sample Date	1,1,1,2-Tetrachloroethane	Ethylbenzene	Total Xylenes	Styrene	Isopropylbenzene	Bromoform	1,1,2,2-Tetrachloroethane	n-Propylbenzene	Bromobenzene	1,3,5-Trimethylbenzene	2-Chlorotoluene	4-Chlorotoluene	tert-Butylbenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	sec-Butylbenzene	p-Isopropyltoluene	Dichlorobenzene	1,4-Dichlorobenzene	1,2-Dichlorobenzene	1,2-Dibromo-3-chloropropane	1,2,4-Trimethylbenzene	Hexachlorobutadiene	Naphthalene	Trichlorobenzene	Acetone	Iodomethane	Carbon Disulfide	Vinyl Acetate		
MW-1	MW-1-10	10	51.7	4/4/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--
	MW-1-25	25	36.7	4/4/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	MW-1-30	30	31.7	4/4/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
HC-1	HC-1-5	5	57.3	4/11/19	--	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	HC-1-10	10	52.3	4/11/19	--	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	HC-1-12.5	12.5	49.8	4/3/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	HC-1-17.5	17.5	44.8	4/3/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	HC-1-20	20	42.3	4/11/19	--	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	HC-1-25	25	37.3	4/3/19	<0.05	0.70	0.52	<0.05	0.55	<0.05	<0.05	1.20	<0.05	1.60	<0.05	<0.05	<0.05	<0.05	2.40	0.55	0.90	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
HC-2	HC-1-30	30	32.3	4/3/19	<0.05	0.18	0.16	<0.05	0.11	<0.05	<0.05	0.27	<0.05	0.36	<0.05	<0.05	<0.05	<0.05	<0.05	0.80	0.09	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	HC-2-10	10	52.5	4/3/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
HC-3	HC-2-15	15	47.5	4/3/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	HC-3-7.5	7.5	54.9	4/4/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	HC-3-15	15	47.4	4/4/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
HC-4	HC-3-20	20	42.4	4/4/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	HC-3-30	30	32.4	4/4/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	HC-4-15	15	45.0	4/4/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
HC-5	HC-4-35	35	25.0	4/4/19	<0.05	<0.05	0.26	0.16	<0.05	<0.05	0.065	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DGW-4	HC-5-15	15	45.7	4/3/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	DGW-4-5	5	64.9	3/4/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.05	<0.05	--	<0.05	<0.05		
	DGW-4-15	15	54.9	3/4/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.05	<0.05	--	<0.05	<0.05		
	DGW-4-20	20	49.9	3/4/19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05</															

Table 1
Soil Analytical Results – Volatile Organic Compounds^a
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle, Washington

Location	Sample ID	Sample Depth (feet)	Approximate Elevation (AMSL)	Sample Date	2-Butanone	Bromo-chloro-methane	Methyl Isobutyl Ketone	2-Hexanone
MW-1	MW-1-10	10	51.7	4/4/19	--	--	--	--
	MW-1-25	25	36.7	4/4/19	--	--	--	--
	MW-1-30	30	31.7	4/4/19	--	--	--	--
HC-1	HC-1-5	5	57.3	4/11/19	--	--	--	--
	HC-1-10	10	52.3	4/11/19	--	--	--	--
	HC-1-12.5	12.5	49.8	4/3/19	--	--	--	--
	HC-1-17.5	17.5	44.8	4/3/19	--	--	--	--
	HC-1-20	20	42.3	4/11/19	--	--	--	--
	HC-1-25	25	37.3	4/3/19	--	--	--	--
HC-2	HC-1-30	30	32.3	4/3/19	--	--	--	--
	HC-2-10	10	52.5	4/3/19	--	--	--	--
	HC-2-15	15	47.5	4/3/19	--	--	--	--
HC-3	HC-3-7.5	7.5	54.9	4/4/19	--	--	--	--
	HC-3-15	15	47.4	4/4/19	--	--	--	--
	HC-3-20	20	42.4	4/4/19	--	--	--	--
HC-4	HC-3-30	30	32.4	4/4/19	--	--	--	--
	HC-4-15	15	45.0	4/4/19	--	--	--	--
HC-5	HC-4-35	35	25.0	4/4/19	--	--	--	--
	HC-5-15	15	45.7	4/3/19	--	--	--	--
DGW-4	DGW-4-5	5	64.9	3/4/19	--	--	--	--
	DGW-4-15	15	54.9	3/4/19	--	--	--	--
	DGW-4-20	20	49.9	3/4/19	--	--	--	--
	DGW-4-35	35	34.9	3/4/19	--	--	--	--
DMW-4S	DGW-4-50	50	19.9	3/4/19	--	--	--	--
	DMW-4S-5	5	56.6	2/26/20	--	--	--	--
	DMW-4S-10	10	51.6	2/26/20	--	--	--	--
	DMW-4S-15	15	46.6	2/26/20	--	--	--	--
	DMW-4S-20	20	41.6	2/26/20	--	--	--	--
	DMW-4S-25	25	36.6	2/26/20	--	--	--	--
DMW-5IA	DMW-4S-30	30	31.6	2/26/20	--	--	--	--
	DMW-5IA-5	5	64.5	2/28/20	--	--	--	--
	DMW-5IA-10	10	59.5	2/28/20	--	--	--	--
	DMW-5IA-15	15	54.5	2/28/20	--	--	--	--
	DMW-5IA-20	20	49.5	2/28/20	--	--	--	--
	DMW-5IA-25	25	44.5	2/28/20	--	--	--	--
GP5	21417-GP5-1	1	65.2	5/19/17	--	--	--	--
GP6	21417-GP5-14	14	52.2	5/19/17	--	--	--	--
GP7	21417-GP6	18	48.1	5/19/17	--	--	--	--
	21417-GP7-2	2	64.5	5/19/17	--	--	--	--
TASB-1	21417-GP7-13	13	53.5	5/19/17	--	--	--	--
	TASB-1-2	2	60.4	2/21/23	<1	<0.05	<1	<0.05
	TASB-1-10	10	53.4	2/21/23	<1	<0.05	<1	<0.05
	TASB-1-20	20	44.8	2/21/23	<1	<0.05	<1	<0.05
	TASB-1-30	30	36.1	2/21/23	<1	<0.05	<1	<0.05
TASB-2	TASB-2-02	2	59.4	2/21/23	<1	<0.05	<1	<0.05
	TASB-2-11	11	51.6	2/21/23	<1	<0.05	<1	<0.05
	TASB-2-22	22	42.1	2/21/23	<1	<0.05	<1	<0.05
	TASB-2-31	31	34.3	2/21/23	<1	<0.05	<1	<0.05
TSB-3	TSB-3-02	2	60.5	2/21/23	<1	<0.05	<1	<0.05
	TSB-3-10	10	52.5	2/21/23	<1	<0.05	<1	<0.05
	TSB-3-22	22	40.5	2/21/23	<1	<0.05	<1	<0.05
	TSB-3-31	31	31.5	2/21/23	<1	<0.05	<1	<0.05
TSB-4	TSB-4-02	2	64.2	4/4/23	<1 ca	<0.05	<1	<0.05
	TSB-4-10	10	56.2	4/4/23	<1 ca	<0.05	<1	<0.05
	TSB-4-15	15	51.2	4/5/23	<1 ca	<0.05	<1	<0.05
	TSB-4-25	25	41.2	4/5/23	<1 ca	<0.05	<1	<0.05
	TSB-4-35	35	31.2	4/5/23	<1 ca	<0.05	<1	<0.05
TSB-5	TSB-4-45	45	21.2	4/5/23	<1 ca	<0.05	<1	<0.05
	TSB-5-02	2	64.2	4/6/23	<1	<0.05	<1	<0.05
	TSB-5-11	11	55.2	4/6/23	<1	<0.05	<1	<0.05
	TSB-5-21	21	45.2	4/6/23	<1	<0.05	<1	<0.05
	TSB-5-30	30	36.2	4/6/23	<1	<0.05	<1	<0.05
TSB-6	TSB-5-40	40	26.2	4/6/23	<1	<0.05	<1	<0.05
	TSB-6-02	2	64.2	4/6/23	<1	<0.05	<1	<0.05
	TSB-6-10	10	56.2	4/6/23	<1	<0.05	<1	<0.05
	TSB-6-21	21	45.2	4/6/23	<1	<0.05	<1	<0.05
	TSB-6-30	30	36.2	4/6/23	<1	<0.05	<1	<0.05
TSB-7	TSB-6-40	40	26.2	4/7/23	<1	<0.05	<1	<0.05
	TSB-7-02	2	64.2	4/7/23	<1	<0.05	<1	<0.05
	TSB-7-10	10	56.2	4/7/23	<1	<0.05	<1	<0.05
	TSB-7-20	20	46.2	4/7/23	<1	<0.05	<1	<0.05
	TSB-7-30	30	36.2	4/7/23	<1	<0.05	<1	<0.05
	TSB-7-40	40	26.2	4/10/23	<1	<0.05	<1	<0.05
MTCA Method A or B Soil Cleanup Levels					48,000 ^b	NVE	6,400 ^b	400 ^b

Notes:
All results presented in milligrams per kilogram (mg/kg).
Soil data collected prior to 2023 were summarized from the February 3, 2022, Remedial Investigation, 615 Dexter Avenue North, by Hart Crowser.
Bold Bold result exceeds the laboratory detection limit.
-- Sample was not analyzed for this compound.
< Result less than the laboratory detection limit.
a Analyzed by EPA Method 8260D.
b Model Toxics Control Act (MTCA) Method B soil cleanup level from Cleanup Levels and Risk Calculations (CLARC) spreadsheet. Where cleanup levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.
c Model Toxics Control Act (MTCA) Method A Soil Cleanup Level for Unrestricted Land Uses from Table 740-1 of Washington Administrative Code Chapter 170-340-900, August 2023.
NVE No value established in CLARC.
AMSL Feet above Mean Sea Level referenced to the North American Vertical Datum of 1988 (NAVD88).

Table 2 Soil Analytical Results – Total Petroleum Hydrocarbons and BTEX Remedial Investigation Work Plan 601 Dexter Site 601 Dexter Avenue North, Seattle, Washington																
Sample Location	Sample ID	Sample Depth (feet)	Approximate Elevation (AMSL)	Sample Date	HCID ^a			GRO ^b	Mineral Spirits / Stoddard ^b	Kerosene / Jet Fuel ^c	DRO ^c	ORO ^c	BTEX ^d			
					GRO	DRO	ORO						Benzene	Toluene	Ethyl-benzene	Xylenes
MW-1	MW-1-10	10	51.7	4/4/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.020	<0.05	<0.05	<0.05
	MW-1-25	25	36.7	4/4/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.020	<0.05	<0.05	<0.05
HC-1 (North-Adjacent Property)	HC-1-5	5	57.3	4/3/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
	HC-1-10	10	52.3	4/3/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
	HC-1-12.5	12.5	49.8	4/3/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
	HC-1-17.5	17.5	44.8	4/3/19	--	--	--	--	--	--	--	--	<0.02	<0.05	<0.05	<0.05
	HC-1-20	20	42.3	4/3/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
	HC-1-25	25	37.3	4/3/19	--	--	--	250	<5.0	<20	<20	<50	<0.02	<0.05	0.84	0.62
	HC-1-30	30	32.3	4/3/19	--	--	--	25	<5.0	<20	<20	<50	<0.02	<0.05	0.22	0.19
HC-2	HC-2-5	5	57.5	4/3/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
	HC-2-10	10	52.5	4/3/19	--	--	--	--	--	--	--	--	<0.02	<0.05	<0.05	<0.05
	HC-2-15	15	47.5	4/3/19	--	--	--	--	--	--	--	--	<0.02	<0.05	<0.05	<0.05
HC-3	HC-3-7.5	7.5	54.9	4/4/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
	HC-3-15	15	47.4	4/4/19	--	--	--	--	--	--	--	--	<0.02	<0.05	<0.05	<0.05
	HC-3-20	20	42.4	4/4/19	--	--	--	--	--	--	--	--	<0.02	<0.05	<0.05	<0.05
	HC-3-30	30	32.4	4/4/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
	HC-3-30 dup	30	32.4	4/4/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
HC-4	HC-4-10	10	50.0	4/4/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
	HC-4-15	15	45.0	4/4/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
	HC-4-35	35	25.0	4/4/19	--	--	--	8.0	<5.0	<20	<20	<50	<0.02	<0.05	0.31	0.19
HC-5	HC-5-15	15	45.7	4/3/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
DGW-4	DGW-4-5	5	64.9	3/4/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
	DGW-4-15	15	54.9	3/4/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
	DGW-4-20	20	49.9	3/4/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
	DGW-4-35	35	34.9	3/4/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
	DGW-4-50	50	19.9	3/4/19	--	--	--	<5.0	<5.0	<20	<20	<50	<0.02	<0.05	<0.05	<0.05
DMW-4S	DMW-4S-5	5	56.6	2/26/20	--	--	--	<5.0	--	<50	<50	<250	<0.02	<0.02	<0.02	<0.01
	DMW-4S-10	10	51.6	2/26/20	--	--	--	<5.0	--	<50	<50	<250	<0.02	<0.02	<0.02	<0.01
	DMW-4S-15	15	46.6	2/26/20	--	--	--	<5.0	--	<50	<50	<250	<0.02	<0.02	<0.02	<0.01
	DMW-4S-20	20	41.6	2/26/20	--	--	--	<5.0	--	<50	<50	<250	<0.02	<0.02	<0.02	<0.01
	DMW-4S-25	25	36.6	2/26/20	--	--	--	35	--	<50	<50	<250	<0.02	0.046	<0.02	<0.01
	DMW-4S-30	30	31.6	2/26/20	--	--	--	<5.0	--	<50	<50	<250	<0.02	<0.02	0.13	<0.01
DMW-9S	DMW-9S-5	5	53.9	10/27/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-9S-10	10	48.9	10/27/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-9S-15	15	43.9	10/27/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-9S-20	20	38.9	10/27/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-9S-25	25	33.9	10/27/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-9S-30	30	28.9	10/27/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
DMW-10S	DMW-10S-5	5	54.4	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-10S-10	10	49.4	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-10S-15	15	44.4	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-10S-20	20	39.4	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-10S-25	25	34.4	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-10S-30	30	29.4	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-10S-35	35	24.4	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-10S-40	40	19.4	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-10S-45	45	14.4	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-10S-50	50	9.4	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-10S-55	55	4.4	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
DMW-11S	DMW-11S-5	5	56.1	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-11S-10	10	51.1	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-11S-15	15	46.1	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-11S-20	20	41.1	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-11S-25	25	36.1	10/19/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-11S-30	30	31.1	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-11S-35	35	26.1	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	0.026	<0.06
	DMW-11S-40	40	21.1	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-11S-45	45	16.1	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-11S-50	50	11.1	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-11S-55	55	6.1	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
DMW-12S	DMW-12S-5	5	60.9	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-12S-10	10	55.9	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-12S-15	15	50.9	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-12S-20	20	45.9	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-12S-25	25	40.9	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-12S-30	30	35.9	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-12S-35	35	30.9	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-12S-40	40	25.9	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	0.025	<0.02	<0.06
	DMW-12S-45	45	20.9	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-12S-50	50	15.9	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-12S-55	55	10.9	10/20/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
DMW-13S	DMW-13S-10	10	56.2	10/23/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-13S-15	15	51.2	10/23/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-13S-20	20	46.2	10/23/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<0.06
	DMW-13S-25	25	41.2	10/23/20	--	--	--	<5.0	--	--	<50	<250	<0.02	<0.02	<0.02	<

Table 2
Soil Analytical Results – Total Petroleum Hydrocarbons and BTEX
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle, Washington

Sample Location	Sample ID	Sample Depth (feet)	Approximate Elevation (AMSL)	Sample Date	HCID ^a			GRO ^b	Mineral Spirits / Stoddard ^b	Kerosene / Jet Fuel ^c	DRO ^c	ORO ^c	BTEX ^d			
					GRO	DRO	ORO						Benzene	Toluene	Ethylbenzene	Xylenes
TASB-2	TASB-2:02	2	59.4	2/21/23	<20	<50	<250	--	--	--	--	--	<0.03	<0.05	<0.05	<0.15
	TASB-2:11	11	51.6	2/21/23	<20	<50	<250	--	--	--	--	--	<0.03	<0.05	<0.05	<0.15
	TASB-2:22	22	42.1	2/21/23	<20	<50	<250	--	--	--	--	--	<0.03	<0.05	<0.05	<0.15
	TASB-2:31	31	34.3	2/21/23	<20	<50	<250	--	--	--	--	--	<0.03	<0.05	<0.05	<0.15
TSB-3	TASB-2:39	39	27.3	2/21/23	<20	<50	<250	--	--	--	--	--	--	--	--	--
	TSB-3:02	2	60.5	2/21/23	<20	<50	<250	--	--	--	--	--	<0.03	<0.05	<0.05	<0.15
	TSB-3:10	10	52.5	2/21/23	<20	<50	<250	--	--	--	--	--	<0.03	<0.05	<0.05	<0.15
	TSB-3:22	22	40.5	2/21/23	<20	<50	<250	--	--	--	--	--	<0.03	<0.05	<0.05	<0.15
	TSB-3:31	31	31.5	2/21/23	<20	<50	<250	--	--	--	--	--	<0.03	<0.05	<0.05	<0.15
	TSB-3:38	38	24.5	2/21/23	<20	<50	<250	--	--	--	--	--	--	--	--	--
TSB-4	TSB-3:45	45	17.5	2/21/23	<20	<50	<250	--	--	--	--	--	--	--	--	--
	TSB-4:02	2	64.2	4/4/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-4:10	10	56.2	4/4/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-4:15	15	51.2	4/5/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-4:25	25	41.2	4/5/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-4:35	35	31.2	4/5/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
TSB-5	TSB-4:45	45	21.2	4/5/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-5:02	2	64.2	4/6/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-5:11	11	55.2	4/6/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-5:21	21	45.2	4/6/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-5:30	30	36.2	4/6/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
TSB-6	TSB-5:40	40	26.2	4/6/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-6:02	2	64.2	4/6/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-6:10	10	56.2	4/6/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-6:21	21	45.2	4/6/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
TSB-7	TSB-6:30	30	36.2	4/6/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-7:02	2	64.2	4/7/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-7:10	10	56.2	4/7/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-7:20	20	46.2	4/7/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-7:30	30	36.2	4/7/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
	TSB-7:40	40	26.2	4/10/23	<20	<50	<250	--	--	--	--	--	<0.001	<0.001	<0.001	<0.003
MTCA Method A Soil Cleanup Level for Unrestricted Land Uses ^e					NA			100 ^f	100 ^e	2,000	2,000	2,000	0.03	7	6	9

Notes:
All results presented in milligrams per kilogram (mg/kg).
Soil data collected prior to 2023 were summarized from the February 3, 2022, Remedial Investigation, 615 Dexter Avenue North, by Hart Crowser.
Bold Bold result exceeds the laboratory detection limit.
 Shaded result exceeds the cleanup level.
-- Sample was not analyzed for this compound.
< Result less than the laboratory detection limit.
a Analyzed by NWTPH-HCID.
b Analyzed by NWTPH-Gx.
c Analyzed by NWTPH-Dx.
d Analyzed by EPA Method 8021B or 8260 Series.
e Model Toxics Control Act (MTCA) Method A Soil Cleanup Level for Unrestricted Land Uses from Table 740-1 of Washington Administrative Code Chapter 170-340-900, August 2023.
f MTCA Method A Soil Cleanup Level is 30 mg/kg when benzene is present and 100 mg/kg when benzene is not detected. Higher cleanup level used due to weathered gasoline at site, with no benzene.
AMSL Feet above Mean Sea Level referenced to the North American Vertical Datum of 1988 (NAVD88).
NA Not applicable.

Compounds:
BTEX Benzene, toluene, ethylbenzene, and total xylenes
GRO Gasoline-range organics
DRO Diesel-range organics
ORO Oil-range organics

Table 3
Soil Analytical Results – Metals^a
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle, Washington

Location	Sample ID	Sample Depth (feet)	Approximate Elevation (AMSL)	Sample Date	Total Arsenic ^a	Total Cadmium ^a	Total Chromium ^a	Total Lead ^a	Total Mercury ^b
HC-1	HC-1-7.5	7.5	54.8	4/3/19	<1.0	<1.0	1.0	<1.0	<0.5
	HC-1-15	15	47.3	4/3/19	<1.0	<1.0	<1.0	<1.0	<0.5
	HC-1-20	20	42.3	4/3/19	<1.0	<1.0	<1.0	<1.0	<0.5
	HC-1-25	25	37.3	4/3/19	--	--	--	1.20	--
	HC-1-25 Dup	25	37.3	4/3/19	--	--	--	1.10	--
	HC-1-30	30	32.3	4/3/19	<1.0	<1.0	<1.0	<1.0	<0.5
HC-3	HC-3-12.5	12.5	49.9	4/4/19	<1.0	<1.0	<1.0	<1.0	<0.5
	HC-3-12.5 Dup	12.5	49.9	4/4/19	<1.0	<1.0	<1.0	<1.0	<0.5
HC-4	HC-4-15	15	45.0	4/4/19	<1.0	<1.0	<1.0	<1.0	<0.5
HC-5	HC-5-15	15	45.7	4/3/19	<1.0	<1.0	<1.0	<1.0	<0.5
DMW-4S	DMW-4S-5	5	56.6	2/26/20	2	<1	30	10	<1.0
	DMW-4S-10	10	51.6	2/26/20	2	<1	20	2	<1.0
	DMW-4S-15	15	46.6	2/26/20	1	<1	20	2	<1.0
	DMW-4S-20	20	41.6	2/26/20	1	<1	14	1	<1.0
	DMW-4S-25	25	36.6	2/26/20	1	<1	18	1	<1.0
	DMW-4S-30	30	31.6	2/26/20	1	<1	13	1	<1.0
DMW-5IA	DMW-5IA-5	5	64.5	2/28/20	2	<1	16	2	<1.0
	DMW-5IA-10	10	59.5	2/28/20	3	<1	21	3	<1.0
	DMW-5IA-15	15	54.5	2/28/20	2	<1	12	1	<1.0
	DMW-5IA-20	20	49.5	2/28/20	2	<1	19	1	<1.0
	DMW-5IA-25	25	44.5	2/28/20	1	<1	12	1	<1.0
GP5	21417-GP5-1	1	65.2	5/19/17	5	<0.178	39	21	<0.273
MTCA Method A Soil Cleanup Levels					20^c	2^c	19 Cr(VI) 2,000 Cr(III)^d	250^c	2^c

Notes:

All results presented in milligrams per kilogram (mg/kg).

Soil data collected prior to 2023 were summarized from the February 3, 2022, Remedial Investigation, 615 Dexter Avenue North, by Hart Crowser.

Bold Bold result exceeds the laboratory detection limit.

-- Sample was not analyzed for this compound.

< Result less than the laboratory detection limit.

a Analyzed by EPA Method 7010.

b Analyzed by EPA Method 7471.

c Model Toxics Control Act (MTCA) Method A Soil Cleanup Level for Unrestricted Land Uses from Table 740-1 of Washington Administrative Code Chapter 170-340-900, August 2023.

d MTCA Method A Soil Cleanup Level from Cleanup Levels and Risk Calculations (CLARC) spreadsheet. Chromium values are not speciated but lower cleanup level is based on site history.

AMSL Feet above Mean Sea Level referenced to the North American Vertical Datum of 1988 (NAVD88).

Compounds:

Cr(VI) Hexavalent chromium

Cr(III) Trivalent chromium

Table 4 Soil Analytical Results – Polychlorinated Biphenyls Remedial Investigation Work Plan 601 Dexter Site 601 Dexter Avenue North, Seattle, Washington													
Location	Sample ID	Sample Depth (feet)	Approximate Elevation (AMSL)	Sample Date	Polychlorinated Biphenyls (PCBs)								
					Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268
DMW-10S	DMW-10S-5	5	54.4	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-10S-10	10	49.4	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-10S-15	15	44.4	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-10S-20	20	39.4	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-10S-25	25	34.4	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-10S-30	30	29.4	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-10S-35	35	24.4	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-10S-40	40	19.4	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-10S-45	45	14.4	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-10S-50	50	9.4	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-10S-55	55	4.4	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
DMW-11S	DMW-11S-5	5	56.1	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-11S-10	10	51.1	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-11S-15	15	46.1	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-11S-20	20	41.1	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-11S-25	25	36.1	10/19/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-11S-30	30	31.1	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-11S-35	35	26.1	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-11S-40	40	21.1	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-11S-45	45	16.1	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-11S-50	50	11.1	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-11S-55	55	6.1	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
DMW-12S	DMW-12S-5	5	60.9	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-12S-10	10	55.9	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-12S-15	15	50.9	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-12S-20	20	45.9	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-12S-25	25	40.9	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-12S-30	30	35.9	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-12S-35	35	30.9	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-12S-40	40	25.9	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-12S-45	45	20.9	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-12S-50	50	15.9	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-12S-55	55	10.9	10/20/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
DMW-13S	DMW-13S-10	10	56.2	10/23/20	<0.02	<0.02	<0.02	<0.02	0.024	<0.02	<0.02	<0.02	<0.02
	DMW-13S-15	15	51.2	10/23/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-13S-20	20	46.2	10/23/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-13S-25	25	41.2	10/23/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-13S-30	30	36.2	10/23/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
DMW-13S	DMW-13S-35	35	31.2	10/23/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-13S-40	40	26.2	10/23/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-13S-45	45	21.2	10/23/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-13S-50	50	16.2	10/23/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
DMW-14S	DMW-14S-10	10	61.2	10/28/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-14S-15	15	56.2	10/28/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-14S-20	20	51.2	10/28/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-14S-25	25	46.2	10/28/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-14S-30	30	41.2	10/28/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-14S-35	35	36.2	10/28/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-14S-40	40	31.2	10/28/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-14S-45	45	26.2	10/28/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	DMW-14S-50	50	21.2	10/28/20	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
HC1-30	HC1-30	30	32.3	4/3/19	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MTCA Method A Soil Cleanup Level for Unrestricted Land Uses^b					1								

Notes:

All results presented in milligrams per kilogram (mg/kg).

Soil data collected prior to 2023 were summarized from the February 3, 2022, Remedial Investigation, 615 Dexter Avenue North, by Hart Crowser.

Bold

Bold result exceeds the laboratory detection limit.

<

Result less than the laboratory detection limit.

a

Analyzed by EPA Method 8082.

b

Model Toxics Control Act (MTCA) Method A Soil Cleanup Level for Unrestricted Land Uses from Table 740-1 of Washington Administrative Code Chapter 170-340-900, August 2023.

AMSL

Feet above Mean Sea Level referenced to the North American Vertical Datum of 1988 (NAVD88).

Table 5
Soil Analytical Results – Polycyclic Aromatic Hydrocarbons^a
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle Washington

Sample Location	Sample ID	Sample Depth (feet)	Approximate Elevation (AMSL)	Sample Date	Semivolatile Organic Compounds ^a											Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) ^a								TEF-Adjusted Total cPAHs
					Naphthalene	1-Methyl Naphthalene	2-Methyl Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(ghi) perylene	Benzo(a) pyrene	Benzo(a) anthracene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene	Dibenzo (ah) nthalene	Indeno (1,2,3-cd) pyrene		
HC1	HC1-10	10	52.3	4/3/19	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	ND	
	HC1-20	20	42.3	4/3/19	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	ND	
HC3	HC3-12.5	12.5	49.9	4/4/19	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	ND	
HC4	HC4-15	15	45.0	4/4/19	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	ND	
GP5	21417-GP5-1	1	65.2	5/19/17	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	--	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	ND	
MTCA Method A or B Soil Cleanup Levels					5 ^b	34 ^b	320 ^b	NVE	4,800 ^c	3,200 ^c	NVE	24,000 ^c	3,200 ^c	2,400 ^c	NVE	See Cleanup Level for TEF-Adjusted Total cPAHs								0.1 ^b

Notes:
All results presented in milligrams per kilogram (mg/kg).
Soil data collected prior to 2023 were summarized from the February 3, 2022, Remedial Investigation, 615 Dexter Avenue North, by Hart Crowser.
-- Sample was not analyzed for this compound.
< Result less than the laboratory detection limit.
a Analyzed by EPA Method SW8270 SIM.
b Model Toxics Control Act (MTCA) Method A Soil Cleanup Level for Unrestricted Land Uses from Table 740-1 of Washington Administrative Code Chapter 170-340-900, August 2023.
c Model Toxics Control Act (MTCA) Method B soil cleanup level from Cleanup Levels and Risk Calculations (CLARC) spreadsheet. Where cleanup levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.
AMSL Feet above Mean Sea Level referenced to the North American Vertical Datum of 1988 (NAVD88).
ND Not detected.
NVE No value established.

Table 6
Groundwater Elevations
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle, Washington

Location	Northing ^a	Easting ^a	Top of Casing Elevation (AMSL)	Total Depth of Well (feet)	Measurement Date	Depth to Water (feet)	Elevation of Static Water (AMSL)
TMW-1	231569.79	1268237.16	60.54	38.66	5/2/2023	36.35	29.06
					6/15/2023	36.84	28.64
					7/17/2023	37.29	28.25
TMW-2	231599.61	1268199.23	62.25	39.89	5/2/2023	29.41	32.84
					6/15/2023	30.15	32.10
					7/17/2023	30.56	31.69
TMW-3	231537.80	1268088.86	65.93	39.30	5/2/2023	35.59	30.34
					6/15/2023	36.34	29.59
					7/17/2023	36.85	29.08
HC-4	231577.79	1268255.35	59.70	49.68	5/2/2023	32.57	27.13
					6/15/2023	33.16	26.54
					7/17/2023	33.48	26.22
DMW-4S	231624.69	1268253.86	61.41	32.99	5/2/2023	21.68	39.73
					6/15/2023	23.69	37.72
					7/17/2023	24.51	36.90
DMW-10S	231589.20	1268260.63	59.11	54.15	5/2/2023	32.26	26.85
					6/15/2023	32.80	26.31
					7/17/2023	33.06	26.05
DMW-11S	231569.23	1268238.62	56.94	50.11	5/2/2023	31.68	25.26
					6/15/2023	32.57	24.37
					7/17/2023	32.95	23.99
DMW-12S	231633.29	1268169.77	65.53	50.11	5/2/2023	31.88	33.65
					6/15/2023	33.68	31.85
					7/17/2023	34.44	31.09
DMW-13S	231631.70	1268126.15	65.89	48.42	5/2/2023	35.40	30.49
					6/15/2023	35.85	30.04
					7/17/2023	36.28	29.61
DMW-14S	231628.14	1268064.05	71.02	50.31	5/2/2023	40.27	30.75
					6/15/2023	40.82	30.20
					7/17/2023	41.29	29.73

Notes:

a Referenced to the North American Datum of 1983 (NAD83), Washington State Plane Coordinates, North 4601.

AMSL Feet above Mean Sea Level referenced to the North American Vertical Datum of 1988 (NAVD88).

Table 7
Groundwater Analytical Results – Volatile Organic Compounds^a
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle Washington

Sample ID	Sample Date	Dichlorodi-fluoro-methane	Chloro-methane	Vinyl Chloride	Bromo-methane	Acetone	Trichloro-fluoro-methane	Chloro-ethane	1,1-Dichloro-ethene	Hexane	Methylene Chloride	trans-1,2-Dichloro-ethene	Methyl t-Butyl Ether	1,1-Dichloro-ethane	2,2-Dichloro-propane	cis-1,2-Dichloro-ethene	Chloro-form
HC-1	04/03/19	<1.0	<1.0	<0.2*	<1.0	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
HC-4	04/18/19	<1.0	<1.0	<0.2*	<1.0	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
TMW-1	05/04/23	<1	<10	<0.02	<5	<50 ca	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1
TMW-2	05/03/23	<1	<10	<0.02	<5	<50	<1	<1	<1	18	<5	<1	<1	<1	<1	<1	<1
TWM-2 DUPLICATE	05/03/23	<1	<10	<0.02	<5	<50	<1	<1	<1	16	<5	<1	<1	<1	<1	<1	<1
TMW-3	05/03/23	<1	<10	<0.02	<5	<50	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1
DMW-4S	05/03/23	<1	<10	<0.02	<5	<50 ca	<1	<1	<1	23	<5	<1	<1	<1	<1	<1	<1
DMW-9S	11/02/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DMW-10S	11/02/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/03/23	<1	<10	<0.02	<5	<50	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1
DMW-11S	11/02/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/03/23	<1	<10	<0.02	<5	<50	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1
DMW-12S	11/02/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/04/23	<1	<10	<0.02	<5	<50 ca	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1
DMW-13S	11/03/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/04/23	<1	<10	<0.02	<5	<50 ca	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1
DMW-14S	11/03/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/04/23	<1	<10	<0.02	<5	<50 ca	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1
	7/17/23	<1	<10	<0.02	<5 k	<50	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1
MTCA Method A or B Groundwater Cleanup Levels		1,600 ^b	NVE	0.2 ^c	11 ^b	7,200 ^b	2,400 ^b	NVE	400 ^b	480 ^b	5 ^c	160 ^b	20 ^b	1,600 ^b	NVE	16 ^b	1.4 ^b

Notes:
All results presented in micrograms per liter (µg/L).
Groundwater data collected prior to 2023 were summarized from the February 3, 2022, Remedial Investigation, 615 Dexter Avenue North, by Hart Crowser.

Bold Bold result exceeds the laboratory detection limit.
 Shaded result exceeds the cleanup level.
-- Sample was not analyzed for this compound.
< Result less than the laboratory detection limit.
a Analyzed by EPA Method 8260.
b Model Toxics Control Act (MTCA) Method B Groundwater Cleanup Levels from Cleanup Levels and Risk Calculations (CLARC) spreadsheet. Where cleanup levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.
c MTCA Method A Cleanup Levels for Groundwater, Table 720-1, Washington Administrative Code (WAC) 173-340-900.
NVE No value established.
* Instrument detection limits.

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

Table 7
Groundwater Analytical Results – Volatile Organic Compounds^a
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle Washington

Sample ID	Sample Date	1,1,1-Trichloro-ethane	1,1-Dichloro-propene	Carbon Tetra-chloride	1,2-Dichloro-ethane	Benzene	Trichloro-ethene	1,2-Dichloro-propane	Bromodi-chloro-methane	4-Methyl-2-pentanone	Dibromo-methane	cis-1-3-Dichloro-propene	Toluene	trans-1-3-Dichloro-propene	1,1,2-Trichloro-ethane	2-Hexanone	1,3-Dichloro-propane
HC-1	04/03/19	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0
HC-4	04/18/19	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0
TMW-1	05/04/23	<1	<1	<0.5	<0.2	<0.35	<0.5	<1	<0.5	<10	<1	<0.4	<1	<0.4	<0.5	<10	<1
TMW-2	05/03/23	<1	<1	<0.5	<0.2	1.2	<0.5	<1	<0.5	<10	<1	<0.4	<1	<0.4	<0.5	<10	<1
TWM-2 DUPLICATE	05/03/23	<1	<1	<0.5	<0.2	1.2	<0.5	<1	<0.5	<10	<1	<0.4	<1	<0.4	<0.5	<10	<1
TMW-3	05/03/23	<1	<1	<0.5	<0.2	<0.35	<0.5	<1	<0.5	<10	<1	<0.4	<1	<0.4	<0.5	<10	<1
DMW-4S	05/03/23	<1	<1	<0.5	<0.2	<0.35	<0.5	<1	<0.5	<10	<1	<0.4	1.7	<0.4	<0.5	<10	<1
DMW-9S	11/02/20	--	--	--	--	<1	--	--	--	--	--	--	<1	--	--	--	--
DMW-10S	11/02/20	--	--	--	--	1.5	--	--	--	--	--	--	1.2	--	--	--	--
	05/03/23	<1	<1	<0.5	<0.2	0.78	<0.5	<1	<0.5	<10	<1	<0.4	<1	<0.4	<0.5	<10	<1
DMW-11S	11/02/20	--	--	--	--	1.2	--	--	--	--	--	--	<1	--	--	--	--
	05/03/23	<1	<1	<0.5	<0.2	1.4	<0.5	<1	<0.5	<10	<1	<0.4	<1	<0.4	<0.5	<10	<1
DMW-12S	11/02/20	--	--	--	--	<1	--	--	--	--	--	--	<1	--	--	--	--
	05/04/23	<1	<1	<0.5	<0.2	<0.35	<0.5	<1	<0.5	<10	<1	<0.4	<1	<0.4	<0.5	<10	<1
DMW-13S	11/03/20	--	--	--	--	<1	--	--	--	--	--	--	<1	--	--	--	--
	05/04/23	<1	<1	<0.5	<0.2	<0.35	<0.5	<1	<0.5	<10	<1	<0.4	<1	<0.4	<0.5	<10	<1
DMW-14S	11/03/20	--	--	--	--	<1	--	--	--	--	--	--	<1	--	--	--	--
	05/04/23	<1	<1	0.65	<0.2	<0.35	<0.5	<1	<0.5	<10	<1	<0.4	<1	<0.4	<0.5	<10	<1
	7/17/23	<1	<1	<0.5	<0.2	<0.35	<0.5	<1	<0.5	<10	<1	<0.4	<1	<0.4	<0.5	<10	<1
MTCA Method A or B Groundwater Cleanup Levels		200 ^c	NVE	0.63 ^b	5 ^c	5 ^c	5 ^c	1.2 ^b	0.71 ^b	640 ^b	80 ^b	NVE	1,000 ^c	NVE	0.77 ^b	40 ^b	0.44 ^b

Notes:
All results presented in micrograms per liter (µg/L).
Groundwater data collected prior to 2023 were summarized from the February 3, 2022, Remedial Investigation, 615 Dexter Avenue North, by Hart Crowser.
Bold Bold result exceeds the laboratory detection limit.
 Shaded result exceeds the cleanup level.
-- Sample was not analyzed for this compound.
< Result less than the laboratory detection limit.
a Analyzed by EPA Method 8260.
b Model Toxics Control Act (MTCA) Method B Groundwater Cleanup Levels from Cleanup Levels and Risk Calculations (CLARC) spreadsheet. Where cleanup levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.
c MTCA Method A Cleanup Levels for Groundwater, Table 720-1, Washington Administrative Code (WAC) 173-340-900.
NVE No value established.
* Instrument detection limits.

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

Table 7
Groundwater Analytical Results – Volatile Organic Compounds^a
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle Washington

Sample ID	Sample Date	Tetrachlor-oethene	Dibromo-chloro-methane	1,2-Dibromo-ethane	Chloro-benzene	1,1,1,2-Tetrachlor-oethane	Ethyl-benzene	Total Xylenes	Styrene	Isopropyl-benzene	Bromo-form	1,1,2,2-Tetrachlor-oethane	n-Propyl-benzene	Bromo-benzene	1,3,5-Trimethy-lbenzene	2-Chloro-toluene	4-Chloro-toluene
HC-1	04/03/19	<1.0	<1.0	<0.01*	<1.0	<1.0	25	11	<1.0	37	<1.0	<1.0	51	<1.0	81	<1.0	<1.0
HC-4	04/18/19	<1.0	<1.0	<0.01*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TMW-1	05/04/23	<1	<1	<1	<1	<1	<1	<3	<1	<1	<5	<0.2	<1	<1	<1	<1	<1
TMW-2	05/03/23	<1	<1	<1	<1	<1	7.6	2	<1	22	<5	<0.2	4.4	<1	16	<1	<1
TWM-2 DUPLICATE	05/03/23	<1	<1	<1	<1	<1	7.4	<3	<1	19	<5	<0.2	4.6	<1	16	<1	<1
TMW-3	05/03/23	<1	<1	<1	<1	<1	<1	<3	<1	<1	<5	<0.2	<1	<1	<1	<1	<1
DMW-4S	05/03/23	<1	<1	<1	<1	<1	64	27	<1	40	<5	<0.2	51	<1	84	<1	<1
DMW-9S	11/02/20	--	--	--	--	--	<1	<3	--	--	--	--	--	--	--	--	--
DMW-10S	11/02/20	--	--	--	--	--	34	21	--	--	--	--	--	--	--	--	--
	05/03/23	<1	<1	<1	<1	<1	19	9.1	<1	4.6	<5	<0.2	3.3	<1	6.2	<1	<1
DMW-11S	11/02/20	--	--	--	--	--	7.9	6.3	--	--	--	--	--	--	--	--	--
	05/03/23	<1	<1	<1	<1	<1	35	19.6	<1	11	<5	<0.2	9.7	<1	18	<1	<1
DMW-12S	11/02/20	--	--	--	--	--	<1	<3	--	--	--	--	--	--	--	--	--
	05/04/23	<1	<1	<1	<1	<1	<1	<3	<1	<1	<5	<0.2	<1	<1	<1	<1	<1
DMW-13S	11/03/20	--	--	--	--	--	<1	<3	--	--	--	--	--	--	--	--	--
	05/04/23	<1	<1	<1	<1	<1	<1	<3	<1	<1	<5	<0.2	<1	<1	<1	<1	<1
DMW-14S	11/03/20	--	--	--	--	--	<1	<3	--	--	--	--	--	--	--	--	--
	05/04/23	<1	<1	<1	<1	<1	<1	<3	<1	<1	<5	<0.2	<1	<1	<1	<1	<1
	7/17/23	<1	<0.5	<1	<1	<1	<1	<3	<1	<1	<5	<0.2	<1	<1	<1	<1	<1
MTCA Method A or B Groundwater Cleanup Levels		5 ^c	0.52 ^b	0.01 ^c	160 ^b	1.7 ^b	700 ^c	1,000 ^c	1,600 ^b	800 ^b	5.5 ^b	0.22 ^b	800 ^b	64 ^b	80 ^b	160 ^b	NVE

Notes:
All results presented in micrograms per liter (µg/L).
Groundwater data collected prior to 2023 were summarized from the February 3, 2022, Remedial Investigation, 615 Dexter Avenue North, by Hart Crowser.
Bold Bold result exceeds the laboratory detection limit.
 Shaded result exceeds the cleanup level.
-- Sample was not analyzed for this compound.
< Result less than the laboratory detection limit.
a Analyzed by EPA Method 8260.
b Model Toxics Control Act (MTCA) Method B Groundwater Cleanup Levels from Cleanup Levels and Risk Calculations (CLARC) spreadsheet. Where cleanup levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.
c MTCA Method A Cleanup Levels for Groundwater, Table 720-1, Washington Administrative Code (WAC) 173-340-900.
NVE No value established.
* Instrument detection limits.

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

Table 7
Groundwater Analytical Results – Volatile Organic Compounds^a
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle Washington

Sample ID	Sample Date	tert-Butyl- benzene	1,2,3- Trichloro- propane	1,2,4- Trichloro- benzene	sec-Butyl- benzene	p-Isopropyl- toluene	1,3- Dichloro- benzene	1,4- Dichloro- benzene	1,2- Dichloro- benzene	1,2- Dibromo-3- chloro- propane	1,2,4- Trimethyl- benzene	Hexachloro- 1,3- butadiene	Naphtha- lene	1,2,3- Trichloro- benzene
HC-1	04/03/19	1.1	<1.0	<1.0	12	19	<1.0	<1.0	<1.0	<1.0	150	<1.0	<1.0	<1.0
HC-4	04/18/19	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TMW-1	05/04/23	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<0.5	<1	<1
TMW-2	05/03/23	1.2	<1	<1	9.4	9.8	<1	<1	<1	<10	3.2	<0.5	2.9	<1
TWM-2 DUPLICATE	05/03/23	1.2	<1	<1	9.2	8.8	<1	<1	<1	<10	2.9	<0.5	2.6	<1
TMW-3	05/03/23	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<0.5	<1	<1
DMW-4S	05/03/23	1.2	<1	<1	11	19	<1	<1	<1	<10	130	<0.5	56	<1
DMW-9S	11/02/20	--	--	--	--	--	--	--	--	--	--	--	--	--
DMW-10S	11/02/20	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/03/23	<1	<1	<1	<1	<1	<1	<1	<1	<10	19	<0.5	1.1	<1
DMW-11S	11/02/20	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/03/23	<1	<1	<1	2.1	2.1	<1	<1	<1	<10	41	<0.5	6.2	<1
DMW-12S	11/02/20	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/04/23	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<0.5	<1	<1
DMW-13S	11/03/20	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/04/23	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<0.5	<1	<1
DMW-14S	11/03/20	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/04/23	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<0.5	<1	<1
	7/17/23	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<0.5	<1	<1
MTCA Method A or B Groundwater Cleanup Levels		800 ^b	0.0015 ^b	1.5 ^b	800 ^b	NVE	NVE	8.1 ^b	720 ^b	0.055 ^b	80 ^b	0.56 ^b	160 ^c	NVE

Notes:
All results presented in micrograms per liter (µg/L).
Groundwater data collected prior to 2023 were summarized from the February 3, 2022, Remedial Investigation, 615 Dexter Avenue North, by Hart Crowser.

Bold Bold result exceeds the laboratory detection limit.
 Shaded result exceeds the cleanup level.
-- Sample was not analyzed for this compound.
< Result less than the laboratory detection limit.
a Analyzed by EPA Method 8260.
b Model Toxics Control Act (MTCA) Method B Groundwater Cleanup Levels from Cleanup Levels and Risk Calculations (CLARC) spreadsheet. Where cleanup levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.
c MTCA Method A Cleanup Levels for Groundwater, Table 720-1, Washington Administrative Code (WAC) 173-340-900.
NVE No value established.
* Instrument detection limits.

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

Table 8
Groundwater Analytical Results – Total Petroleum Hydrocarbons
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle Washington

Location	Sample Date	GRO ^a		DRO ^b			ORO ^b	
		Gasoline	Mineral Spirits / Stoddard (C ₉ -C ₁₂)	Kerosene / Jet Fuel (C ₉ -C ₁₉)	Diesel / Fuel Oil		Heavy Oil	
					without SGC	with SGC ^c	without SGC	with SGC ^c
HC-1	04/03/19	6,900	<100	<200	<200	--	<500	--
HC-1 Duplicate	04/03/19	7,000	<100	<200	<200	--	--	--
HC-4	04/12/19	<100	<100	<200	<200	--	<500	--
HC-4 Duplicate	04/12/19	<100	<100	<200	<200	--	<500	--
TMW-1	05/04/23	<100	--	--	<50	--	<250	--
TMW-2	05/03/23	3,500	--	--	520 x	--	<250	--
TMW-2 Duplicate	05/03/23	3,200	--	--	480 x	--	<250	--
TMW-3	05/03/23	240 x	--	--	900 x	--	1,600 x	--
	07/17/23	--	--	--	4,300 x	<50	<250	<250
DMW-4S	05/03/23	5,300	--	--	1,200 x	--	<250	--
DMW-9S	11/02/20	<100	--	--	<50	--	<250	--
DMW-10S	11/02/20	630	--	--	190	--	<250	--
	05/03/23	380	--	--	64 x	--	<250	--
DMW-11S	11/02/20	270	--	--	210	--	<250	--
	05/03/23	1,300	--	--	110 x	--	<250	--
DMW-12S	11/02/20	<100	--	--	<50	--	<250	--
	05/04/23	<100	--	--	<50	--	<250	--
DMW-13S	11/03/20	<100	--	--	<50	--	<250	--
	05/04/23	<100	--	--	<50	--	<250	--
DMW-14S	11/03/20	<100	--	--	<50	--	<250	--
	05/04/23	<100	--	--	<50	--	<250	--
MTCA Method A Groundwater Cleanup Levels^d		1,000	NVE	500	500		500	

Notes:

All results presented in micrograms per liter (µg/L).

Groundwater data collected prior to 2023 were summarized from the February 3, 2022, Remedial Investigation, 615 Dexter Avenue North, by Hart Crowser.

Bold Bold result exceeds the laboratory detection limit.

Shaded Shaded result exceeds the cleanup level.

-- Sample was not analyzed for this compound.

< Result less than the laboratory detection limit.

a Analyzed by NWTPH-Gx.

b Analyzed by NWTPH-Dx.

c Sample extracts passed through a silica gel column (SGC) prior to analysis.

d MTCA Method A Cleanup Levels for Groundwater, Table 720-1, Washington Administrative Code (WAC) 173-340-900, August 2023.

Compounds:

GRO Gasoline-range organics

DRO Diesel-range organics

ORO Oil-range organics

Qualifier:

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

Table 9
Groundwater Analytical Results – Metals^a and Total Suspended Solids
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle Washington

Location	Sample Date	Arsenic ^a		Cadmium ^a		Chromium ^a		Lead ^a		Mercury ^b		Total Suspended Solids ^c
		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	
HC-1-TMW	04/03/19	<5	<5	<5	<5	<10	<10	6.0	<2	<0.5	<0.5	160,000
HC-1-TMW Duplicate	04/03/19	<5	<5	<5	<5	<10	<10	7.0	<2	<0.5	<0.5	--
HC-4	04/18/19	<5	--	<5	--	<10	--	2.0	--	<0.5	--	--
HC-4 Duplicate	04/18/19	<5	--	<5	--	<10	--	<2	--	<0.5	--	--
MTCA Method A Groundwater Cleanup Levels ^d		5		5		50		15		2		NVE

Notes:
All results presented in micrograms per liter (µg/L).
Groundwater data collected prior to 2023 were summarized from the February 3, 2022, Remedial Investigation, 615 Dexter Avenue North, by Hart Crowser

Bold Bold results exceed the laboratory detection limit.
-- Sample was not analyzed for this compound.
< Result less than the laboratory detection limit.
a Analyzed by EPA Method 7010.
b Analyzed by EPA Method 7470A.
c Analyzed by EPA Method 160.2.
d MTCA Method A Cleanup Levels for Groundwater, Table 720-1, Washington Administrative Code (WAC) 173-340-900.
NVE No value established.

Table 10
Groundwater Analytical Results – Polychlorinated Biphenyls (PCBs)
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle Washington

Location ID	Sample Date	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCBs ^a
TMW-2	05/03/23	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
TMW-2 DUP-1	05/03/23	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
TMW-3	05/03/23	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
DMW-4S	05/03/23	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
DMW-10S	05/03/23	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
DMW-11S	05/03/23	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
MTCA Method A Groundwater Cleanup Levels^b		0.1									

Notes:

All results presented in micrograms per liter (µg/L).

< Result less than the laboratory detection limit.

a Analyzed by EPA Method 8082.

b MTCA Method A Cleanup Levels for Groundwater, Table 720-1, Washington Administrative Code (WAC) 173-340-900.

ND Not detected.

Table 11
Groundwater Analytical Results – Polycyclic Aromatic Hydrocarbons^a
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle Washington

Sample ID	Sample Date	Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) ^a							TEF-Adjusted Total cPAHs
		Benzo(a) pyrene	Benzo(a) anthracene	Benzo(b) fluor-anthene	Benzo(k) fluor-anthene	Chrysene	Dibenzo (ah) nthalracene	Indeno (1,2,3-cd) pyrene	
HC-4	04/18/19	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
TMW-2	05/03/23	0.065	0.087	0.1	0.044	0.084	<0.04	0.044	0.0953
TWM-2 Dup	05/03/23	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	ND
TMW-3	05/03/23	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	ND
DMW-4S	05/03/23	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	ND
DMW-10S	05/03/23	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	ND
DMW-11S	05/03/23	0.074	0.072	0.13	0.045	0.085	<0.04	0.063	0.108
MTCA Method A Groundwater Cleanup Levels^b		See Cleanup Level for TEF-Adjusted Total cPAHs							0.1

Notes:

All results presented in micrograms per liter (µg/L).

Groundwater data collected prior to 2023 were summarized from the February 3, 2022, Remedial Investigation, 615 Dexter Avenue North, by Hart Crowser.

Bold Bold result exceeds the laboratory detection limit.

Shaded Shaded result exceeds the cleanup level.

< Result less than the laboratory detection limit.

^a Analyzed by EPA Method SW8270.

^b MTCA Method A Cleanup Levels for Groundwater, Table 720-1, Washington Administrative Code (WAC) 173-340-900

TEF Toxicity equivalency factor.

ND Not detected.

Table 12
Soil Vapor Analytical Results – Volatile Organic Compounds
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle Washington

Sample ID	Sample Date	Volatile Compounds ^a																
		1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloro-ethane	CFC-113	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-methane	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Butadiene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1,4-Dioxane
TSV-1	5/2/23	<1.8	<0.45 j	<2.7	<0.18 j	<1.3	<1.3	<2.4	<16	<0.25 j	<2	<0.13 j	<0.76	<16	<0.15 j	<2	<0.75 j	<1.2
TSV-2	5/2/23	7.0	<0.69 j	<4	<0.27 j	<2	<2	<3.7	<25	<0.38 j	<3	<0.2 j	<1.2	<25	<0.22 j	<3	<1.1 j	<1.8
AA-1	5/2/23	<1.7	<0.44 j	<2.6	<0.17 j	<1.3	<1.3	<2.4	<16	<0.25 j	<1.9	<0.13 j	<0.74	<16	<0.14 j	<1.9	<0.73 j	<1.2
Adjusted Results: TSV-1		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Adjusted Results: TSV-2		6.15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil Gas Screening Level ^d		76,000	1.4	76,000	3	52	3,000	30	910	NVE	3,000	3.2	23	910	2.8	NVE	7.6	17
Indoor Air Cleanup Level ^e		2,285	0.338	2,285	0.091	1.56	91.4	0.914	27.4	NVE	91.4	0.096	0.676	27.4	0.083	NVE	0.227	0.5

Notes:

Results presented in micrograms per cubic meter (µg/m3); unless indicated otherwise.

Helium results presented in percent (%).

For Adjusted Results- ambient air results were subtracted from the sub-slab results. For results less than the method detection limit (<MDL) half the method detection limit was used in the calculation per WAC 173-340-709 (5)(a).

Bold Bold result exceeds the laboratory detection limit.

 Shaded result exceeds the screening level.

< Result less than the laboratory detection limit.

a Analyzed by Method TO-15.

b Analyzed by Method MA-APH.

c Analyzed by Method ASTM D1946.

d Model Toxics Control Act (MTCA) Vapor Intrusion Soil Gas Screening Levels from CLARC spreadsheet (February 2024). Where cleanup levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.

e MTCA Indoor Air Cleanup Level Method B, Washington Department of Ecology CLARC table (February 2024). Where screening levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.

f Site-specific TPH indoor air cleanup level has not been calculated.

NVE No value established.

Qualifiers:

* Flagged value is not within established control limits.

fb The analyte was detected in the method blank.

j The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

MDL Analyte reported to Method Detection Limit (MDL)

ve The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

Table 12
Soil Vapor Analytical Results – Volatile Organic Compounds
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle Washington

Sample ID	Sample Date	Volatile Compounds ^a																
		4-Ethyl-toluene	4-Methyl-2-pentanone	Acetone	Acrolein	Benzene	Benzyl chloride	Dichloro-bromo-methane	Bromo-form	Bromo-methane	Butane	Carbon Disulfide	Carbon Tetra-chloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloro-ethene
TSV-1	5/2/23	<16	<15	31	1.0	<1.1	<0.17 j	<0.22 j	<6.8	<13	<16	<21	790 ve	<1.5	<8.7	23	<12	<1.3
TSV-2	5/2/23	<25	<23	56	1.0	<1.6	<0.26 j	<0.34 j	<10	<19	28	<31	120	<2.3	<13	5.1	<19	<2
AA-1	5/2/23	<16	<15	27	0.73	<1	<0.17 j	<0.21 j	<6.6	<12	<15	<20	30	<1.5	<8.4	1.3	<12	<1.3
Adjusted Results: TSV-1		<MDL	<MDL	4	0.27	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	760	<MDL	<MDL	21.7	<MDL	<MDL
Adjusted Results: TSV-2		<MDL	<MDL	29	0.27	<MDL	<MDL	<MDL	<MDL	<MDL	20.5	<MDL	90	<MDL	<MDL	3.8	<MDL	<MDL
Soil Gas Screening Level ^d		NVE	46,000	NVE	0.3	11	1.7	2.3	76	76	NVE	11,000	14	760	150,000	3.6	1,400	610
Indoor Air Cleanup Level ^e		NVE	1,371	NVE	0.009	0.321	0.051	0.067	2.27	2.29	NVE	320	0.417	22.9	NVE	0.108	41	18.3

Notes:

Results presented in micrograms per cubic meter (µg/m3); unless indicated otherwise.

Helium results presented in percent (%).

For Adjusted Results- ambient air results were subtracted from the sub-slab results. For results less than the method detection limit (<MDL) half the method detection limit was used in the calculation per WAC 173-340-709 (5)(a).

Bold Bold result exceeds the laboratory detection limit.

 Shaded result exceeds the screening level.

< Result less than the laboratory detection limit.

a Analyzed by Method TO-15.

b Analyzed by Method MA-APH.

c Analyzed by Method ASTM D1946.

d Model Toxics Control Act (MTCA) Vapor Intrusion Soil Gas Screening Levels from CLARC spreadsheet (February 2024). Where cleanup levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.

e MTCA Indoor Air Cleanup Level Method B, Washington Department of Ecology CLARC table (February 2024). Where screening levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.

f Site-specific TPH indoor air cleanup level has not been calculated.

NVE No value established.

Qualifiers:

* Flagged value is not within established control limits.

fb The analyte was detected in the method blank.

j The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

MDL Analyte reported to Method Detection Limit (MDL)

ve The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

Table 12
Soil Vapor Analytical Results – Volatile Organic Compounds
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle Washington

Sample ID	Sample Date	Volatile Compounds ^a																	
		cis-1-3-Dichloro-propene	Cyclo-hexane	Dibromo-chloro-methane	Dichloro-difluoro-methane (CF-12)	Dichloro-tetrafluoro-ethane (CF-114)	Ethyl Acetate	Ethyl-benzene	Heptane	Hexachloro-butadiene	m,p-Xylene	Methyl meth-acrylate	Methylene Chloride	Naphthalene	n-Hexane	o-Xylene	Propylene	Styrene	
TSV-1	5/2/23	<1.3	<1.3	<0.28 j	47	<6.9	<24	1.6	<14	<0.7 j	4.0	<14	<110	<0.86	<12	1.9	5.9	<2.8	
TSV-2	5/2/23	<2	<1.3	<0.43 j	270	<10	<36	2.5	<20	<1.1 j	5.9	<20	<170	<1.3	32	2.9	30	<4.3	
AA-1	5/2/23	<1.3	<1.3	<0.27 j	89	<6.7	<23	<1.4	<13	<0.68 j	<2.8	<13	<110	<0.84	<11	<1.4	7	<2.7	
Adjusted Results: TSV-1		<MDL	<MDL	<MDL	0	<MDL	<MDL	0.9	<MDL	<MDL	2.6	<MDL	<MDL	<MDL	<MDL	<MDL	0	<MDL	
Adjusted Results: TSV-2		<MDL	<MDL	<MDL	181	<MDL	<MDL	1.8	<MDL	<MDL	4.5	<MDL	<MDL	<MDL	<MDL	26.5	2.2	23	<MDL
Soil Gas Screening Level ^d		NVE	91,000	NVE	1,500	NVE	1,100	15,000	6,100	3.8	1,500	11,000	2,200	2.5	11,000	1,500	NVE	15,000	
Indoor Air Cleanup Level ^e		NVE	2,742	NVE	46	NVE	32	457	183	0.113	46	320	66	0.073	320	46	NVE	457	

Notes:

Results presented in micrograms per cubic meter (µg/m3); unless indicated otherwise.

Helium results presented in percent (%).

For Adjusted Results- ambient air results were subtracted from the sub-slab results. For results less than the method detection limit (<MDL) half the method detection limit was used in the calculation per WAC 173-340-709 (5)(a).

Bold Bold result exceeds the laboratory detection limit.

Shaded result exceeds the screening level.

< Result less than the laboratory detection limit.

a Analyzed by Method TO-15.

b Analyzed by Method MA-APH.

c Analyzed by Method ASTM D1946.

d Model Toxics Control Act (MTCA) Vapor Intrusion Soil Gas Screening Levels from CLARC spreadsheet (February 2024). Where cleanup levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.

e MTCA Indoor Air Cleanup Level Method B, Washington Department of Ecology CLARC table (February 2024). Where screening levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.

f Site-specific TPH indoor air cleanup level has not been calculated.

NVE No value established.

Qualifiers:

* Flagged value is not within established control limits.

fb The analyte was detected in the method blank.

j The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

MDL Analyte reported to Method Detection Limit (MDL)

ve The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

Table 12
Soil Vapor Analytical Results – Volatile Organic Compounds
Remedial Investigation Work Plan
601 Dexter Site
601 Dexter Avenue North, Seattle Washington

Sample ID	Sample Date	Volatile Compounds ^a							Petroleum Fractionation ^b			Calculated Total Petroleum Hydrocarbons	Helium ^c
		Toluene	trans-1,2-Dichloro-ethene	trans-1,3-Dichloro-propene	Trichloro-ethene	Trichloro-fluoro-methane (CF-11)	Vinyl Acetate	Vinyl Chloride	Aliphatic Hydrocarbon (EC5-8)	Aliphatic Hydrocarbon (EC9-12)	Aromatic Hydrocarbon (EC9-10)		
TSV-1	5/2/23	<62	<1.3	<1.5	0.53	12	<23	<0.84	540 fb	140	<82	680	<0.6
TSV-2	5/2/23	<94	<2	<2.3	2.0	29	<35	<1.3	940 fb	180	<120	1,120	--
AA-1	5/2/23	<60	<1.3	<1.5	0.84 j	<7.2	<23	<0.82	430 fb	<80	<80	430	<0.6
Adjusted Results: TSV-1		<MDL	<MDL	<MDL	0	8.4	<MDL	<MDL	110	100	<MDL	250	<MDL
Adjusted Results: TSV-2		<MDL	<MDL	<MDL	1.16	25.4	<MDL	<MDL	510	140	<MDL	690	<MDL
Soil Gas Screening Level ^d		76,000	610	21	11	11,000	3,000	9.5	NVE	NVE	NVE	1,500 ^e	NVE
Indoor Air Cleanup Level ^e		2,285	18.3	NVE	0.334	320	91	0.3	NVE	NVE	NVE	46 ^f	NVE

Notes:

Results presented in micrograms per cubic meter (µg/m3); unless indicated otherwise.

Helium results presented in percent (%).

For Adjusted Results- ambient air results were subtracted from the sub-slab results. For results less than the method detection limit (<MDL) half the method detection limit was used in the calculation per WAC 173-340-709 (5)(a).

Bold Bold result exceeds the laboratory detection limit.

Shaded result exceeds the screening level.

< Result less than the laboratory detection limit.

a Analyzed by Method TO-15.

b Analyzed by Method MA-APH.

c Analyzed by Method ASTM D1946.

d Model Toxics Control Act (MTCA) Vapor Intrusion Soil Gas Screening Levels from CLARC spreadsheet (February 2024). Where cleanup levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.

e MTCA Indoor Air Cleanup Level Method B, Washington Department of Ecology CLARC table (February 2024). Where screening levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.

f Site-specific TPH indoor air cleanup level has not been calculated.

NVE No value established.

Qualifiers:

* Flagged value is not within established control limits.

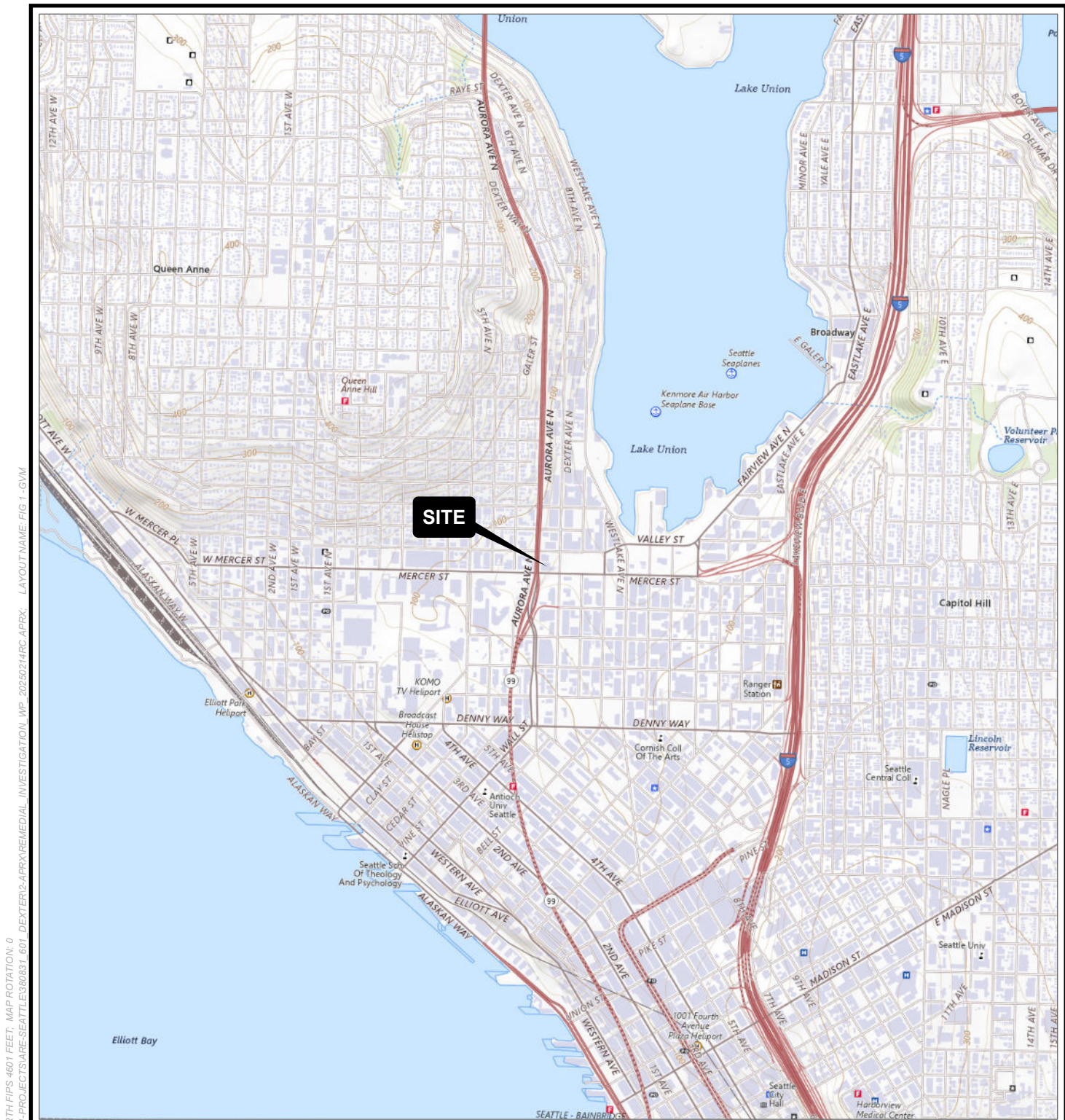
fb The analyte was detected in the method blank.

j The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

MDL Analyte reported to Method Detection Limit (MDL)

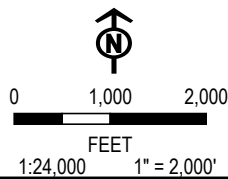
ve The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

Figures



COORDINATE SYSTEM: NAD 1983 STATEPLANE WASHINGTON NORTH FIPS 4801 FEET; MAP ROTATION: 0
- SAVED BY: RCOLLINS ON 2/14/2025, 15:19:41 PM; FILE PATH: T11-PROJECTS\ARE-SEATTLE\380831_601_DEXTER\2-APRX\REMEDIAL_INVESTIGATION_WP_20250214RC.APRX; LAYOUT NAME: FIG 1 - GVM

BASE MAP: USGS COLOR ORTHO IMAGERY
DATA SOURCES: TRC

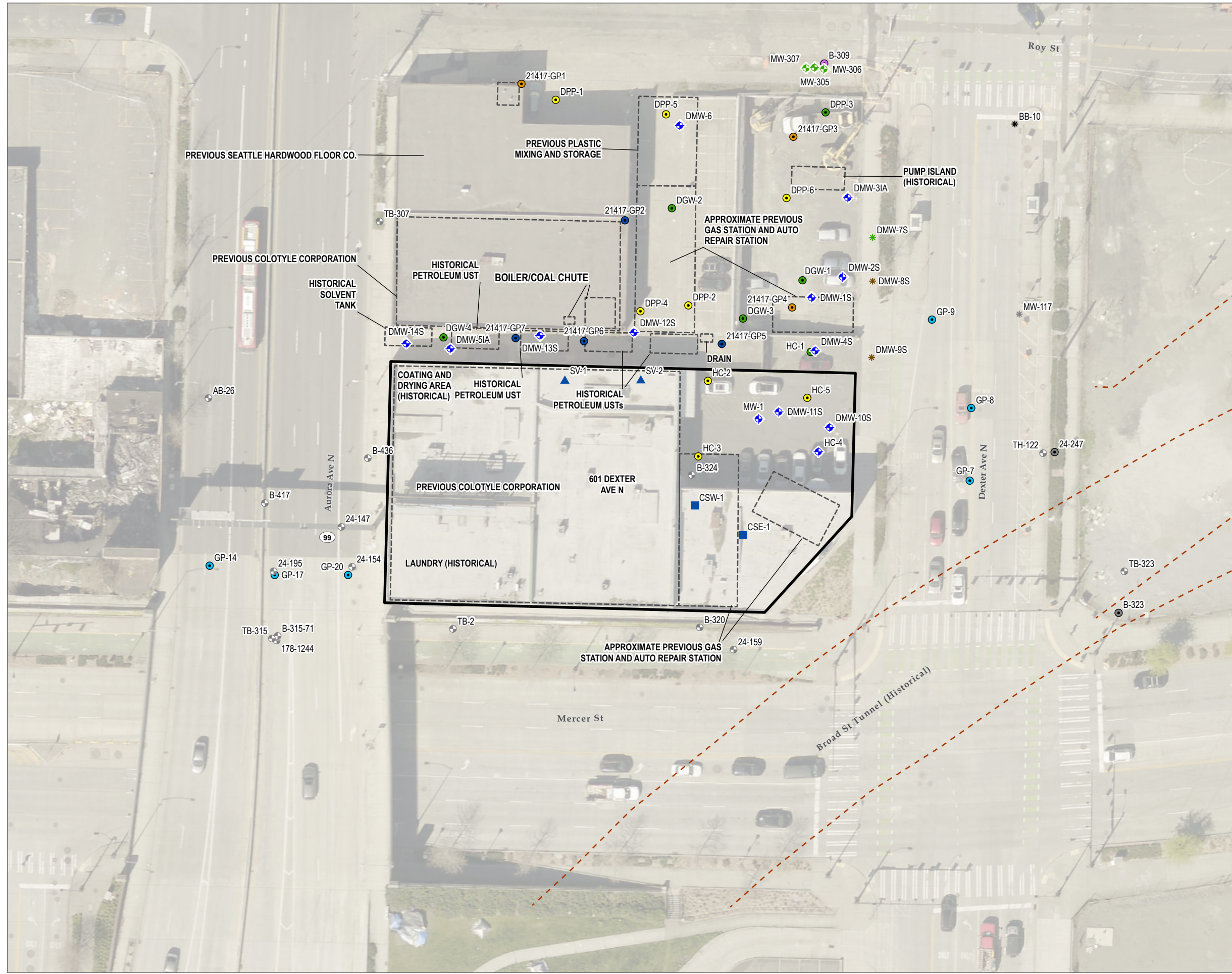


PROJECT:		601 DEXTER SITE 601 DEXTER AVE NORTH SEATTLE, WASHINGTON	
TITLE:		GENERAL VICINITY MAP REMEDIAL INVESTIGATION WORK PLAN	
DRAWN BY:		R. COLLINS	PROJ. NO.: 380831.0003.0000
CHECKED BY:		R. OTTEMAN	FIGURE 1
APPROVED BY:		R. OTTEMAN	
DATE:		FEBRUARY 2025	
		13810 SE EASTGATE WAY SUITE 440 BELLEVUE, WA 98005 PHONE: 425.395.0010	
FILE:		REMEDIAL_INVESTIGATION_WP_20250214RC	



13810 SE EASTGATE WAY
SUITE 440
BELLEVUE, WA 98005
PHONE: 425.395.0010

Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet, Map Rotation: 0
-- Saved By: RCOLLINS on 2/14/2025, 15:19:41 PM, File Path: T:\H-PROJECTS\SAFE Seattle\380831_601-Dexter\24PRX Remedial Investigation_WP_20250214RC.aprx, Layout Name: Fig 2 - Historical Features



- * ABANDONED MONITORING WELL, HART CROWSER, 2019
- * ABANDONED MONITORING WELL, HART CROWSER, 2020
- * ABANDONED OR DECOMMISSIONED MONITORING WELL, SOUNDEARTH STRATEGIES, 2013
- * ABANDONED OR DECOMMISSIONED MONITORING WELL, BLACK & VEATCH, 1997
- CRAWL SPACE AIR QUALITY SAMPLE, HART CROWSER, 2019
- ◆ MONITORING WELL, HART CROWSER, 2019
- ◆ MONITORING WELL, PES ENVIRONMENTAL, 2019
- PREVIOUS GEOTECHNICAL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR
- SOIL BORING, HART CROWSER, 2019
- SOIL BORING, SHANNON & WILSON, 1971
- SOIL BORING, SHANNON & WILSON, 2012
- SOIL BORING, SHANNON & WILSON, 2017
- SOIL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR
- SOIL BORING WITH GRAB GROUNDWATER SAMPLE, HART CROWSER, 2019
- SOIL BORING WITH GRAB GROUNDWATER SAMPLE, SHANNON & WILSON, 2017
- ▲ SUBSLAB VAPOR SAMPLE, HART CROWSER, 2019
- - - APPROXIMATE FORMER EXTENT OF BROAD STREET (1958-2012)
- - - APPROXIMATE LOCATION OF HISTORICAL FEATURES
- ▭ SUBJECT PROPERTY BOUNDARY

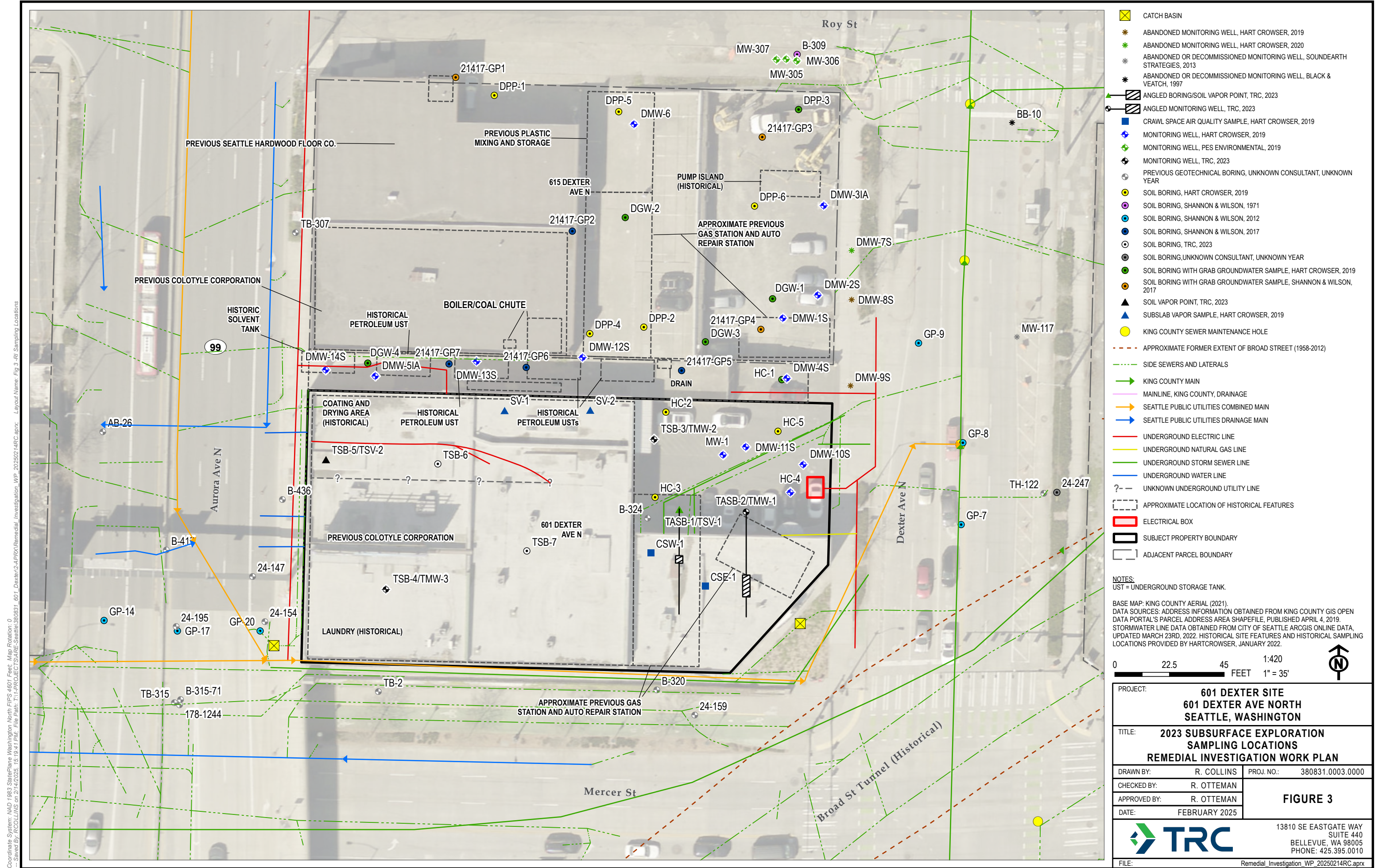
NOTES:
UST = UNDERGROUND STORAGE TANK.

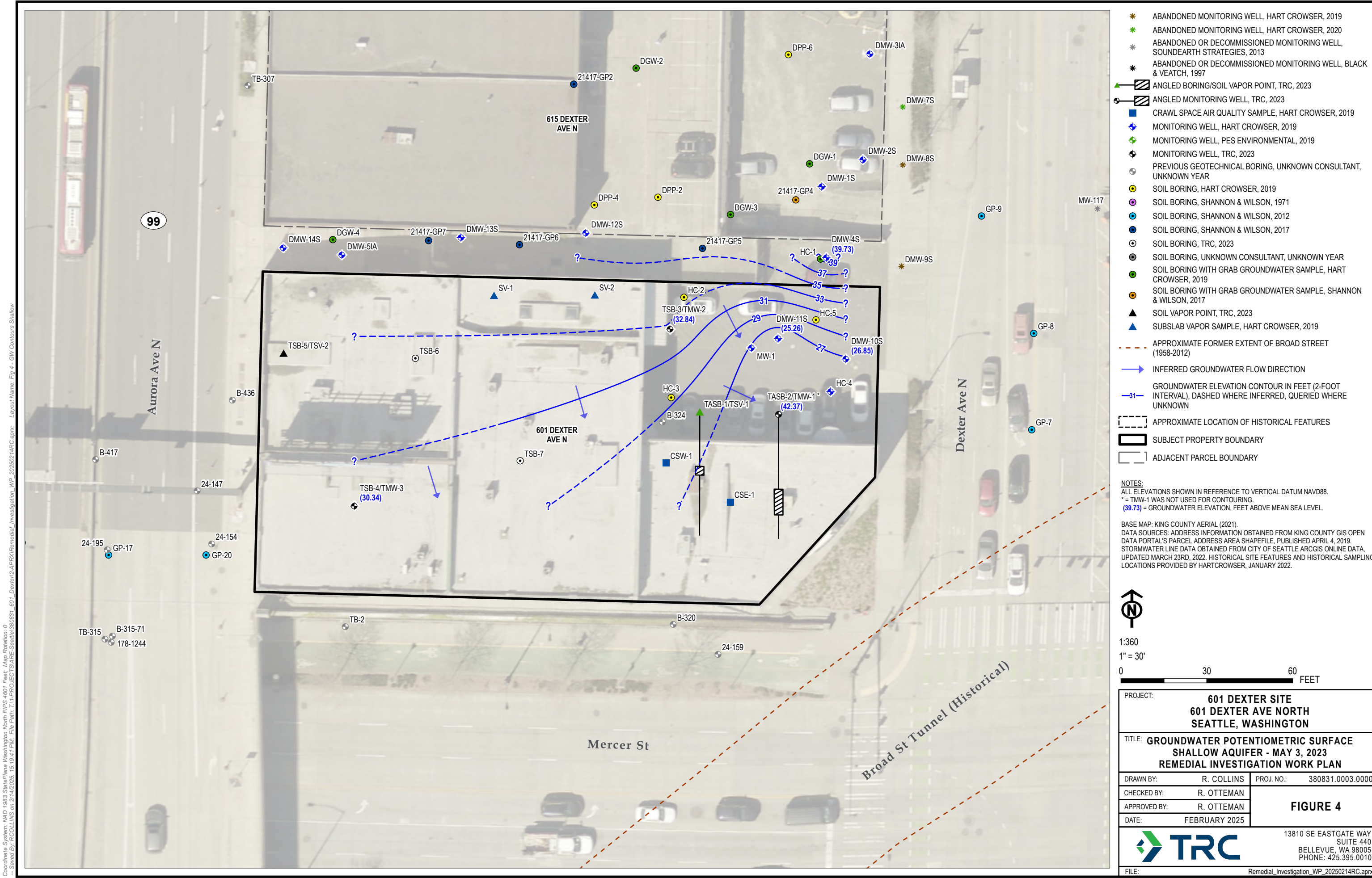
BASE MAP: KING COUNTY AERIAL (2021).
DATA SOURCES: ADDRESS INFORMATION OBTAINED FROM KING COUNTY GIS OPEN DATA PORTAL'S PARCEL ADDRESS AREA SHAPEFILE, PUBLISHED APRIL 4, 2019.
STORMWATER LINE DATA OBTAINED FROM CITY OF SEATTLE ARCGIS ONLINE DATA, UPDATED MARCH 23RD, 2022. HISTORICAL SITE FEATURES PROVIDED BY HARTCROWSER, JANUARY 2022.

1:540
1" = 45'
0 22.5 45 FEET

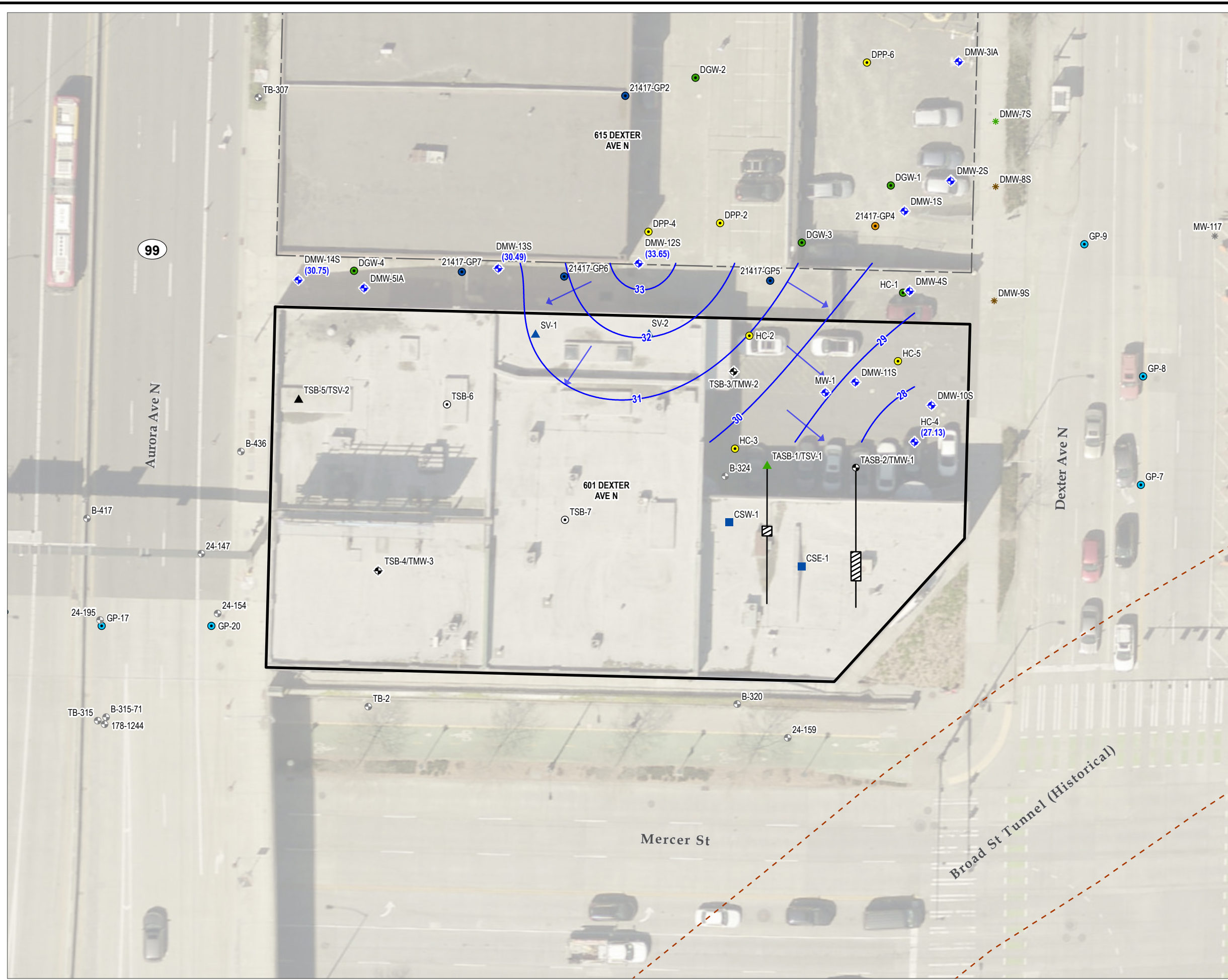


PROJECT:		601 DEXTER SITE 601 DEXTER AVE NORTH SEATTLE, WASHINGTON	
TITLE:		HISTORICAL FEATURES AND SAMPLING LOCATIONS REMEDIAL INVESTIGATION WORK PLAN	
DRAWN BY:	R. COLLINS	PROJ. NO.:	380831.0003.0000
CHECKED BY:	R. OTTEMAN	FIGURE 2	
APPROVED BY:	R. OTTEMAN		
DATE:	FEBRUARY 2025		
		13810 SE EASTGATE WAY SUITE 440 BELLEVUE, WA 98005 PHONE: 425.395.0010	
FILE:	Remedial_Investigation_WP_20250214RC.apr		





Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet, Map Rotation: 0
-- Saved By: RCOLLINS on 2/14/2025, 15:19:41 PM, File Path: T:\PROJECTS\SAFE-Seattle\380831_601-Dexter\24-APRX Remedial Investigation_WP_20250214RC.aprx, Layout Name: Fig 5 - GW Contours Intermediate



- * ABANDONED MONITORING WELL, HART CROWSER, 2019
- * ABANDONED MONITORING WELL, HART CROWSER, 2020
- * ABANDONED OR DECOMMISSIONED MONITORING WELL, SOUNDEARTH STRATEGIES, 2013
- * ABANDONED OR DECOMMISSIONED MONITORING WELL, BLACK & VEATCH, 1997
- ▲ ANGLLED BORING/SOIL VAPOR POINT, TRC, 2023
- ◻ ANGLLED MONITORING WELL, TRC, 2023
- CRAWL SPACE AIR QUALITY SAMPLE, HART CROWSER, 2019
- ◆ MONITORING WELL, HART CROWSER, 2019
- ◆ MONITORING WELL, PES ENVIRONMENTAL, 2019
- ◆ MONITORING WELL, TRC, 2023
- ◆ PREVIOUS GEOTECHNICAL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR
- SOIL BORING, HART CROWSER, 2019
- SOIL BORING, SHANNON & WILSON, 1971
- SOIL BORING, SHANNON & WILSON, 2012
- SOIL BORING, SHANNON & WILSON, 2017
- SOIL BORING, TRC, 2023
- SOIL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR
- SOIL BORING WITH GRAB GROUNDWATER SAMPLE, HART CROWSER, 2019
- SOIL BORING WITH GRAB GROUNDWATER SAMPLE, SHANNON & WILSON, 2017
- ▲ SOIL VAPOR POINT, TRC, 2023
- ▲ SUBSLAB VAPOR SAMPLE, HART CROWSER, 2019
- - - APPROXIMATE FORMER EXTENT OF BROAD STREET (1958-2012)
- INFERRED GROUNDWATER FLOW DIRECTION
- 31- GROUNDWATER ELEVATION CONTOUR IN FEET (1-FOOT INTERVAL)
- ▭ SUBJECT PROPERTY BOUNDARY
- ▭ ADJACENT PARCEL BOUNDARY

NOTES:
ALL ELEVATIONS SHOWN IN REFERENCE TO VERTICAL DATUM NAVD88.
(33.65) = GROUNDWATER ELEVATION, FEET ABOVE MEAN SEA LEVEL.

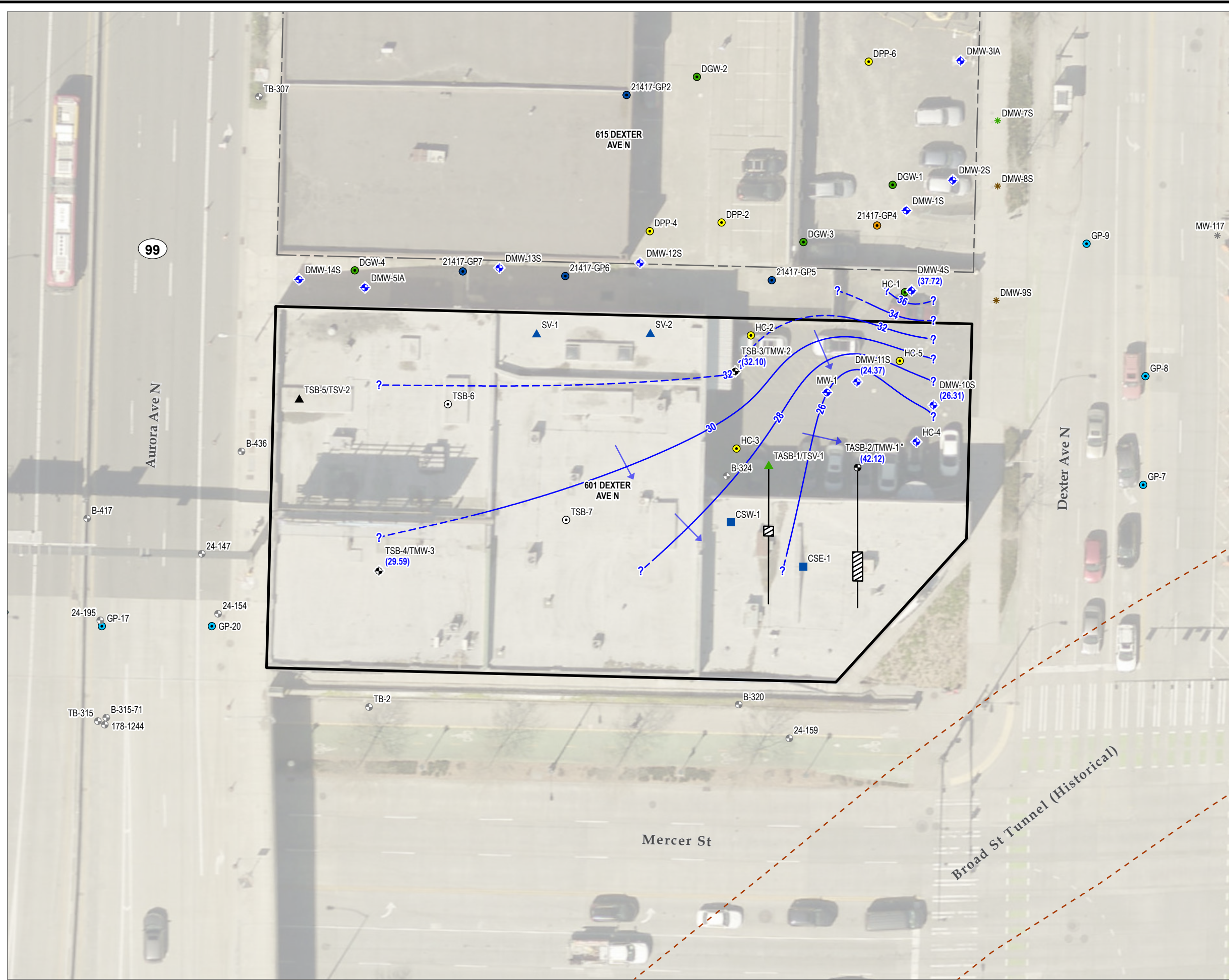
BASE MAP: KING COUNTY AERIAL (2021).
DATA SOURCES: ADDRESS INFORMATION OBTAINED FROM KING COUNTY GIS OPEN DATA PORTAL'S PARCEL ADDRESS AREA SHAPEFILE, PUBLISHED APRIL 4, 2019.
STORMWATER LINE DATA OBTAINED FROM CITY OF SEATTLE ARCGIS ONLINE DATA, UPDATED MARCH 23RD, 2022. HISTORICAL SITE FEATURES AND HISTORICAL SAMPLING LOCATIONS PROVIDED BY HARTCROWSER, JANUARY 2022.



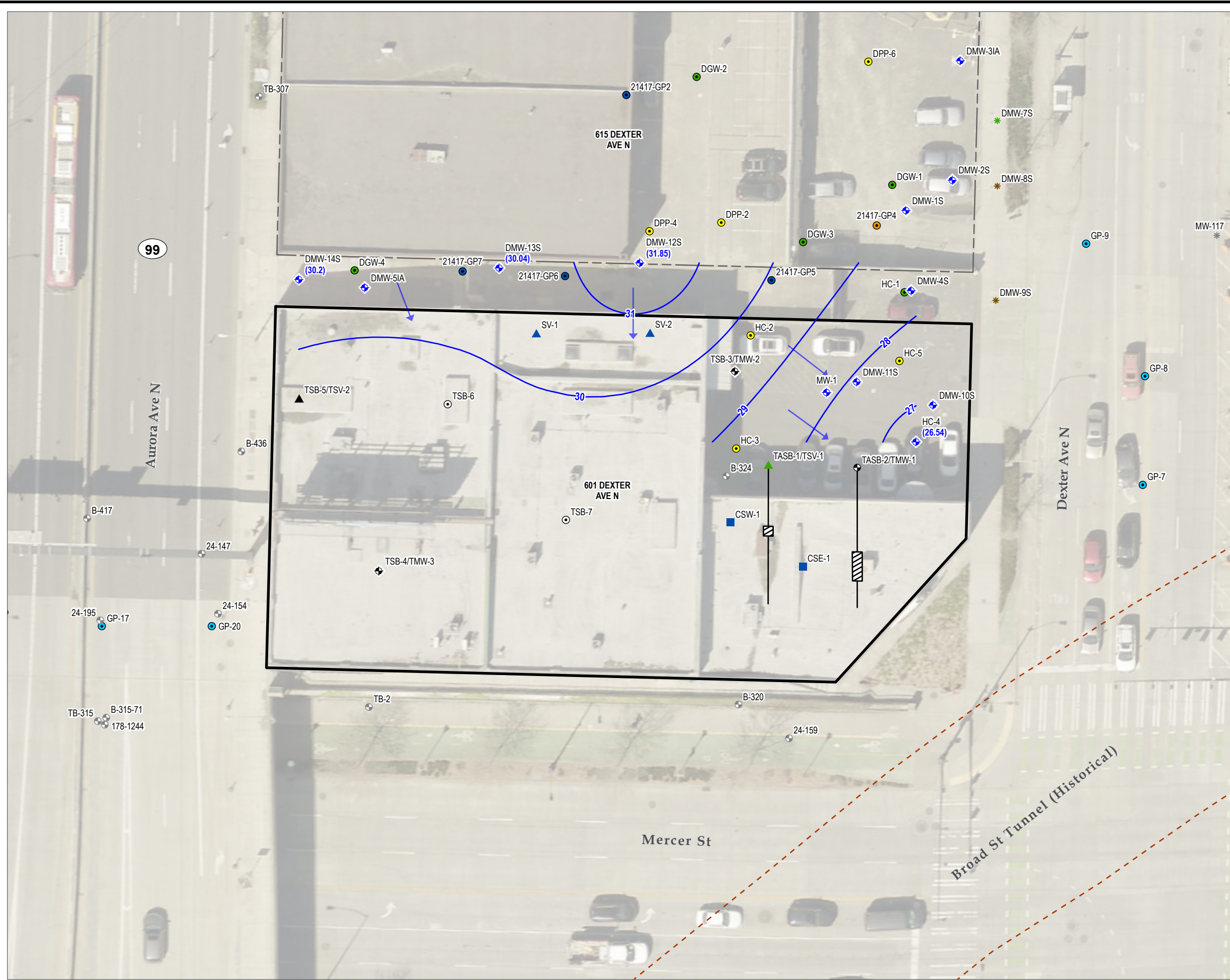
1:360
1" = 30'
0 30 60 FEET

PROJECT:		601 DEXTER SITE 601 DEXTER AVE NORTH SEATTLE, WASHINGTON	
TITLE: GROUNDWATER POTENTIOMETRIC SURFACE INTERMEDIATE AQUIFER - MAY 3, 2023 REMEDIAL INVESTIGATION WORK PLAN			
DRAWN BY: R. COLLINS		PROJ. NO.: 380831.0003.0000	
CHECKED BY: R. OTTEMAN		FIGURE 5	
APPROVED BY: R. OTTEMAN			
DATE: FEBRUARY 2025			
		13810 SE EASTGATE WAY SUITE 440 BELLEVUE, WA 98005 PHONE: 425.395.0010	
FILE:		Remedial_Investigation_WP_20250214RC.aprx	

Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet, Map Rotation: 0
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Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet, Map Rotation: 0
-- Saved By: RCOLLINS on 2/14/2025, 16:21:02 PM, File Path: T:\H-PROJECTS\SAFE-Seattle\380831_601-Dexter\24-APRX Remedial Investigation_WP_20250214RC.aprx, Layout Name: Fig 7 - GW Contours Intermediate June 2023



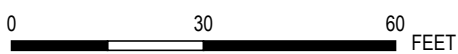
- * ABANDONED MONITORING WELL, HART CROWSER, 2019
- * ABANDONED MONITORING WELL, HART CROWSER, 2020
- * ABANDONED OR DECOMMISSIONED MONITORING WELL, SOUNDEARTH STRATEGIES, 2013
- * ABANDONED OR DECOMMISSIONED MONITORING WELL, BLACK & VEATCH, 1997
- ▲ ANGLLED BORING/SOIL VAPOR POINT, TRC, 2023
- ◻ ANGLLED MONITORING WELL, TRC, 2023
- CRAWL SPACE AIR QUALITY SAMPLE, HART CROWSER, 2019
- ◆ MONITORING WELL, HART CROWSER, 2019
- ◆ MONITORING WELL, PES ENVIRONMENTAL, 2019
- ◆ MONITORING WELL, TRC, 2023
- ◆ PREVIOUS GEOTECHNICAL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR
- SOIL BORING, HART CROWSER, 2019
- SOIL BORING, SHANNON & WILSON, 1971
- SOIL BORING, SHANNON & WILSON, 2012
- SOIL BORING, SHANNON & WILSON, 2017
- SOIL BORING, TRC, 2023
- SOIL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR
- SOIL BORING WITH GRAB GROUNDWATER SAMPLE, HART CROWSER, 2019
- SOIL BORING WITH GRAB GROUNDWATER SAMPLE, SHANNON & WILSON, 2017
- ▲ SOIL VAPOR POINT, TRC, 2023
- ▲ SUBSLAB VAPOR SAMPLE, HART CROWSER, 2019
- - - APPROXIMATE FORMER EXTENT OF BROAD STREET (1958-2012)
- INFERRED GROUNDWATER FLOW DIRECTION
- 31- GROUNDWATER ELEVATION CONTOUR IN FEET (1-FOOT INTERVAL)
- ▭ SUBJECT PROPERTY BOUNDARY
- ▭ ADJACENT PARCEL BOUNDARY

NOTES:
ALL ELEVATIONS SHOWN IN REFERENCE TO VERTICAL DATUM NAVD88.
(33.65) = GROUNDWATER ELEVATION, FEET ABOVE MEAN SEA LEVEL.

BASE MAP: KING COUNTY AERIAL (2021).
DATA SOURCES: ADDRESS INFORMATION OBTAINED FROM KING COUNTY GIS OPEN DATA PORTAL'S PARCEL ADDRESS AREA SHAPEFILE, PUBLISHED APRIL 4, 2019.
STORMWATER LINE DATA OBTAINED FROM CITY OF SEATTLE ARCGIS ONLINE DATA, UPDATED MARCH 23RD, 2022. HISTORICAL SITE FEATURES AND HISTORICAL SAMPLING LOCATIONS PROVIDED BY HARTCROWSER, JANUARY 2022.

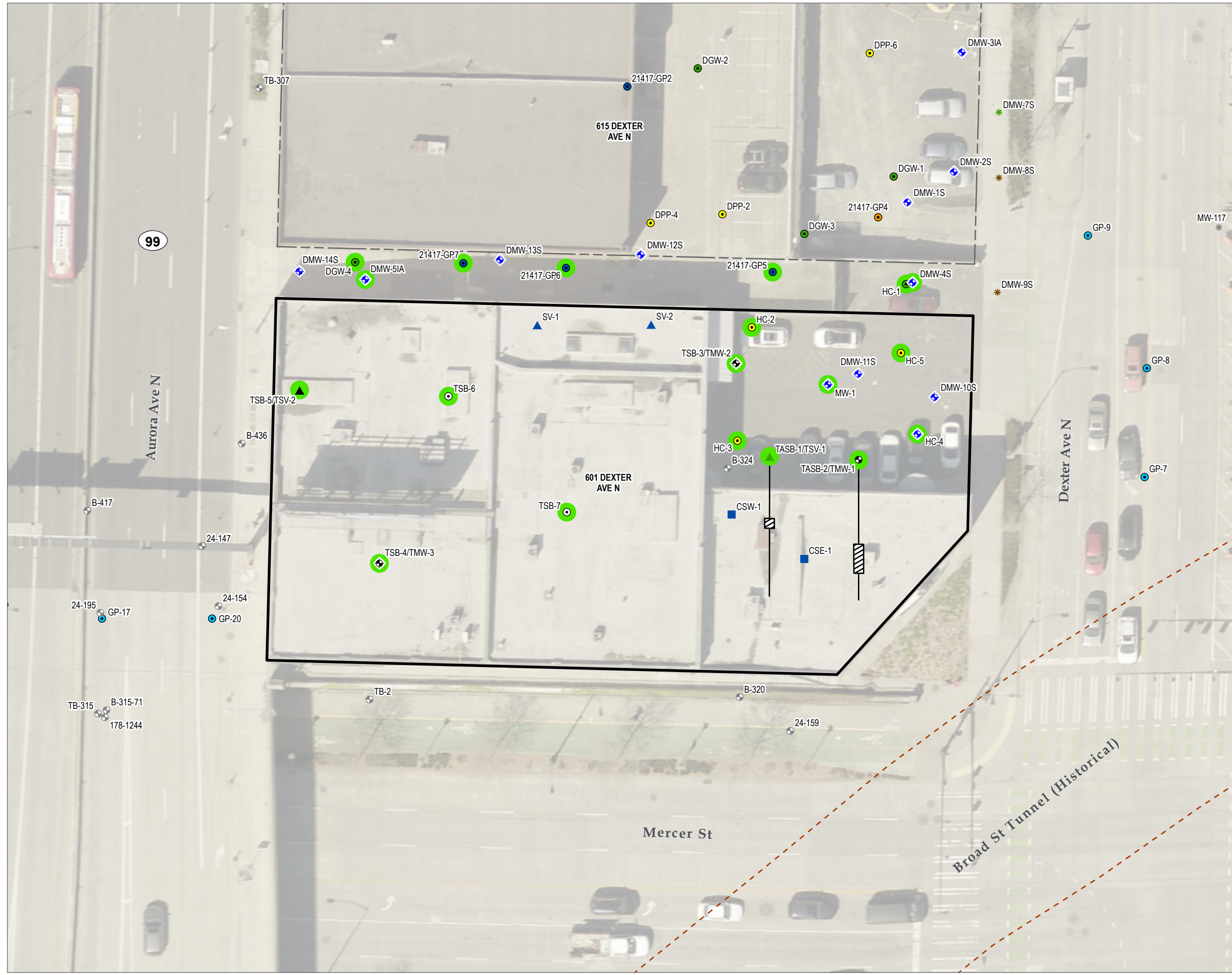


1:360
1" = 30'



PROJECT:		601 DEXTER SITE 601 DEXTER AVE NORTH SEATTLE, WASHINGTON	
TITLE: GROUNDWATER POTENTIOMETRIC SURFACE INTERMEDIATE AQUIFER - JUNE 15, 2023 REMEDIAL INVESTIGATION WORK PLAN			
DRAWN BY:	R. COLLINS	PROJ. NO.:	380831.0003.0000
CHECKED BY:	R. OTTEMAN	FIGURE 7	
APPROVED BY:	R. OTTEMAN		
DATE:	FEBRUARY 2025		
		13810 SE EASTGATE WAY SUITE 440 BELLEVUE, WA 98005 PHONE: 425.395.0010	
FILE:		Remedial_Investigation_WP_20250214RC.aprx	

Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet, Map Rotation: 0
-- Saved By: RCOLLINS on 2/14/2025, 16:21:02 PM, File Path: T:\H-PROJECTS\SAFE-Seattle\80831_601_Dexter\24-APRX Remedial Investigation_WP_20250214RC.aprx, Layout Name: Fig 8 - Soil VOC



* ABANDONED MONITORING WELL, HART CROWSER, 2019

* ABANDONED MONITORING WELL, HART CROWSER, 2020

* ABANDONED OR DECOMMISSIONED MONITORING WELL, SOUNDEARTH STRATEGIES, 2013

* ABANDONED OR DECOMMISSIONED MONITORING WELL, BLACK & VEATCH, 1997

▲ ANGLD BORING/SOIL VAPOR POINT, TRC, 2023

● ANGLD MONITORING WELL, TRC, 2023

■ CRAWL SPACE AIR QUALITY SAMPLE, HART CROWSER, 2019

◆ MONITORING WELL, HART CROWSER, 2019

◆ MONITORING WELL, PES ENVIRONMENTAL, 2019

◆ MONITORING WELL, TRC, 2023

● PREVIOUS GEOTECHNICAL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR

● SOIL BORING, HART CROWSER, 2019

● SOIL BORING, SHANNON & WILSON, 1971

● SOIL BORING, SHANNON & WILSON, 2012

● SOIL BORING, SHANNON & WILSON, 2017

● SOIL BORING, TRC, 2023

● SOIL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR

● SOIL BORING WITH GRAB GROUNDWATER SAMPLE, HART CROWSER, 2019

● SOIL BORING WITH GRAB GROUNDWATER SAMPLE, SHANNON & WILSON, 2017

▲ SOIL VAPOR POINT, TRC, 2023

▲ SUBSLAB VAPOR SAMPLE, HART CROWSER, 2019

● ALL COMPOUND CONCENTRATIONS ARE LESS THAN THE MTCA METHOD A OR B SOIL CLEANUP LEVEL

--- APPROXIMATE FORMER EXTENT OF BROAD STREET (1958-2012)

--- APPROXIMATE LOCATION OF HISTORICAL FEATURES

■ SUBJECT PROPERTY BOUNDARY

■ ADJACENT PARCEL BOUNDARY

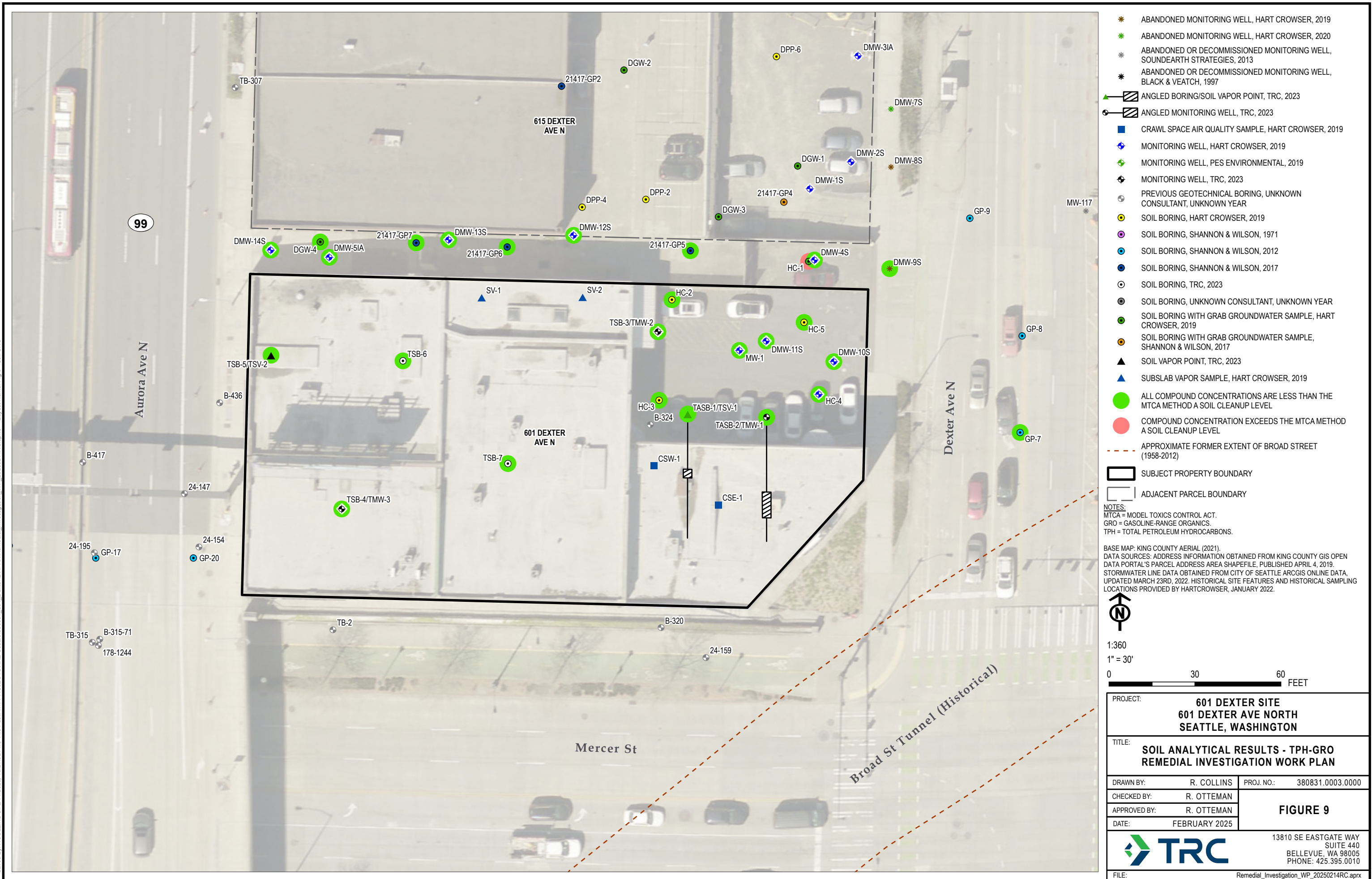
NOTES:
MTCA = MODEL TOXICS CONTROL ACT.
VOCs = VOLATILE ORGANIC COMPOUNDS.

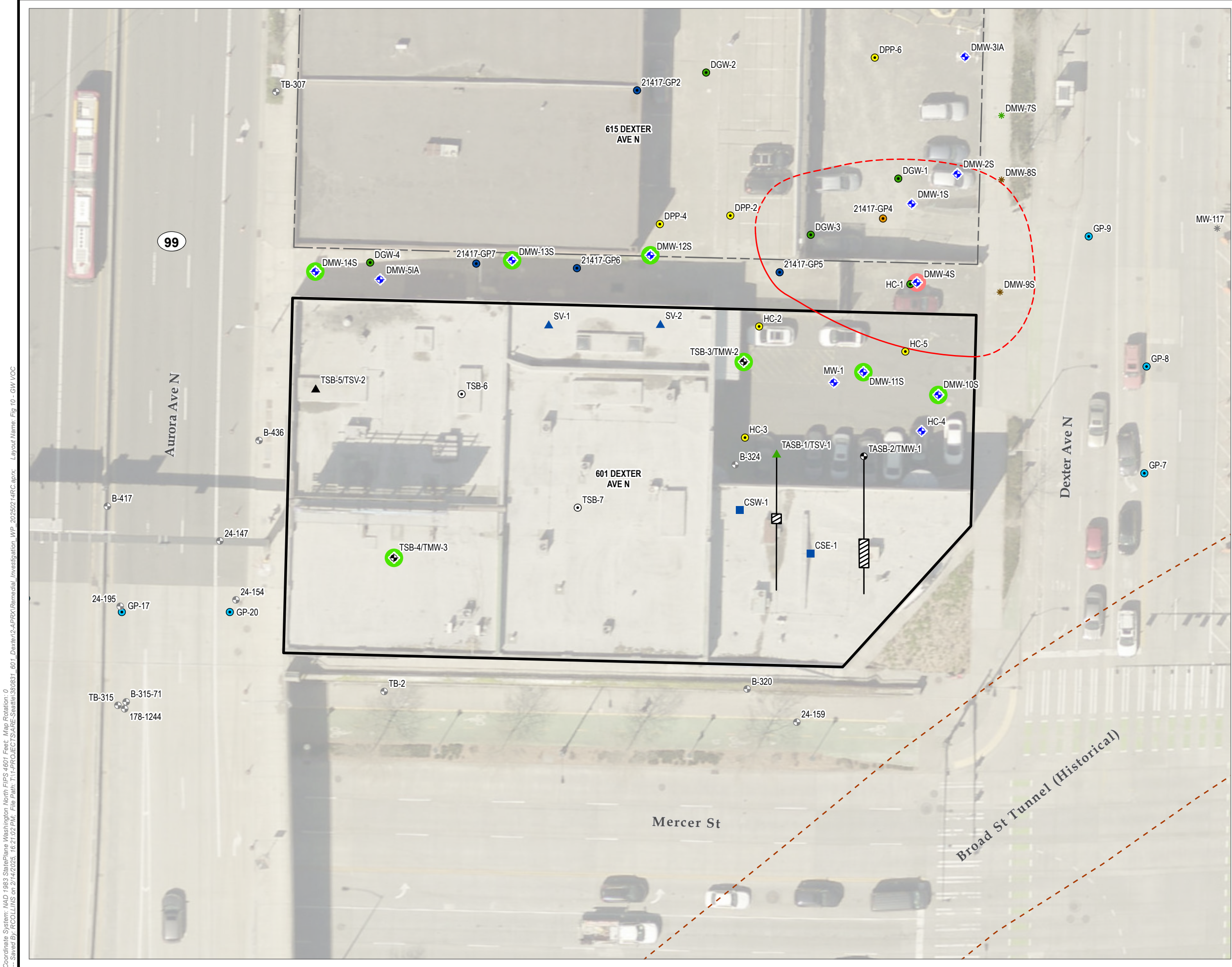
BASE MAP: KING COUNTY AERIAL (2021).
DATA SOURCES: ADDRESS INFORMATION OBTAINED FROM KING COUNTY GIS OPEN DATA PORTAL'S PARCEL ADDRESS AREA SHAPEFILE, PUBLISHED APRIL 4, 2019.
STORMWATER LINE DATA OBTAINED FROM CITY OF SEATTLE ARCGIS ONLINE DATA, UPDATED MARCH 23RD, 2022. HISTORICAL SITE FEATURES AND HISTORICAL SAMPLING LOCATIONS PROVIDED BY HARTCROWSER, JANUARY 2022.

1:360
1" = 30'

0 30 60 FEET

PROJECT:	601 DEXTER SITE 601 DEXTER AVE NORTH SEATTLE, WASHINGTON	
TITLE:	SOIL ANALYTICAL RESULTS - VOCs REMEDIAL INVESTIGATION WORK PLAN	
DRAWN BY:	R. COLLINS	PROJ. NO.: 380831.0003.0000
CHECKED BY:	R. OTTEMAN	FIGURE 8
APPROVED BY:	R. OTTEMAN	
DATE:	FEBRUARY 2025	
		13810 SE EASTGATE WAY SUITE 440 BELLEVUE, WA 98005 PHONE: 425.395.0010
FILE:	Remedial_Investigation_WP_20250214RC.aprx	





- ABANDONED MONITORING WELL, HART CROWSER, 2019
- ABANDONED MONITORING WELL, HART CROWSER, 2020
- ABANDONED OR DECOMMISSIONED MONITORING WELL, SOUNDEARTH STRATEGIES, 2013
- ABANDONED OR DECOMMISSIONED MONITORING WELL, BLACK & VEATCH, 1997
- ANGLED BORING/SOIL VAPOR POINT, TRC, 2023
- ANGLED MONITORING WELL, TRC, 2023
- CRAWL SPACE AIR QUALITY SAMPLE, HART CROWSER, 2019
- MONITORING WELL, HART CROWSER, 2019
- MONITORING WELL, PES ENVIRONMENTAL, 2019
- MONITORING WELL, TRC, 2023
- PREVIOUS GEOTECHNICAL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR
- SOIL BORING, HART CROWSER, 2019
- SOIL BORING, SHANNON & WILSON, 1971
- SOIL BORING, SHANNON & WILSON, 2012
- SOIL BORING, SHANNON & WILSON, 2017
- SOIL BORING, TRC, 2023
- SOIL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR
- SOIL BORING WITH GRAB GROUNDWATER SAMPLE, HART CROWSER, 2019
- SOIL BORING WITH GRAB GROUNDWATER SAMPLE, SHANNON & WILSON, 2017
- SOIL VAPOR POINT, TRC, 2023
- SUBSLAB VAPOR SAMPLE, HART CROWSER, 2019
- ALL COMPOUND CONCENTRATIONS ARE LESS THAN THE MTCA METHOD A OR B GROUNDWATER CLEANUP LEVEL
- CONCENTRATION EXCEEDS THE MTCA METHOD A OR B GROUNDWATER CLEANUP LEVEL FOR ONE OR MORE CONSTITUENT
- APPROXIMATE FORMER EXTENT OF BROAD STREET (1958-2012)
- APPROXIMATE EXTENT OF 1,3,5-TRIMETHYLBENZENE AND 1,2,4-TRIMETHYLBENZENE IMPACTS IN GROUNDWATER, DASHED WHERE INFERRED
- SUBJECT PROPERTY BOUNDARY
- ADJACENT PARCEL BOUNDARY

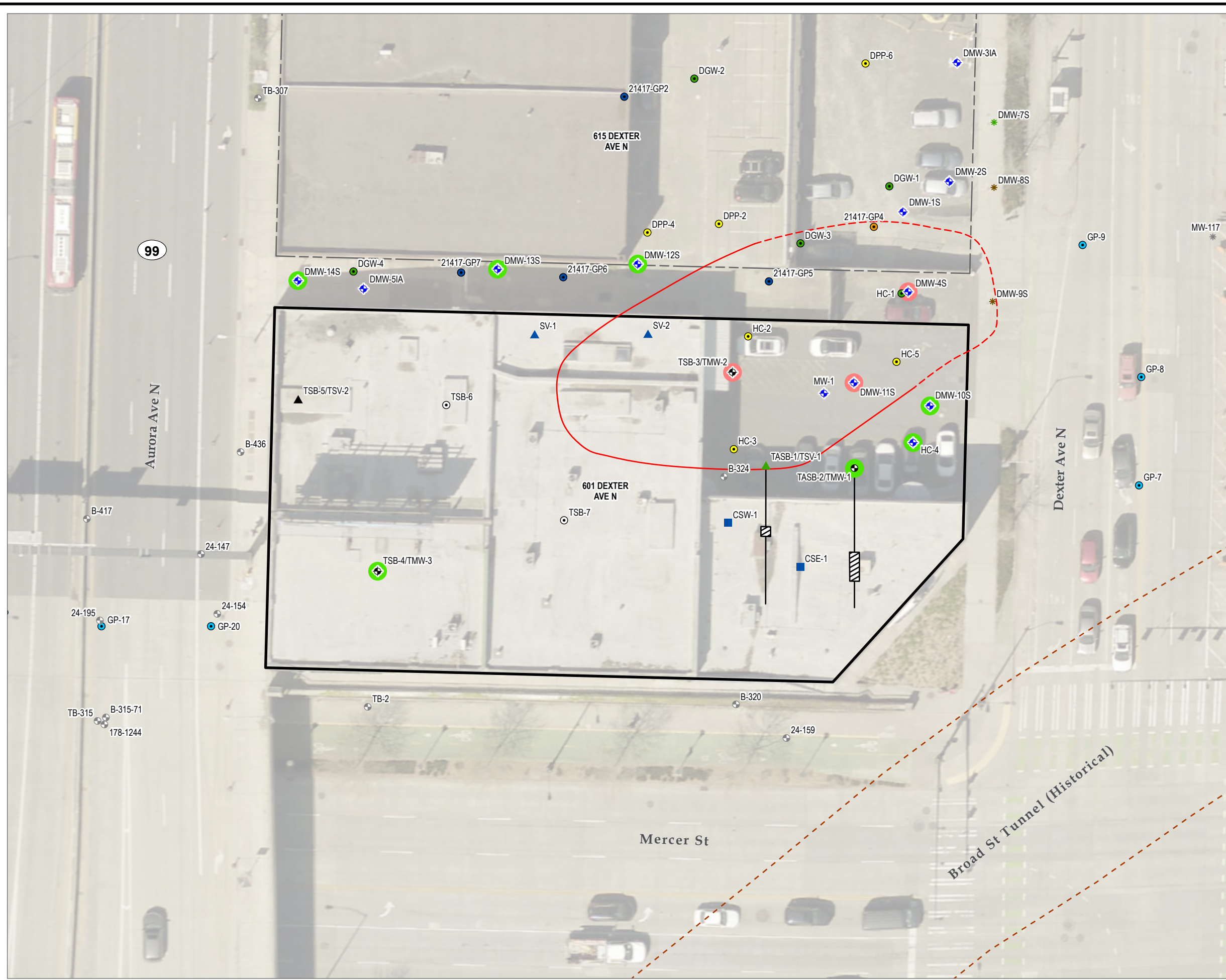
NOTES:
* = EXCEEDED FOR CARBON TETRACHLORIDE ON 5/4/2023, BUT SUBSEQUENT SAMPLE ON 7/17/2023 WAS BELOW LAB DETECTION LIMITS.
MTCA = MODEL TOXICS CONTROL ACT.
VOC = VOLATILE ORGANIC COMPOUNDS.
DMW-14S EXCEEDED THE CLEANUP LEVEL FOR CARBON TETRACHLORIDE.
DMW-4S EXCEEDED THE CLEANUP LEVEL FOR 1,3,5-TRIMETHYLBENZENE AND 1,2,4-TRIMETHYLBENZENE.

BASE MAP: KING COUNTY AERIAL (2021).
DATA SOURCES: ADDRESS INFORMATION OBTAINED FROM KING COUNTY GIS OPEN DATA PORTAL'S PARCEL ADDRESS AREA SHAPEFILE, PUBLISHED APRIL 4, 2019.
STORMWATER LINE DATA OBTAINED FROM CITY OF SEATTLE ARCGIS ONLINE DATA, UPDATED MARCH 23RD, 2022. HISTORICAL SITE FEATURES AND HISTORICAL SAMPLING LOCATIONS PROVIDED BY HARTCROWSER, JANUARY 2022.



PROJECT:		601 DEXTER SITE 601 DEXTER AVE NORTH SEATTLE, WASHINGTON	
TITLE:		GROUNDWATER ANALYTICAL RESULTS - VOCs, MAY 2023 AND JULY 2023 REMEDIAL INVESTIGATION WORK PLAN	
DRAWN BY:		R. COLLINS	PROJ. NO.: 380831.0003.0000
CHECKED BY:		R. OTTEMAN	FIGURE 10
APPROVED BY:		R. OTTEMAN	
DATE:		FEBRUARY 2025	
		13810 SE EASTGATE WAY SUITE 440 BELLEVUE, WA 98005 PHONE: 425.395.0010	
FILE:		Remedial_Investigation_WP_20250214RC.aprx	

Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet, Map Rotation: 0
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- * ABANDONED MONITORING WELL, HART CROWSER, 2019
 - * ABANDONED MONITORING WELL, HART CROWSER, 2020
 - * ABANDONED OR DECOMMISSIONED MONITORING WELL, SOUNDEARTH STRATEGIES, 2013
 - * ABANDONED OR DECOMMISSIONED MONITORING WELL, BLACK & VEATCH, 1997
 - ▲ ANGLED BORING/SOIL VAPOR POINT, TRC, 2023
 - ▨ ANGLED MONITORING WELL, TRC, 2023
 - CRAWL SPACE AIR QUALITY SAMPLE, HART CROWSER, 2019
 - ⊕ MONITORING WELL, HART CROWSER, 2019
 - ⊕ MONITORING WELL, PES ENVIRONMENTAL, 2019
 - ⊕ MONITORING WELL, TRC, 2023
 - ⊕ PREVIOUS GEOTECHNICAL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR
 - SOIL BORING, HART CROWSER, 2019
 - SOIL BORING, SHANNON & WILSON, 1971
 - SOIL BORING, SHANNON & WILSON, 2012
 - SOIL BORING, SHANNON & WILSON, 2017
 - ⊙ SOIL BORING, TRC, 2023
 - ⊙ SOIL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR
 - SOIL BORING WITH GRAB GROUNDWATER SAMPLE, HART CROWSER, 2019
 - SOIL BORING WITH GRAB GROUNDWATER SAMPLE, SHANNON & WILSON, 2017
 - ▲ SOIL VAPOR POINT, TRC, 2023
 - ▲ SUBSLAB VAPOR SAMPLE, HART CROWSER, 2019
 - ALL COMPOUND CONCENTRATIONS ARE LESS THAN THE MTCA METHOD A GROUNDWATER CLEANUP LEVEL
 - COMPOUND CONCENTRATION EXCEEDS THE MTCA METHOD A GROUNDWATER CLEANUP LEVEL
 - - - APPROXIMATE FORMER EXTENT OF BROAD STREET (1958-2012)
 - - - APPROXIMATE EXTENT OF EXCEEDANCES OF TPH-GRO MTCA METHOD A CLEANUP LEVEL IN GROUNDWATER, DASHED WHERE INFERRED
 - ▭ SUBJECT PROPERTY BOUNDARY
 - ▭ ADJACENT PARCEL BOUNDARY
- NOTES:
MTCA = MODEL TOXICS CONTROL ACT.
GRO = GASOLINE-RANGE ORGANICS.
TPH = TOTAL PETROLEUM HYDROCARBONS.

BASE MAP: KING COUNTY AERIAL (2021).
DATA SOURCES: ADDRESS INFORMATION OBTAINED FROM KING COUNTY GIS OPEN DATA PORTAL'S PARCEL ADDRESS AREA SHAPEFILE, PUBLISHED APRIL 4, 2019.
STORMWATER LINE DATA OBTAINED FROM CITY OF SEATTLE ARCGIS ONLINE DATA, UPDATED MARCH 23RD, 2022. HISTORICAL SITE FEATURES AND HISTORICAL SAMPLING LOCATIONS PROVIDED BY HARTCROWSER, JANUARY 2022.

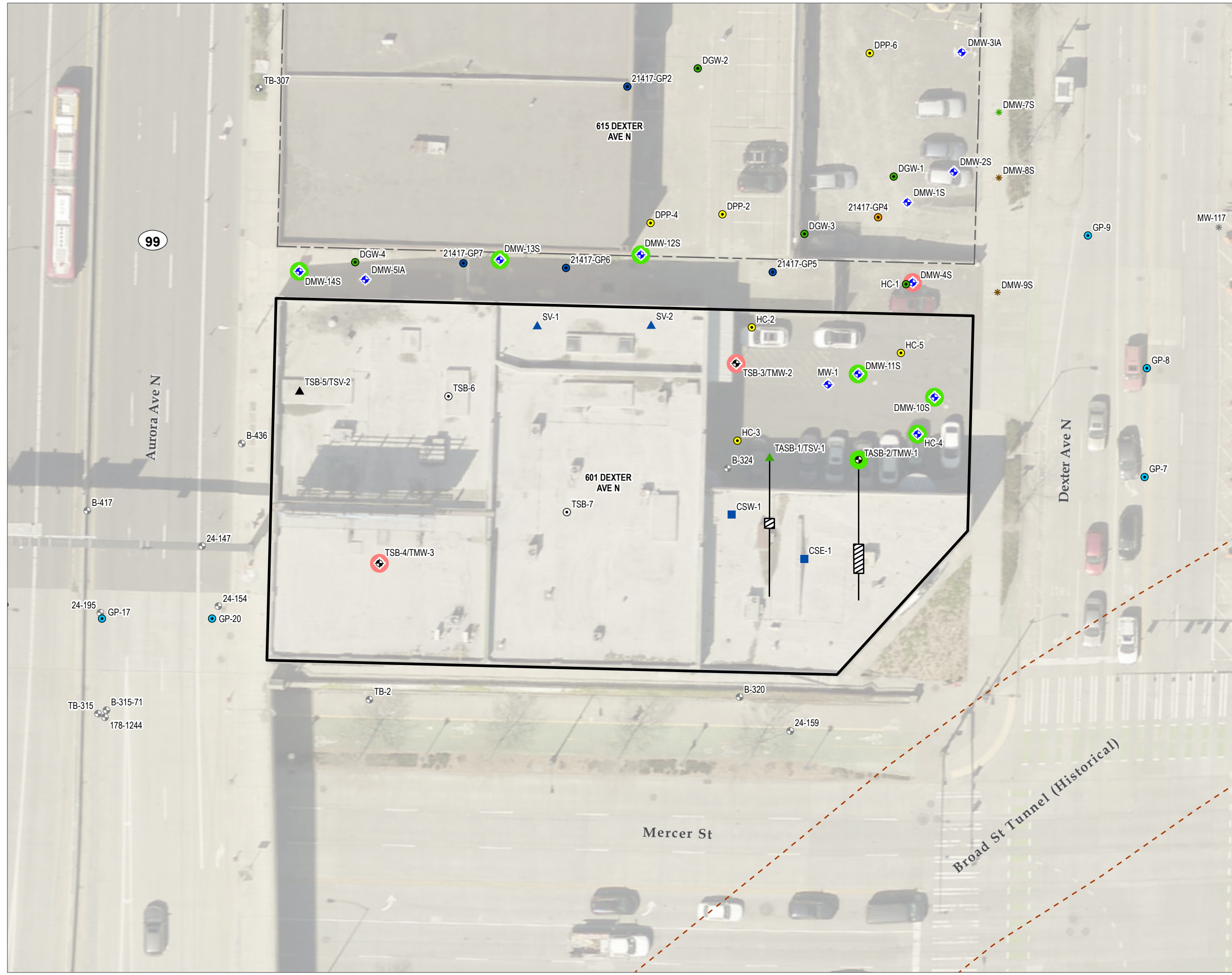


1:360
1" = 30'

0 30 60 FEET

PROJECT:		601 DEXTER SITE 601 DEXTER AVE NORTH SEATTLE, WASHINGTON	
TITLE:		GROUNDWATER ANALYTICAL RESULTS - TPH-GRO, MAY 3 AND 4, 2023 REMEDIAL INVESTIGATION WORK PLAN	
DRAWN BY:	R. COLLINS	PROJ. NO.:	380831.0003.0000
CHECKED BY:	R. OTTEMAN	FIGURE 11	
APPROVED BY:	R. OTTEMAN		
DATE:	FEBRUARY 2025		
		13810 SE EASTGATE WAY SUITE 440 BELLEVUE, WA 98005 PHONE: 425.395.0010	
FILE:		Remedial_Investigation_WP_20250214RC.aprx	

Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet, Map Rotation: 0
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LEGEND

- ABANDONED MONITORING WELL, HART CROWSER, 2019
- ABANDONED MONITORING WELL, HART CROWSER, 2020
- ABANDONED OR DECOMMISSIONED MONITORING WELL, SOUNDEARTH STRATEGIES, 2013
- ABANDONED OR DECOMMISSIONED MONITORING WELL, BLACK & VEATCH, 1997
- ANGLED BORING/SOIL VAPOR POINT, TRC, 2023
- ANGLED MONITORING WELL, TRC, 2023
- CRAWL SPACE AIR QUALITY SAMPLE, HART CROWSER, 2019
- MONITORING WELL, HART CROWSER, 2019
- MONITORING WELL, PES ENVIRONMENTAL, 2019
- MONITORING WELL, TRC, 2023
- PREVIOUS GEOTECHNICAL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR
- SOIL BORING, HART CROWSER, 2019
- SOIL BORING, SHANNON & WILSON, 1971
- SOIL BORING, SHANNON & WILSON, 2012
- SOIL BORING, SHANNON & WILSON, 2017
- SOIL BORING, TRC, 2023
- SOIL BORING, UNKNOWN CONSULTANT, UNKNOWN YEAR
- SOIL BORING WITH GRAB GROUNDWATER SAMPLE, HART CROWSER, 2019
- SOIL BORING WITH GRAB GROUNDWATER SAMPLE, SHANNON & WILSON, 2017
- SOIL VAPOR POINT, TRC, 2023
- SUBSLAB VAPOR SAMPLE, HART CROWSER, 2019
- ALL COMPOUND CONCENTRATIONS ARE LESS THAN THE MTCA METHOD A GROUNDWATER CLEANUP LEVEL
- COMPOUND CONCENTRATION EXCEEDS THE MTCA METHOD A GROUNDWATER CLEANUP LEVEL;
- APPROXIMATE FORMER EXTENT OF BROAD STREET (1958-2012)
- SUBJECT PROPERTY BOUNDARY
- ADJACENT PARCEL BOUNDARY

NOTES:
MTCA = MODEL TOXICS CONTROL ACT.
DRO = DIESEL-RANGE ORGANICS.
ORO = OIL-RANGE ORGANICS.
TPH = TOTAL PETROLEUM HYDROCARBONS.

BASE MAP: KING COUNTY AERIAL (2021).
DATA SOURCES: ADDRESS INFORMATION OBTAINED FROM KING COUNTY GIS OPEN DATA PORTAL'S PARCEL ADDRESS AREA SHAPEFILE, PUBLISHED APRIL 4, 2019. STORMWATER LINE DATA OBTAINED FROM CITY OF SEATTLE ARCGIS ONLINE DATA, UPDATED MARCH 23RD, 2022. HISTORICAL SITE FEATURES AND HISTORICAL SAMPLING LOCATIONS PROVIDED BY HARTCROWSER, JANUARY 2022.

1:360
1" = 30'

0 30 60 FEET

PROJECT: 601 DEXTER SITE
601 DEXTER AVE NORTH
SEATTLE, WASHINGTON

TITLE: GROUNDWATER ANALYTICAL RESULTS -
TPH-DRO AND TPH-ORO, MAY 2023 AND JULY 2023
REMEDIAL INVESTIGATION WORK PLAN

DRAWN BY: R. COLLINS **PROJ. NO.:** 380831.0003.0000

CHECKED BY: R. OTTEMAN

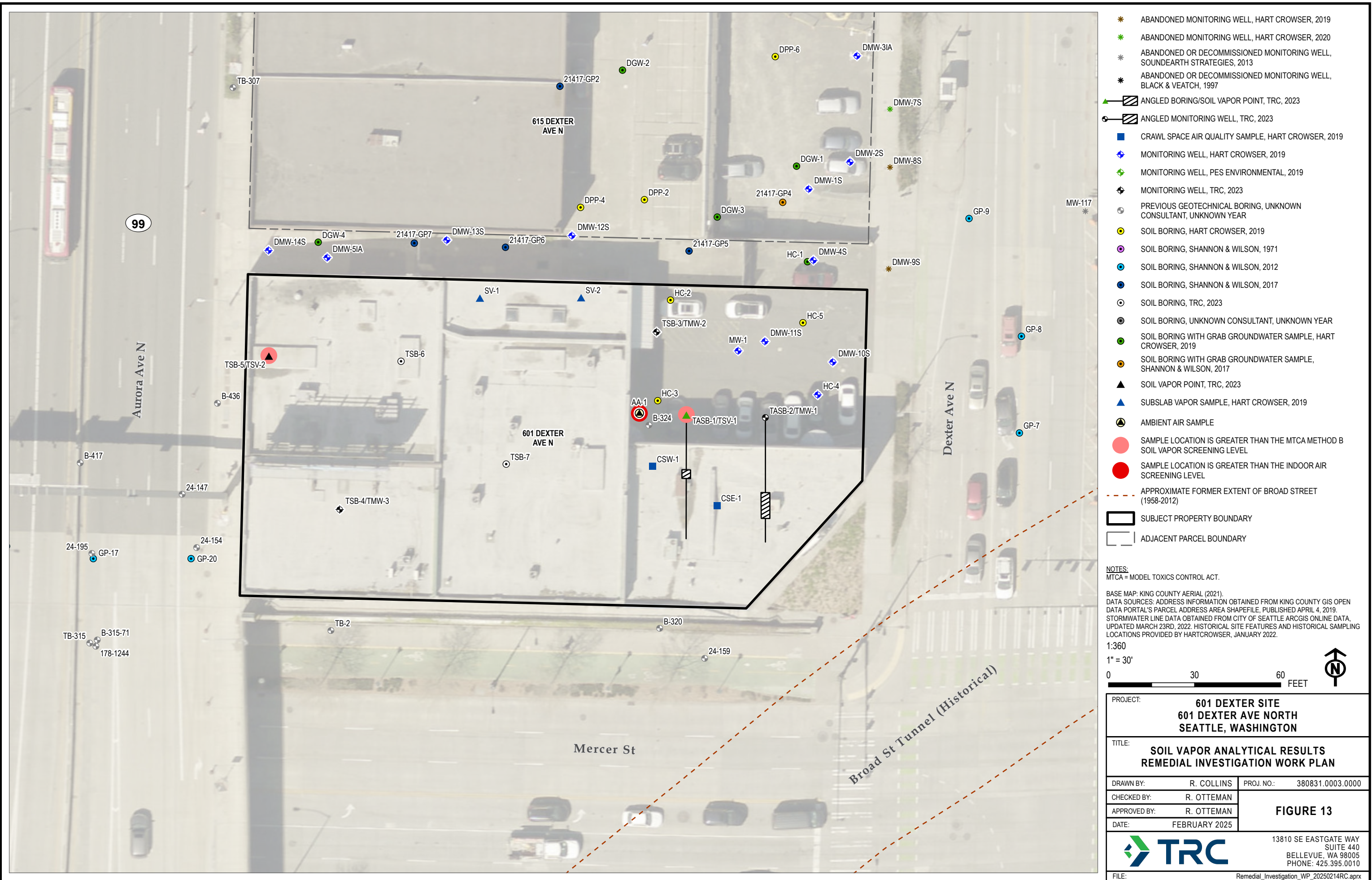
APPROVED BY: R. OTTEMAN

DATE: JUNE 2025

FIGURE 12

TRC 13810 SE EASTGATE WAY
SUITE 440
BELLEVUE, WA 98005
PHONE: 425.395.0010

FILE: Remedial_Investigation_WP_20250214RC.aprx



Attachment A
Laboratory Reports

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

February 24, 2023

Jerry Boyd, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: ARE-Seattle No 32 380831, F&BI 302281

Dear Mr Boyd:

Included are the results from the testing of material submitted on February 20, 2023 from the ARE-Seattle No 32 380831 196954, F&BI 302281 project. There are 10 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: Cynthia Moon
TRC0224R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 20, 2023 by Friedman & Bruya, Inc. from the TRC Environmental ARE-Seattle No 32 380831, F&BI 302281 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
302281-01	TASB-1:2
302281-02	TASB-1:5
302281-03	TASB-1:10
302281-04	TASB-1:15
302281-05	TASB-1:20
302281-06	TASB-1:25
302281-07	TASB-1:30
302281-08	TASB-1:35
302281-09	TASB-1:40
302281-10	TASB-1:45
302281-11	TASB-1:50

The 8260D matrix spike and matrix spike duplicate failed the relative percent difference for bromomethane. The analyte was not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/24/23

Date Received: 02/20/23

Project: ARE-Seattle No 32 380831, F&BI 302281

Date Extracted: 02/21/23

Date Analyzed: 02/21/23

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID**

Results Reported on a Dry Weight Basis

Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE
WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION
WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 50-150)
TASB-1:2 302281-01	ND	ND	ND	94
TASB-1:10 302281-03	ND	ND	ND	94
TASB-1:20 302281-05	ND	ND	ND	92
TASB-1:30 302281-07	ND	ND	ND	95
TASB-1:40 302281-09	ND	ND	ND	94
TASB-1:50 302281-11	ND	ND	ND	96
Method Blank 03-448 MB2	ND	ND	ND	98

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	TASB-1:2	Client:	TRC Environmental
Date Received:	02/20/23	Project:	ARE-Seattle No 32 380831
Date Extracted:	02/22/23	Lab ID:	302281-01
Date Analyzed:	02/22/23	Data File:	022218.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	90	109
Toluene-d8	102	89	112
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	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	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:	TASB-1:10	Client:	TRC Environmental
Date Received:	02/20/23	Project:	ARE-Seattle No 32 380831
Date Extracted:	02/22/23	Lab ID:	302281-03
Date Analyzed:	02/22/23	Data File:	022219.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	109
Toluene-d8	100	89	112
4-Bromofluorobenzene	98	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	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: TASB-1:20	Client: TRC Environmental
Date Received: 02/20/23	Project: ARE-Seattle No 32 380831
Date Extracted: 02/22/23	Lab ID: 302281-05
Date Analyzed: 02/22/23	Data File: 022220.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm) Dry Weight	Operator: lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	109
Toluene-d8	99	89	112
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	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	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: TASB-1:30	Client: TRC Environmental
Date Received: 02/20/23	Project: ARE-Seattle No 32 380831
Date Extracted: 02/22/23	Lab ID: 302281-07
Date Analyzed: 02/22/23	Data File: 022221.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm) Dry Weight	Operator: lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	90	109
Toluene-d8	101	89	112
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	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	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:	TRC Environmental
Date Received:	Not Applicable	Project:	ARE-Seattle No 32 380831
Date Extracted:	02/22/23	Lab ID:	03-0345 mb
Date Analyzed:	02/22/23	Data File:	022209.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	90	109
Toluene-d8	98	89	112
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	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	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: 02/24/23

Date Received: 02/20/23

Project: ARE-Seattle No 32 380831, F&BI 302281

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

Laboratory Code: 302281-05 (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	35	34	10-142	3
Chloromethane	mg/kg (ppm)	2	<0.5	68	65	10-126	5
Vinyl chloride	mg/kg (ppm)	2	<0.05	70	65	10-138	7
Bromomethane	mg/kg (ppm)	2	<0.5	118	65	10-163	58 vo
Chloroethane	mg/kg (ppm)	2	<0.5	87	79	10-176	10
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	84	81	10-176	4
Acetone	mg/kg (ppm)	10	<5	102	94	10-163	8
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	93	88	10-160	6
Hexane	mg/kg (ppm)	2	<0.25	81	76	10-137	6
Methylene chloride	mg/kg (ppm)	2	<0.5	102	92	10-156	10
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	103	98	21-145	5
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	95	90	14-137	5
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	95	91	19-140	4
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	104	101	10-158	3
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	101	96	25-135	5
Chloroform	mg/kg (ppm)	2	<0.05	102	97	21-145	5
2-Butanone (MEK)	mg/kg (ppm)	10	<1	99	92	19-147	7
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	100	94	12-160	6
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	101	98	10-156	3
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	99	92	17-140	7
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	97	94	9-164	3
Benzene	mg/kg (ppm)	2	<0.03	101	96	29-129	5
Trichloroethene	mg/kg (ppm)	2	<0.02	98	94	21-139	4
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	95	89	30-135	7
Bromodichloromethane	mg/kg (ppm)	2	<0.05	100	96	23-155	4
Dibromomethane	mg/kg (ppm)	2	<0.05	100	96	23-145	4
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	104	99	24-155	5
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	101	95	28-144	6
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	93	87	10-205	7
2-Hexanone	mg/kg (ppm)	10	<5	101	93	15-166	8
1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	99	94	31-137	5
Tetrachloroethene	mg/kg (ppm)	2	<0.025	104	99	20-133	5
Dibromochloromethane	mg/kg (ppm)	2	<0.05	93	88	28-150	6
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	96	90	28-142	6
Chlorobenzene	mg/kg (ppm)	2	<0.05	100	95	32-129	5
Ethylbenzene	mg/kg (ppm)	2	<0.05	102	97	32-137	5
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	99	95	31-143	4
m,p-Xylene	mg/kg (ppm)	4	<0.1	102	97	34-136	5
o-Xylene	mg/kg (ppm)	2	<0.05	103	97	33-134	6
Styrene	mg/kg (ppm)	2	<0.05	101	96	35-137	5
Isopropylbenzene	mg/kg (ppm)	2	<0.05	103	98	31-142	5
Bromoform	mg/kg (ppm)	2	<0.05	100	95	21-156	5
n-Propylbenzene	mg/kg (ppm)	2	<0.05	101	98	23-146	3
Bromobenzene	mg/kg (ppm)	2	<0.05	103	100	34-130	3
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	102	99	18-149	3
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	101	98	28-140	3
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	99	95	25-144	4
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	100	98	31-134	2
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	99	96	31-136	3
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	103	100	30-137	3
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	102	100	10-182	2
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	101	99	23-145	2
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	102	99	21-149	3
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	104	100	30-131	4
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	104	99	29-129	5
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	104	101	31-132	3
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	96	96	11-161	0
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	107	105	22-142	2
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	101	106	10-142	5
Naphthalene	mg/kg (ppm)	2	<0.05	106	105	14-157	1
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	106	104	20-144	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/24/23

Date Received: 02/20/23

Project: ARE-Seattle No 32 380831, F&BI 302281

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	53	10-146
Chloromethane	mg/kg (ppm)	2	78	27-133
Vinyl chloride	mg/kg (ppm)	2	81	22-139
Bromomethane	mg/kg (ppm)	2	82	38-114
Chloroethane	mg/kg (ppm)	2	92	9-163
Trichlorofluoromethane	mg/kg (ppm)	2	96	10-196
Acetone	mg/kg (ppm)	10	94	52-141
1,1-Dichloroethene	mg/kg (ppm)	2	98	47-128
Hexane	mg/kg (ppm)	2	99	43-142
Methylene chloride	mg/kg (ppm)	2	101	10-184
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	104	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2	101	67-129
1,1-Dichloroethane	mg/kg (ppm)	2	98	68-115
2,2-Dichloropropane	mg/kg (ppm)	2	115	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2	103	72-127
Chloroform	mg/kg (ppm)	2	103	66-120
2-Butanone (MEK)	mg/kg (ppm)	10	94	30-197
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	104	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	105	62-131
1,1-Dichloropropene	mg/kg (ppm)	2	102	69-128
Carbon tetrachloride	mg/kg (ppm)	2	102	60-139
Benzene	mg/kg (ppm)	2	104	71-118
Trichloroethene	mg/kg (ppm)	2	98	63-121
1,2-Dichloropropane	mg/kg (ppm)	2	96	72-127
Bromodichloromethane	mg/kg (ppm)	2	105	57-126
Dibromomethane	mg/kg (ppm)	2	104	62-123
4-Methyl-2-pentanone	mg/kg (ppm)	10	104	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2	103	67-122
Toluene	mg/kg (ppm)	2	100	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2	102	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2	95	64-115
2-Hexanone	mg/kg (ppm)	10	99	33-152
1,3-Dichloropropane	mg/kg (ppm)	2	101	72-130
Tetrachloroethene	mg/kg (ppm)	2	107	72-114
Dibromochloromethane	mg/kg (ppm)	2	96	55-121
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	97	74-132
Chlorobenzene	mg/kg (ppm)	2	102	76-111
Ethylbenzene	mg/kg (ppm)	2	104	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	99	64-121
m,p-Xylene	mg/kg (ppm)	4	103	78-122
o-Xylene	mg/kg (ppm)	2	102	77-124
Styrene	mg/kg (ppm)	2	101	74-126
Isopropylbenzene	mg/kg (ppm)	2	104	76-127
Bromoform	mg/kg (ppm)	2	103	56-132
n-Propylbenzene	mg/kg (ppm)	2	106	74-124
Bromobenzene	mg/kg (ppm)	2	108	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	108	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	107	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2	105	61-137
2-Chlorotoluene	mg/kg (ppm)	2	106	74-121
4-Chlorotoluene	mg/kg (ppm)	2	104	75-122
tert-Butylbenzene	mg/kg (ppm)	2	107	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	106	76-125
sec-Butylbenzene	mg/kg (ppm)	2	108	71-130
p-Isopropyltoluene	mg/kg (ppm)	2	107	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2	107	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2	107	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2	107	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	104	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	109	64-135
Hexachlorobutadiene	mg/kg (ppm)	2	112	50-153
Naphthalene	mg/kg (ppm)	2	104	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	107	63-138

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 high; 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

02/20/23

VS-B3/E2

Page # 1 of 2

302281 Jerry BORD

Report To
Company TRC
Address 1180 NW Maple Street, Suite 310
City, State, ZIP Issaquah, WA, 98027
Phone 425-395-0010 Email jborde@trccompanies.com

SAMPLERS (signature) *EW*

PROJECT NAME
ARE-Seattle No. 32
380831

PO #

196954

REMARKS

INVOICE TO *TRC*

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				
TASB-1:2	01A-E	2/20/23	0930	Soil	5				X	X						Archive
TASB-1:5	02		0935						X	X						
TASB-1:10	03		0935						X	X						Archive
TASB-1:15	04		0950						X	X						
TASB-1:20	05		0954						X	X						Archive
TASB-1:25	06		0958						X	X						
TASB-1:30	07		1018						X	X						Archive
TASB-1:35	08		1021						X							
TASB-1:40	09		1028													Archive
TASB-1:45	10		1034													

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>EW</i>	EVAN MILLER	TRC	2/20/23	1404
Received by: <i>Ann</i>	ANN WUB	FRP	2/20/23	1404
Relinquished by:		Samples received at 0°C		
Received by:				

SAMPLE CHAIN OF CUSTODY

02/20/23 VS-B3/E2

302281

Report to Serry Boyd

Company TRC

Address 1180 NW Maple St, Suite 300

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email JBoyd@trccomp.com

SAMPLERS (signature)

PROJECT NAME
ARE - Seattle No. 32

PO #

380381

REMARKS

INVOICE TO

Project specific RLs? - Yes / No

Page # 2 of 2

TURNAROUND TIME

☒ Standard turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

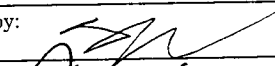
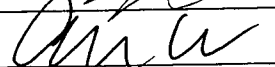
☒ Archive samples

☐ 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				
TASB-1:50	11A-E	2/20/23	1037	Soil	5				X							

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Evan Miller	TRC	2/20/23	1404
Received by: 	Ann V.B.	FRB	2/20/23	1704
Relinquished by:		Samples received at <u>0</u> °C		
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

March 1, 2023

Jerry Boyd, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: ARE Seattle No 32 380831 196954, F&BI 302301

Dear Mr Boyd:

Included are the results from the testing of material submitted on February 21, 2023 from the ARE Seattle No 32 380831 196954, F&BI 302301 project. There are 15 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: Cynthia Moon
TRC0301R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 21, 2023 by Friedman & Bruya, Inc. from the TRC Environmental ARE Seattle No 32 380831 196954, F&BI 302301 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
302301-01	TASB-2:02
302301-02	TASB-2:05
302301-03	TASB-2:11
302301-04	TASB-2:16
302301-05	TASB-2:22
302301-06	TASB-2:25
302301-07	TASB-2:31
302301-08	TASB-2:35
302301-09	TASB-2:39
302301-10	TASB-2:45
302301-11	TASB-2:50
302301-12	TSB-3:02
302301-13	TSB-3:05
302301-14	TSB-3:10
302301-15	TSB-3:14
302301-16	TSB-3:17
302301-17	TSB-3:22
302301-18	TSB-3:25
302301-19	TSB-3:31
302301-20	TSB-3:38
302301-21	TSB-3:41
302301-22	TSB-3:45

The 8260D matrix spike and matrix spike duplicate failed the relative percent difference for bromomethane. The analyte was not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/01/23

Date Received: 02/21/23

Project: ARE Seattle No 32 380831 196954, F&BI 302301

Date Extracted: 02/22/23

Date Analyzed: 02/22/23

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID**

Results Reported on a Dry Weight Basis

Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE
WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION
WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 50-150)
TASB-2:02 302301-01	ND	ND	ND	92
TASB-2:11 302301-03	ND	ND	ND	98
TASB-2:22 302301-05	ND	ND	ND	99
TASB-2:31 302301-07	ND	ND	ND	98
TASB-2:39 302301-09	ND	ND	ND	100
TSB-3:02 302301-12	ND	ND	ND	97
TSB-3:10 302301-14	ND	ND	ND	98
TSB-3:22 302301-17	ND	ND	ND	99
TSB-3:31 302301-19	ND	ND	ND	100
TSB-3:38 302301-20	ND	ND	ND	99

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/01/23

Date Received: 02/21/23

Project: ARE Seattle No 32 380831 196954, F&BI 302301

Date Extracted: 02/22/23

Date Analyzed: 02/22/23

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID**

Results Reported on a Dry Weight Basis

Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE
WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION
WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 50-150)
TSB-3:45 302301-22	ND	ND	ND	101
Method Blank 03-482 MB	ND	ND	ND	103

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	TASB-2:02	Client:	TRC Environmental
Date Received:	02/21/23	Project:	ARE Seattle No 32 380831
Date Extracted:	02/22/23	Lab ID:	302301-01
Date Analyzed:	02/22/23	Data File:	022222.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	90	109
Toluene-d8	100	89	112
4-Bromofluorobenzene	98	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	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:	TASB-2:11	Client:	TRC Environmental
Date Received:	02/21/23	Project:	ARE Seattle No 32 380831
Date Extracted:	02/22/23	Lab ID:	302301-03
Date Analyzed:	02/22/23	Data File:	022223.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	90	109
Toluene-d8	99	89	112
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	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	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: TASB-2:22	Client: TRC Environmental
Date Received: 02/21/23	Project: ARE Seattle No 32 380831
Date Extracted: 02/22/23	Lab ID: 302301-05
Date Analyzed: 02/22/23	Data File: 022224.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm) Dry Weight	Operator: lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	90	109
Toluene-d8	97	89	112
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	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:	TASB-2:31	Client:	TRC Environmental
Date Received:	02/21/23	Project:	ARE Seattle No 32 380831
Date Extracted:	02/22/23	Lab ID:	302301-07
Date Analyzed:	02/22/23	Data File:	022225.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	90	109
Toluene-d8	102	89	112
4-Bromofluorobenzene	98	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	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:	TSB-3:02	Client:	TRC Environmental
Date Received:	02/21/23	Project:	ARE Seattle No 32 380831
Date Extracted:	02/22/23	Lab ID:	302301-12
Date Analyzed:	02/22/23	Data File:	022226.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	109
Toluene-d8	97	89	112
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	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	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: TSB-3:10	Client: TRC Environmental
Date Received: 02/21/23	Project: ARE Seattle No 32 380831
Date Extracted: 02/22/23	Lab ID: 302301-14
Date Analyzed: 02/22/23	Data File: 022227.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm) Dry Weight	Operator: lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	90	109
Toluene-d8	100	89	112
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	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	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: TSB-3:22	Client: TRC Environmental
Date Received: 02/21/23	Project: ARE Seattle No 32 380831
Date Extracted: 02/22/23	Lab ID: 302301-17
Date Analyzed: 02/22/23	Data File: 022228.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm) Dry Weight	Operator: lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	90	109
Toluene-d8	100	89	112
4-Bromofluorobenzene	98	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	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:	TSB-3:31	Client:	TRC Environmental
Date Received:	02/21/23	Project:	ARE Seattle No 32 380831
Date Extracted:	02/22/23	Lab ID:	302301-19
Date Analyzed:	02/22/23	Data File:	022229.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	90	109
Toluene-d8	100	89	112
4-Bromofluorobenzene	98	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	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:	TRC Environmental
Date Received:	Not Applicable	Project:	ARE Seattle No 32 380831
Date Extracted:	02/22/23	Lab ID:	03-0345 mb
Date Analyzed:	02/22/23	Data File:	022209.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	90	109
Toluene-d8	98	89	112
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	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	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: 03/01/23

Date Received: 02/21/23

Project: ARE Seattle No 32 380831 196954, F&BI 302301

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

Laboratory Code: 302281-05 (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	35	34	10-142	3
Chloromethane	mg/kg (ppm)	2	<0.5	68	65	10-126	5
Vinyl chloride	mg/kg (ppm)	2	<0.05	70	65	10-138	7
Bromomethane	mg/kg (ppm)	2	<0.5	118	65	10-163	58 vo
Chloroethane	mg/kg (ppm)	2	<0.5	87	79	10-176	10
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	84	81	10-176	4
Acetone	mg/kg (ppm)	10	<5	102	94	10-163	8
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	93	88	10-160	6
Hexane	mg/kg (ppm)	2	<0.25	81	76	10-137	6
Methylene chloride	mg/kg (ppm)	2	<0.5	102	92	10-156	10
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	103	98	21-145	5
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	95	90	14-137	5
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	95	91	19-140	4
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	104	101	10-158	3
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	101	96	25-135	5
Chloroform	mg/kg (ppm)	2	<0.05	102	97	21-145	5
2-Butanone (MEK)	mg/kg (ppm)	10	<1	99	92	19-147	7
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	100	94	12-160	6
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	101	98	10-156	3
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	99	92	17-140	7
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	97	94	9-164	3
Benzene	mg/kg (ppm)	2	<0.03	101	96	29-129	5
Trichloroethene	mg/kg (ppm)	2	<0.02	98	94	21-139	4
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	95	89	30-135	7
Bromodichloromethane	mg/kg (ppm)	2	<0.05	100	96	23-155	4
Dibromomethane	mg/kg (ppm)	2	<0.05	100	96	23-145	4
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	104	99	24-155	5
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	101	95	28-144	6
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	93	87	10-205	7
2-Hexanone	mg/kg (ppm)	10	<5	101	93	15-166	8
1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	99	94	31-137	5
Tetrachloroethene	mg/kg (ppm)	2	<0.025	104	99	20-133	5
Dibromochloromethane	mg/kg (ppm)	2	<0.05	93	88	28-150	6
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	96	90	28-142	6
Chlorobenzene	mg/kg (ppm)	2	<0.05	100	95	32-129	5
Ethylbenzene	mg/kg (ppm)	2	<0.05	102	97	32-137	5
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	99	95	31-143	4
m,p-Xylene	mg/kg (ppm)	4	<0.1	102	97	34-136	5
o-Xylene	mg/kg (ppm)	2	<0.05	103	97	33-134	6
Styrene	mg/kg (ppm)	2	<0.05	101	96	35-137	5
Isopropylbenzene	mg/kg (ppm)	2	<0.05	103	98	31-142	5
Bromoform	mg/kg (ppm)	2	<0.05	100	95	21-156	5
n-Propylbenzene	mg/kg (ppm)	2	<0.05	101	98	23-146	3
Bromobenzene	mg/kg (ppm)	2	<0.05	103	100	34-130	3
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	102	99	18-149	3
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	101	98	28-140	3
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	99	95	25-144	4
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	100	98	31-134	2
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	99	96	31-136	3
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	103	100	30-137	3
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	102	100	10-182	2
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	101	99	23-145	2
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	102	99	21-149	3
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	104	100	30-131	4
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	104	99	29-129	5
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	104	101	31-132	3
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	96	96	11-161	0
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	107	105	22-142	2
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	101	106	10-142	5
Naphthalene	mg/kg (ppm)	2	<0.05	106	105	14-157	1
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	106	104	20-144	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/01/23

Date Received: 02/21/23

Project: ARE Seattle No 32 380831 196954, F&BI 302301

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	53	10-146
Chloromethane	mg/kg (ppm)	2	78	27-133
Vinyl chloride	mg/kg (ppm)	2	81	22-139
Bromomethane	mg/kg (ppm)	2	82	38-114
Chloroethane	mg/kg (ppm)	2	92	9-163
Trichlorofluoromethane	mg/kg (ppm)	2	96	10-196
Acetone	mg/kg (ppm)	10	94	52-141
1,1-Dichloroethene	mg/kg (ppm)	2	98	47-128
Hexane	mg/kg (ppm)	2	99	43-142
Methylene chloride	mg/kg (ppm)	2	101	10-184
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	104	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2	101	67-129
1,1-Dichloroethane	mg/kg (ppm)	2	98	68-115
2,2-Dichloropropane	mg/kg (ppm)	2	115	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2	103	72-127
Chloroform	mg/kg (ppm)	2	103	66-120
2-Butanone (MEK)	mg/kg (ppm)	10	94	30-197
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	104	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	105	62-131
1,1-Dichloropropene	mg/kg (ppm)	2	102	69-128
Carbon tetrachloride	mg/kg (ppm)	2	102	60-139
Benzene	mg/kg (ppm)	2	104	71-118
Trichloroethene	mg/kg (ppm)	2	98	63-121
1,2-Dichloropropane	mg/kg (ppm)	2	96	72-127
Bromodichloromethane	mg/kg (ppm)	2	105	57-126
Dibromomethane	mg/kg (ppm)	2	104	62-123
4-Methyl-2-pentanone	mg/kg (ppm)	10	104	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2	103	67-122
Toluene	mg/kg (ppm)	2	100	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2	102	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2	95	64-115
2-Hexanone	mg/kg (ppm)	10	99	33-152
1,3-Dichloropropane	mg/kg (ppm)	2	101	72-130
Tetrachloroethene	mg/kg (ppm)	2	107	72-114
Dibromochloromethane	mg/kg (ppm)	2	96	55-121
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	97	74-132
Chlorobenzene	mg/kg (ppm)	2	102	76-111
Ethylbenzene	mg/kg (ppm)	2	104	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	99	64-121
m,p-Xylene	mg/kg (ppm)	4	103	78-122
o-Xylene	mg/kg (ppm)	2	102	77-124
Styrene	mg/kg (ppm)	2	101	74-126
Isopropylbenzene	mg/kg (ppm)	2	104	76-127
Bromoform	mg/kg (ppm)	2	103	56-132
n-Propylbenzene	mg/kg (ppm)	2	106	74-124
Bromobenzene	mg/kg (ppm)	2	108	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	108	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	107	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2	105	61-137
2-Chlorotoluene	mg/kg (ppm)	2	106	74-121
4-Chlorotoluene	mg/kg (ppm)	2	104	75-122
tert-Butylbenzene	mg/kg (ppm)	2	107	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	106	76-125
sec-Butylbenzene	mg/kg (ppm)	2	108	71-130
p-Isopropyltoluene	mg/kg (ppm)	2	107	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2	107	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2	107	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2	107	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	104	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	109	64-135
Hexachlorobutadiene	mg/kg (ppm)	2	112	50-153
Naphthalene	mg/kg (ppm)	2	104	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	107	63-138

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 high; 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.

302301

SAMPLE CHAIN OF CUSTODY

02/21/23

VS-B4/E4

Report To Jerry BoydCompany TRCAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone 425-395-6010 Email JBoyd@trccompanies.comSAMPLERS (signature) Miller ENPage # 1 of 3

PROJECT NAME

ARE Seattle No. 32

PO #

196954

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				
TASB - 2:02	01 A-E	2/21/23	0903	Soil	5				X	X						
TASB - 2:05	02		0907													Archive
TASB - 2:11	03		0911						X	X						
TASB - 2:16	04		0943													Archive
TASB - 2:22	05		0954						X	X						
TASB - 2:25	06		1014						X	X						Archive
TASB - 2:31	07		1021						X	X						
TASB - 2:35	08		1022													Archive
TASB - 2:39	09		1027						X	X						
TASB - 2:45	10		1029													Archive

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>EN</u>	<u>EVAN MILLER</u>	<u>TRC</u>	<u>2/21/23</u>	<u>1709</u>
Received by: <u>HONGUYEN</u>	<u>HONGUYEN</u>	<u>FDI</u>	<u>2/21/23</u>	<u>17:10</u>
Relinquished by:		Samples received at <u>4:00</u>		
Received by:				

302301

SAMPLE CHAIN OF CUSTODY

02/21/23

VS-B4/E4

Page # 2 of 3

Report To Jerry Boyd

Company TRC

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0100 Email JBoyd@trccompanies.com

SAMPLERS (signature)

PROJECT NAME

ARE Seattle No. 32

320831

REMARKS

PO #

196954

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				
TASB-2:50	11 A-E	2/21/23	10:33	Soil	5											Archive
TSB-3:02	12		14:48						X	X						
TSB-3:05	13		14:54													Archive
TSB-3:10	14		14:59						X	X						
TSB-3:14	15		15:03													Archive
TSB-3:17	16		15:07													Archive
TSB-3:22	17		15:10						X	X						
TSB-3:25	18		15:12													Archive
TSB-3:31	19		15:15						X	X						
TSB-3:38	20		15:19						X							

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Evan Miller	TRC	2/21/23	1709
Received by:	HONG NGUYEN	FBI	2/21/23	17:10
Relinquished by:		Samples received at 4 °C		
Received by:				

302301

Report To Jerry BoydCompany TRCAddress 1180 NW Maple street, Suite 310City, State, ZIP Issaquah, WA, 98027Phone 425-395-0010 Email JBoyd@TRCcompanies.com

SAMPLE CHAIN OF CUSTODY

02/21/23

VS-54/E4

Page # 3 of 3

SAMPLERS (signature)

[Signature]EM

PROJECT NAME

Air Seattle NO. 32
380831

PO #

196954

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				
TSB - 3:41	21A-E	2/21/23	15:25	Soil	5											Archive
TSB - 3:45	221	↓	15:29	↓	↓				X							

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>EM</u>	<u>Evan Miller</u>	<u>TRC</u>	<u>2/21/23</u>	<u>17:09</u>
Received by: <u>[Signature]</u>	<u>HONG NGUYEN</u>	<u>FBI</u>	<u>2/21/23</u>	<u>17:10</u>
Relinquished by:		Samples received at <u>4</u> °C		
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

April 11, 2023

Jerry Boyd, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: ARE-Seattle No 32 380831 196954, F&BI 304034

Dear Mr Boyd:

Included are the results from the testing of material submitted on April 4, 2023 from the ARE-Seattle No 32 380831 196954, F&BI 304034 project. There are 8 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: Cynthia Moon
TRC0411R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 4, 2023 by Friedman & Bruya, Inc. from the TRC Environmental ARE-Seattle No 32 380831 196954, F&BI 304034 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
304034-01	TSB-4:02
304034-02	TSB-4:05
304034-03	TSB-4:10

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: 04/11/23

Date Received: 04/04/23

Project: ARE-Seattle No 32 380831 196954, F&BI 304034

Date Extracted: 04/05/23

Date Analyzed: 04/05/23

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID**

Results Reported on a Dry Weight Basis

Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE
WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION
WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 50-150)
TSB-4:02 304034-01	ND	ND	ND	87
TSB-4:10 304034-03	ND	ND	ND	90
Method Blank 03-868 MB	ND	ND	ND	88

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	TSB-4:02	Client:	TRC Environmental
Date Received:	04/04/23	Project:	ARE-Seattle No 32 380831
Date Extracted:	04/07/23	Lab ID:	304034-01 1/0.25
Date Analyzed:	04/07/23	Data File:	040739.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	79	128
Toluene-d8	103	84	121
4-Bromofluorobenzene	89	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.001
Vinyl chloride	<0.001	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	<0.001	m,p-Xylene	<0.002
Hexane	<0.25	o-Xylene	<0.001
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.001	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	<0.001	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	<0.001	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	<0.005
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5 ca		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	TSB-4:10	Client:	TRC Environmental
Date Received:	04/04/23	Project:	ARE-Seattle No 32 380831
Date Extracted:	04/07/23	Lab ID:	304034-03 1/0.25
Date Analyzed:	04/07/23	Data File:	040740.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	103	84	121
4-Bromofluorobenzene	90	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.001
Vinyl chloride	<0.001	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	<0.001	m,p-Xylene	<0.002
Hexane	<0.25	o-Xylene	<0.001
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.001	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	<0.001	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	<0.001	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	<0.005
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5 ca		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	ARE-Seattle No 32 380831
Date Extracted:	04/07/23	Lab ID:	03-0716 mb 1/0.25
Date Analyzed:	04/07/23	Data File:	040708.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	79	128
Toluene-d8	103	84	121
4-Bromofluorobenzene	92	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.001
Vinyl chloride	<0.001	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.001	m,p-Xylene	<0.002
Hexane	<0.25	o-Xylene	<0.001
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.001	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	<0.001	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.002	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.001	sec-Butylbenzene	<0.05
Trichloroethene	<0.001	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	<0.005
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/11/23

Date Received: 04/04/23

Project: ARE-Seattle No 32 380831 196954, F&BI 304034

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

Laboratory Code: 304078-03 (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	36	34	10-142	6
Chloromethane	mg/kg (ppm)	2	<0.5	72	65	10-126	10
Vinyl chloride	mg/kg (ppm)	2	<0.05	81	73	10-138	10
Bromomethane	mg/kg (ppm)	2	<0.5	82	76	10-163	8
Chloroethane	mg/kg (ppm)	2	<0.5	84	77	10-176	9
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	73	66	10-176	10
Acetone	mg/kg (ppm)	10	<5	126	104	10-163	19
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	90	82	10-160	9
Hexane	mg/kg (ppm)	2	<0.25	93	84	10-137	10
Methylene chloride	mg/kg (ppm)	2	<0.5	98	86	10-156	13
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	99	89	21-145	11
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	99	90	14-137	10
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	101	93	19-140	8
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	97	89	10-158	9
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	100	90	25-135	11
Chloroform	mg/kg (ppm)	2	<0.05	96	86	21-145	11
2-Butanone (MEK)	mg/kg (ppm)	10	<1	110	99	19-147	11
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	98	88	12-160	11
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	94	86	10-156	9
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	101	92	17-140	9
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	94	84	9-164	11
Benzene	mg/kg (ppm)	2	<0.03	105	95	29-129	10
Trichloroethene	mg/kg (ppm)	2	<0.02	98	90	21-139	9
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	110	99	30-135	11
Bromodichloromethane	mg/kg (ppm)	2	<0.05	104	93	23-155	11
Dibromomethane	mg/kg (ppm)	2	<0.05	104	92	23-145	12
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	113	100	24-155	12
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	110	98	28-144	12
Toluene	mg/kg (ppm)	2	<0.05	99	89	35-130	11
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	101	92	26-149	9
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	102	93	10-205	9
2-Hexanone	mg/kg (ppm)	10	<5	102	93	15-166	9
1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	103	93	31-137	10
Tetrachloroethene	mg/kg (ppm)	2	<0.025	97	87	20-133	11
Dibromochloromethane	mg/kg (ppm)	2	<0.05	96	87	28-150	10
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	99	91	28-142	8
Chlorobenzene	mg/kg (ppm)	2	<0.05	99	90	32-129	10
Ethylbenzene	mg/kg (ppm)	2	<0.05	102	93	32-137	9
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	96	88	31-143	9
m,p-Xylene	mg/kg (ppm)	4	<0.1	101	91	34-136	10
o-Xylene	mg/kg (ppm)	2	<0.05	103	93	33-134	10
Styrene	mg/kg (ppm)	2	<0.05	105	94	35-137	11
Isopropylbenzene	mg/kg (ppm)	2	<0.05	103	93	31-142	10
Bromoform	mg/kg (ppm)	2	<0.05	98	89	21-156	10
n-Propylbenzene	mg/kg (ppm)	2	<0.05	104	95	23-146	9
Bromobenzene	mg/kg (ppm)	2	<0.05	101	92	34-130	9
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	106	95	18-149	11
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	105	98	28-140	7
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	100	93	25-144	7
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	102	94	31-134	8
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	103	93	31-136	10
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	104	95	30-137	9
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	105	94	10-182	11
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	106	96	23-145	10
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	106	96	21-149	10
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	100	91	30-131	9
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	99	91	29-129	8
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	102	92	31-132	10
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	92	84	11-161	9
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	99	87	22-142	13
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	99	88	10-142	12
Naphthalene	mg/kg (ppm)	2	<0.05	96	86	14-157	11
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	94	84	20-144	11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/11/23

Date Received: 04/04/23

Project: ARE-Seattle No 32 380831 196954, F&BI 304034

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	47	10-146
Chloromethane	mg/kg (ppm)	2	76	27-133
Vinyl chloride	mg/kg (ppm)	2	85	22-139
Bromomethane	mg/kg (ppm)	2	83	38-114
Chloroethane	mg/kg (ppm)	2	87	9-163
Trichlorofluoromethane	mg/kg (ppm)	2	75	10-196
Acetone	mg/kg (ppm)	10	118	52-141
1,1-Dichloroethene	mg/kg (ppm)	2	89	47-128
Hexane	mg/kg (ppm)	2	99	43-142
Methylene chloride	mg/kg (ppm)	2	92	10-184
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	95	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2	96	67-129
1,1-Dichloroethane	mg/kg (ppm)	2	100	68-115
2,2-Dichloropropane	mg/kg (ppm)	2	93	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2	95	72-127
Chloroform	mg/kg (ppm)	2	91	66-120
2-Butanone (MEK)	mg/kg (ppm)	10	102	30-197
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	93	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	91	62-131
1,1-Dichloropropene	mg/kg (ppm)	2	97	69-128
Carbon tetrachloride	mg/kg (ppm)	2	89	60-139
Benzene	mg/kg (ppm)	2	101	71-118
Trichloroethene	mg/kg (ppm)	2	95	63-121
1,2-Dichloropropane	mg/kg (ppm)	2	104	72-127
Bromodichloromethane	mg/kg (ppm)	2	98	57-126
Dibromomethane	mg/kg (ppm)	2	96	62-123
4-Methyl-2-pentanone	mg/kg (ppm)	10	106	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2	104	67-122
Toluene	mg/kg (ppm)	2	95	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2	97	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2	99	64-115
2-Hexanone	mg/kg (ppm)	10	98	33-152
1,3-Dichloropropane	mg/kg (ppm)	2	99	72-130
Tetrachloroethene	mg/kg (ppm)	2	91	72-114
Dibromochloromethane	mg/kg (ppm)	2	93	55-121
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	96	74-132
Chlorobenzene	mg/kg (ppm)	2	95	76-111
Ethylbenzene	mg/kg (ppm)	2	97	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	92	64-121
m,p-Xylene	mg/kg (ppm)	4	96	78-122
o-Xylene	mg/kg (ppm)	2	98	77-124
Styrene	mg/kg (ppm)	2	98	74-126
Isopropylbenzene	mg/kg (ppm)	2	97	76-127
Bromoform	mg/kg (ppm)	2	94	56-132
n-Propylbenzene	mg/kg (ppm)	2	99	74-124
Bromobenzene	mg/kg (ppm)	2	96	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	101	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	102	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2	98	61-137
2-Chlorotoluene	mg/kg (ppm)	2	99	74-121
4-Chlorotoluene	mg/kg (ppm)	2	97	75-122
tert-Butylbenzene	mg/kg (ppm)	2	100	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	99	76-125
sec-Butylbenzene	mg/kg (ppm)	2	100	71-130
p-Isopropyltoluene	mg/kg (ppm)	2	101	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2	95	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2	94	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2	97	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	88	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	91	64-135
Hexachlorobutadiene	mg/kg (ppm)	2	92	50-153
Naphthalene	mg/kg (ppm)	2	91	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	89	63-138

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 high; 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.

304034
[REDACTED] Jerry Boyd
Company TRC
Address 1150 NW Maple Suite 310
City, State, ZIP Issaquah, WA
Phone 425-348-0089 Email jboyd@trccompanies.com

~~SAMPLERS~~ (*signature*)

PROJECT NAME

ARE - Seattle No 32
(380831)

PO #

196954

REMARKS

INVOICE TO

Project specific RLs? - Yes / No

Page # 1 / 1 of 1

TURNAROUND TIME

☒ Standard turnaround

☐ RUSH.

Rush charges authorized by:

SAMPLE DISPOSAL

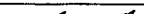
☒ Archive samples

☐ Other_

Default: Dispose after 30 days

[illegible]

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Michael Andrews	TRC	4/4/23	14:30
Received by: 	Minh Truong	F & BI	4/4/23	14:30
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

April 14, 2023

Jerry Boyd, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: ARE-Seattle No 32 380831 196954, F&BI 304065

Dear Mr Boyd:

Included are the results from the testing of material submitted on April 5, 2023 from the ARE-Seattle No 32 380831 196954, F&BI 304065 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: Cynthia Moon
TRC0414R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 5, 2023 by Friedman & Bruya, Inc. from the TRC Environmental ARE-Seattle No 32 380831 196954, F&BI 304065 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
304065-01	TSB-4:15
304065-02	TSB-4:21
304065-03	TSB-4:25
304065-04	TSB-4:30
304065-05	TSB-4:35
304065-06	TSB-4:40
304065-07	TSB-4:45

Several 8260D compounds failed below the acceptance criteria in the matrix spike samples. The laboratory control samples met the acceptance criteria, therefore the data were likely due to sample matrix effect.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/14/23

Date Received: 04/05/23

Project: ARE-Seattle No 32 380831 196954, F&BI 304065

Date Extracted: 04/06/23

Date Analyzed: 04/06/23

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID**

Results Reported on a Dry Weight Basis

Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE
WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION
WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 50-150)
TSB-4:15 304065-01	ND	ND	ND	85
TSB-4:25 304065-03	ND	ND	ND	85
TSB-4:35 304065-05	ND	ND	ND	84
TSB-4:45 304065-07	ND	ND	ND	79
Method Blank 03-868 MB2	ND	ND	ND	82

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	TSB-4:15	Client:	TRC Environmental
Date Received:	04/05/23	Project:	196954, F&BI 304065
Date Extracted:	04/11/23	Lab ID:	304065-01 1/0.25
Date Analyzed:	04/11/23	Data File:	041137.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	84	120
Toluene-d8	102	73	128
4-Bromofluorobenzene	101	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.002
Hexane	<0.25	o-Xylene	<0.001
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.002	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.001	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.001	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:	TSB-4:25	Client:	TRC Environmental
Date Received:	04/05/23	Project:	196954, F&BI 304065
Date Extracted:	04/07/23	Lab ID:	304065-03 1/0.25
Date Analyzed:	04/07/23	Data File:	040736.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	79	128
Toluene-d8	100	84	121
4-Bromofluorobenzene	91	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.001
Vinyl chloride	<0.001	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	<0.001	m,p-Xylene	<0.002
Hexane	<0.25	o-Xylene	<0.001
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.001	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	<0.001	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	<0.001	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	<0.005
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5 ca		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	TSB-4:35	Client:	TRC Environmental
Date Received:	04/05/23	Project:	196954, F&BI 304065
Date Extracted:	04/07/23	Lab ID:	304065-05 1/0.25
Date Analyzed:	04/07/23	Data File:	040737.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	79	128
Toluene-d8	102	84	121
4-Bromofluorobenzene	92	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.001
Vinyl chloride	<0.001	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	<0.001	m,p-Xylene	<0.002
Hexane	<0.25	o-Xylene	<0.001
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.001	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	<0.001	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	<0.001	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	<0.005
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5 ca		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	TSB-4:45	Client:	TRC Environmental
Date Received:	04/05/23	Project:	196954, F&BI 304065
Date Extracted:	04/07/23	Lab ID:	304065-07 1/0.25
Date Analyzed:	04/07/23	Data File:	040738.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	79	128
Toluene-d8	96	84	121
4-Bromofluorobenzene	90	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.001
Vinyl chloride	<0.001	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	<0.001	m,p-Xylene	<0.002
Hexane	<0.25	o-Xylene	<0.001
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.001	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	<0.001	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	<0.001	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	<0.005
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5 ca		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	196954, F&BI 304065
Date Extracted:	04/07/23	Lab ID:	03-0716 mb 1/0.25
Date Analyzed:	04/07/23	Data File:	040708.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	79	128
Toluene-d8	103	84	121
4-Bromofluorobenzene	92	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.001
Vinyl chloride	<0.001	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.001	m,p-Xylene	<0.002
Hexane	<0.25	o-Xylene	<0.001
Methylene chloride	<0.2	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.001	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	<0.001	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.002	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.001	sec-Butylbenzene	<0.05
Trichloroethene	<0.001	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	<0.005
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:	TRC Environmental
Date Received:	Not Applicable	Project:	196954, F&BI 304065
Date Extracted:	04/11/23	Lab ID:	03-0722 mb 1/0.25
Date Analyzed:	04/11/23	Data File:	041110.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	84	120
Toluene-d8	102	73	128
4-Bromofluorobenzene	102	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.002
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	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: 04/14/23

Date Received: 04/05/23

Project: ARE-Seattle No 32 380831 196954, F&BI 304065

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

Laboratory Code: 304078-03 (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	36	34	10-142	6
Chloromethane	mg/kg (ppm)	2	<0.5	72	65	10-126	10
Vinyl chloride	mg/kg (ppm)	2	<0.05	81	73	10-138	10
Bromomethane	mg/kg (ppm)	2	<0.5	82	76	10-163	8
Chloroethane	mg/kg (ppm)	2	<0.5	84	77	10-176	9
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	73	66	10-176	10
Acetone	mg/kg (ppm)	10	<5	126	104	10-163	19
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	90	82	10-160	9
Hexane	mg/kg (ppm)	2	<0.25	93	84	10-137	10
Methylene chloride	mg/kg (ppm)	2	<0.5	98	86	10-156	13
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	99	89	21-145	11
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	99	90	14-137	10
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	101	93	19-140	8
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	97	89	10-158	9
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	100	90	25-135	11
Chloroform	mg/kg (ppm)	2	<0.05	96	86	21-145	11
2-Butanone (MEK)	mg/kg (ppm)	10	<1	110	99	19-147	11
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	98	88	12-160	11
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	94	86	10-156	9
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	101	92	17-140	9
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	94	84	9-164	11
Benzene	mg/kg (ppm)	2	<0.03	105	95	29-129	10
Trichloroethene	mg/kg (ppm)	2	<0.02	98	90	21-139	9
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	110	99	30-135	11
Bromodichloromethane	mg/kg (ppm)	2	<0.05	104	93	23-155	11
Dibromomethane	mg/kg (ppm)	2	<0.05	104	92	23-145	12
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	113	100	24-155	12
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	110	98	28-144	12
Toluene	mg/kg (ppm)	2	<0.05	99	89	35-130	11
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	101	92	26-149	9
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	102	93	10-205	9
2-Hexanone	mg/kg (ppm)	10	<5	102	93	15-166	9
1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	103	93	31-137	10
Tetrachloroethene	mg/kg (ppm)	2	<0.025	97	87	20-133	11
Dibromochloromethane	mg/kg (ppm)	2	<0.05	96	87	28-150	10
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	99	91	28-142	8
Chlorobenzene	mg/kg (ppm)	2	<0.05	99	90	32-129	10
Ethylbenzene	mg/kg (ppm)	2	<0.05	102	93	32-137	9
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	96	88	31-143	9
m,p-Xylene	mg/kg (ppm)	4	<0.1	101	91	34-136	10
o-Xylene	mg/kg (ppm)	2	<0.05	103	93	33-134	10
Styrene	mg/kg (ppm)	2	<0.05	105	94	35-137	11
Isopropylbenzene	mg/kg (ppm)	2	<0.05	103	93	31-142	10
Bromoform	mg/kg (ppm)	2	<0.05	98	89	21-156	10
n-Propylbenzene	mg/kg (ppm)	2	<0.05	104	95	23-146	9
Bromobenzene	mg/kg (ppm)	2	<0.05	101	92	34-130	9
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	106	95	18-149	11
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	105	98	28-140	7
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	100	93	25-144	7
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	102	94	31-134	8
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	103	93	31-136	10
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	104	95	30-137	9
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	105	94	10-182	11
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	106	96	23-145	10
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	106	96	21-149	10
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	100	91	30-131	9
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	99	91	29-129	8
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	102	92	31-132	10
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	92	84	11-161	9
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	99	87	22-142	13
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	99	88	10-142	12
Naphthalene	mg/kg (ppm)	2	<0.05	96	86	14-157	11
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	94	84	20-144	11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/14/23

Date Received: 04/05/23

Project: ARE-Seattle No 32 380831 196954, F&BI 304065

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	47	10-146
Chloromethane	mg/kg (ppm)	2	76	27-133
Vinyl chloride	mg/kg (ppm)	2	85	22-139
Bromomethane	mg/kg (ppm)	2	83	38-114
Chloroethane	mg/kg (ppm)	2	87	9-163
Trichlorofluoromethane	mg/kg (ppm)	2	75	10-196
Acetone	mg/kg (ppm)	10	118	52-141
1,1-Dichloroethene	mg/kg (ppm)	2	89	47-128
Hexane	mg/kg (ppm)	2	99	43-142
Methylene chloride	mg/kg (ppm)	2	92	10-184
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	95	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2	96	67-129
1,1-Dichloroethane	mg/kg (ppm)	2	100	68-115
2,2-Dichloropropane	mg/kg (ppm)	2	93	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2	95	72-127
Chloroform	mg/kg (ppm)	2	91	66-120
2-Butanone (MEK)	mg/kg (ppm)	10	102	30-197
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	93	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	91	62-131
1,1-Dichloropropene	mg/kg (ppm)	2	97	69-128
Carbon tetrachloride	mg/kg (ppm)	2	89	60-139
Benzene	mg/kg (ppm)	2	101	71-118
Trichloroethene	mg/kg (ppm)	2	95	63-121
1,2-Dichloropropane	mg/kg (ppm)	2	104	72-127
Bromodichloromethane	mg/kg (ppm)	2	98	57-126
Dibromomethane	mg/kg (ppm)	2	96	62-123
4-Methyl-2-pentanone	mg/kg (ppm)	10	106	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2	104	67-122
Toluene	mg/kg (ppm)	2	95	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2	97	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2	99	64-115
2-Hexanone	mg/kg (ppm)	10	98	33-152
1,3-Dichloropropene	mg/kg (ppm)	2	99	72-130
Tetrachloroethene	mg/kg (ppm)	2	91	72-114
Dibromochloromethane	mg/kg (ppm)	2	93	55-121
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	96	74-132
Chlorobenzene	mg/kg (ppm)	2	95	76-111
Ethylbenzene	mg/kg (ppm)	2	97	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	92	64-121
m,p-Xylene	mg/kg (ppm)	4	96	78-122
o-Xylene	mg/kg (ppm)	2	98	77-124
Styrene	mg/kg (ppm)	2	98	74-126
Isopropylbenzene	mg/kg (ppm)	2	97	76-127
Bromoform	mg/kg (ppm)	2	94	56-132
n-Propylbenzene	mg/kg (ppm)	2	99	74-124
Bromobenzene	mg/kg (ppm)	2	96	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	101	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	102	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2	98	61-137
2-Chlorotoluene	mg/kg (ppm)	2	99	74-121
4-Chlorotoluene	mg/kg (ppm)	2	97	75-122
tert-Butylbenzene	mg/kg (ppm)	2	100	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	99	76-125
sec-Butylbenzene	mg/kg (ppm)	2	100	71-130
p-Isopropyltoluene	mg/kg (ppm)	2	101	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2	95	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2	94	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2	97	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	88	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	91	64-135
Hexachlorobutadiene	mg/kg (ppm)	2	92	50-153
Naphthalene	mg/kg (ppm)	2	91	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	89	63-138

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/14/23

Date Received: 04/05/23

Project: ARE-Seattle No 32 380831 196954, F&BI 304065

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

Laboratory Code: 304123-07 (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	3 vo	5 vo	50-150	50 vo
Chloromethane	mg/kg (ppm)	2	<0.5	26 vo	30 vo	50-150	14
Vinyl chloride	mg/kg (ppm)	2	<0.05	27 vo	30 vo	50-150	11
Bromomethane	mg/kg (ppm)	2	<0.5	50	52	50-150	4
Chloroethane	mg/kg (ppm)	2	<0.5	45 vo	49 vo	50-150	9
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	29 vo	34 vo	50-150	16
Acetone	mg/kg (ppm)	10	<5	47 vo	78	50-150	50 vo
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	48 vo	52	50-150	8
Hexane	mg/kg (ppm)	2	<0.25	13 vo	16 vo	50-150	21 vo
Methylene chloride	mg/kg (ppm)	2	<0.5	64	68	50-150	6
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	82	86	50-150	5
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	64	68	50-150	6
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	70	75	50-150	7
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	74	80	50-150	8
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	83	87	50-150	5
Chloroform	mg/kg (ppm)	2	<0.05	76	84	50-150	10
2-Butanone (MEK)	mg/kg (ppm)	10	<1	51	78	50-150	42 vo
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	84	89	50-150	6
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	70	77	50-150	10
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	65	72	50-150	10
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	65	72	50-150	10
Benzene	mg/kg (ppm)	2	<0.03	74	80	50-150	8
Trichloroethene	mg/kg (ppm)	2	<0.02	72	78	50-150	8
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	68	73	50-150	7
Bromodichloromethane	mg/kg (ppm)	2	<0.05	81	87	50-150	7
Dibromomethane	mg/kg (ppm)	2	<0.05	72	79	50-150	9
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	72	80	50-150	11
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	75	83	50-150	10
Toluene	mg/kg (ppm)	2	<0.05	82	90	50-150	9
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	75	85	50-150	12
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	83	92	50-150	10
2-Hexanone	mg/kg (ppm)	10	<0.5	62	77	50-150	22 vo
1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	75	83	50-150	10
Tetrachloroethene	mg/kg (ppm)	2	<0.025	85	94	50-150	10
Dibromochloromethane	mg/kg (ppm)	2	<0.05	82	93	50-150	13
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	86	95	50-150	10
Chlorobenzene	mg/kg (ppm)	2	<0.05	82	89	50-150	8
Ethylbenzene	mg/kg (ppm)	2	<0.05	89	97	50-150	9
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	85	91	50-150	7
m,p-Xylene	mg/kg (ppm)	4	<0.1	84	91	50-150	8
o-Xylene	mg/kg (ppm)	2	<0.05	83	89	50-150	7
Styrene	mg/kg (ppm)	2	<0.05	82	90	50-150	9
Isopropylbenzene	mg/kg (ppm)	2	<0.05	84	90	50-150	7
Bromoform	mg/kg (ppm)	2	<0.05	88	95	50-150	8
n-Propylbenzene	mg/kg (ppm)	2	<0.05	79	88	50-150	11
Bromobenzene	mg/kg (ppm)	2	<0.05	85	95	50-150	11
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	79	86	50-150	8
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	86	95	50-150	10
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	73	87	50-150	17
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	78	87	50-150	11
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	77	86	50-150	11
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	82	92	50-150	11
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	79	87	50-150	10
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	85	94	50-150	10
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	85	95	50-150	11
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	88	99	50-150	12
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	84	97	50-150	14
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	86	93	50-150	8
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	76	81	50-150	6
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	90	99	50-150	10
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	96	103	50-150	7
Naphthalene	mg/kg (ppm)	2	<0.05	76	83	50-150	9
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	89	97	50-150	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/14/23

Date Received: 04/05/23

Project: ARE-Seattle No 32 380831 196954, F&BI 304065

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	50	10-150
Chloromethane	mg/kg (ppm)	2	61	21-140
Vinyl chloride	mg/kg (ppm)	2	81	35-135
Bromomethane	mg/kg (ppm)	2	128	20-151
Chloroethane	mg/kg (ppm)	2	101	21-147
Trichlorofluoromethane	mg/kg (ppm)	2	99	47-143
Acetone	mg/kg (ppm)	10	55	13-169
1,1-Dichloroethene	mg/kg (ppm)	2	95	49-138
Hexane	mg/kg (ppm)	2	88	61-141
Methylene chloride	mg/kg (ppm)	2	88	25-146
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	98	65-129
trans-1,2-Dichloroethene	mg/kg (ppm)	2	98	62-126
1,1-Dichloroethane	mg/kg (ppm)	2	96	64-131
2,2-Dichloropropane	mg/kg (ppm)	2	109	76-150
cis-1,2-Dichloroethene	mg/kg (ppm)	2	106	62-127
Chloroform	mg/kg (ppm)	2	99	67-129
2-Butanone (MEK)	mg/kg (ppm)	10	74	19-171
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	107	73-123
1,1,1-Trichloroethane	mg/kg (ppm)	2	103	66-125
1,1-Dichloropropene	mg/kg (ppm)	2	96	70-131
Carbon tetrachloride	mg/kg (ppm)	2	97	53-135
Benzene	mg/kg (ppm)	2	100	70-130
Trichloroethene	mg/kg (ppm)	2	97	62-116
1,2-Dichloropropane	mg/kg (ppm)	2	88	70-130
Bromodichloromethane	mg/kg (ppm)	2	102	70-130
Dibromomethane	mg/kg (ppm)	2	95	70-130
4-Methyl-2-pentanone	mg/kg (ppm)	10	94	64-137
cis-1,3-Dichloropropene	mg/kg (ppm)	2	99	68-137
Toluene	mg/kg (ppm)	2	105	70-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2	96	70-130
1,1,2-Trichloroethane	mg/kg (ppm)	2	104	70-130
2-Hexanone	mg/kg (ppm)	10	77	55-145
1,3-Dichloropropane	mg/kg (ppm)	2	99	70-130
Tetrachloroethene	mg/kg (ppm)	2	116	69-131
Dibromochloromethane	mg/kg (ppm)	2	102	61-137
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	109	70-130
Chlorobenzene	mg/kg (ppm)	2	102	70-130
Ethylbenzene	mg/kg (ppm)	2	111	70-130
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	102	56-134
m,p-Xylene	mg/kg (ppm)	4	105	70-130
o-Xylene	mg/kg (ppm)	2	101	70-130
Styrene	mg/kg (ppm)	2	100	70-130
Isopropylbenzene	mg/kg (ppm)	2	101	67-131
Bromoform	mg/kg (ppm)	2	108	70-130
n-Propylbenzene	mg/kg (ppm)	2	97	70-130
Bromobenzene	mg/kg (ppm)	2	105	70-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	94	70-130
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	103	70-130
1,2,3-Trichloropropane	mg/kg (ppm)	2	91	70-130
2-Chlorotoluene	mg/kg (ppm)	2	96	70-130
4-Chlorotoluene	mg/kg (ppm)	2	92	70-130
tert-Butylbenzene	mg/kg (ppm)	2	95	70-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	96	70-130
sec-Butylbenzene	mg/kg (ppm)	2	101	68-131
p-Isopropyltoluene	mg/kg (ppm)	2	100	70-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	106	70-130
1,4-Dichlorobenzene	mg/kg (ppm)	2	101	70-130
1,2-Dichlorobenzene	mg/kg (ppm)	2	101	70-130
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	84	70-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	106	66-140
Hexachlorobutadiene	mg/kg (ppm)	2	109	67-141
Naphthalene	mg/kg (ppm)	2	93	69-119
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	106	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 high; 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.

304065

SAMPLE CHAIN OF CUSTODY

04/05/23 VS-D2/A2

Report To Jerry BoydCompany TACAddress 1150 NW Maple Suite 310City, State, ZIP Issaquah, WAPhone 425-358-0889 Email jboyd@trecompanies.com

SAMPLERS (signature)

Page # _____ of _____

PROJECT NAME

ARE - Seattle No 32
(380831)

PO #

196954

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

						ANALYSES REQUESTED												Notes
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						
TSB-4:15	01 A.E	4/5/23	1310	S	5				X	X								Archive
TSB-4:21	02		1351						X	X								
TSB-4:25	03		1419						X	X								
TSB-4:30	04		1508															
TSB-4:35	05		1523						X	X								
TSB-4:40	06		1541															
TSB-4:45	07		1551						X	X								

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Natalie Diert	TRC	4/5/23	1747
Received by:	Andre Lagron	FBI	4/09/23	1747
Relinquished by:	Samples received at 38°C			
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

April 14, 2023

Jerry Boyd, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: ARE-Seattle No.32 380831 196954, F&BI 304084

Dear Mr Boyd:

Included are the results from the testing of material submitted on April 6, 2023 from the ARE-Seattle No.32 380831 196954, F&BI 304084 project. There are 15 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: Cynthia Moon
TRC0414R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 6, 2023 by Friedman & Bruya, Inc. from the TRC Environmental ARE-Seattle No.32 380831 196954, F&BI 304084 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
304084-01	TSB-5:02
304084-02	TSB-5:07
304084-03	TSB-5:11
304084-04	TSB-5:15
304084-05	TSB-5:21
304084-06	TSB-5:26
304084-07	TSB-5:30
304084-08	TSB-5:35
304084-09	TSB-5:40
304084-10	TSB-5:45
304084-11	TSB-6:02
304084-12	TSB-6:05
304084-13	TSB-6:10
304084-14	TSB-6:15
304084-15	TSB-6:21
304084-16	TSB-6:25
304084-17	TSB-6:30

Several 8260D compounds failed below the acceptance criteria in the matrix spike samples. The laboratory control samples met the acceptance criteria, therefore the data were likely due to sample matrix effect.

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: 04/14/23

Date Received: 04/06/23

Project: ARE-Seattle No.32 380831 196954, F&BI 304084

Date Extracted: 04/07/23

Date Analyzed: 04/07/23

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID**

Results Reported on a Dry Weight Basis

Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE
WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION
WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 50-150)
TSB-5:02 304084-01	ND	ND	ND	102
TSB-5:11 304084-03	ND	ND	ND	101
TSB-5:21 304084-05	ND	ND	ND	104
TSB-5:30 304084-07	ND	ND	ND	104
TSB-5:40 304084-09	ND	ND	ND	101
TSB-6:02 304084-11	ND	ND	ND	102
TSB-6:10 304084-13	ND	ND	ND	102
TSB-6:21 304084-15	ND	ND	ND	99
TSB-6:30 304084-17	ND	ND	ND	105
Method Blank 03-879 MB	ND	ND	ND	95

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	TSB-5:02	Client:	TRC Environmental
Date Received:	04/06/23	Project:	ARE-Seattle No.32 380831
Date Extracted:	04/11/23	Lab ID:	304084-01 1/0.25
Date Analyzed:	04/11/23	Data File:	041128.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	101	73	128
4-Bromofluorobenzene	100	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5 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	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:	TSB-5:11	Client:	TRC Environmental
Date Received:	04/06/23	Project:	ARE-Seattle No.32 380831
Date Extracted:	04/11/23	Lab ID:	304084-03 1/0.25
Date Analyzed:	04/11/23	Data File:	041129.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	102	73	128
4-Bromofluorobenzene	108	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5 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	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:	TSB-5:21	Client:	TRC Environmental
Date Received:	04/06/23	Project:	ARE-Seattle No.32 380831
Date Extracted:	04/11/23	Lab ID:	304084-05 1/0.25
Date Analyzed:	04/11/23	Data File:	041130.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	91	84	120
Toluene-d8	94	73	128
4-Bromofluorobenzene	101	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5 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	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:	TSB-5:30	Client:	TRC Environmental
Date Received:	04/06/23	Project:	ARE-Seattle No.32 380831
Date Extracted:	04/11/23	Lab ID:	304084-07 1/0.25
Date Analyzed:	04/11/23	Data File:	041131.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	110	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5 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	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:	TSB-5:40	Client:	TRC Environmental
Date Received:	04/06/23	Project:	ARE-Seattle No.32 380831
Date Extracted:	04/11/23	Lab ID:	304084-09 1/0.25
Date Analyzed:	04/11/23	Data File:	041132.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	100	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5 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	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: TSB-6:02	Client: TRC Environmental
Date Received: 04/06/23	Project: ARE-Seattle No.32 380831
Date Extracted: 04/11/23	Lab ID: 304084-11 1/0.25
Date Analyzed: 04/11/23	Data File: 041133.D
Matrix: Soil	Instrument: GCMS13
Units: mg/kg (ppm) Dry Weight	Operator: MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	109	84	120
Toluene-d8	105	73	128
4-Bromofluorobenzene	115	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5 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	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: TSB-6:10	Client: TRC Environmental
Date Received: 04/06/23	Project: ARE-Seattle No.32 380831
Date Extracted: 04/11/23	Lab ID: 304084-13 1/0.25
Date Analyzed: 04/11/23	Data File: 041134.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	101	73	128
4-Bromofluorobenzene	88	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5 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	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:	TSB-6:21	Client:	TRC Environmental
Date Received:	04/06/23	Project:	ARE-Seattle No.32 380831
Date Extracted:	04/11/23	Lab ID:	304084-15 1/0.25
Date Analyzed:	04/11/23	Data File:	041135.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	103	73	128
4-Bromofluorobenzene	118	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5 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	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:	TSB-6:30	Client:	TRC Environmental
Date Received:	04/06/23	Project:	ARE-Seattle No.32 380831
Date Extracted:	04/11/23	Lab ID:	304084-17 1/0.25
Date Analyzed:	04/11/23	Data File:	041136.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	84	120
Toluene-d8	103	73	128
4-Bromofluorobenzene	92	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5 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	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:	TRC Environmental
Date Received:	Not Applicable	Project:	ARE-Seattle No.32 380831
Date Extracted:	04/11/23	Lab ID:	03-0722 mb 1/0.25
Date Analyzed:	04/11/23	Data File:	041110.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	84	120
Toluene-d8	102	73	128
4-Bromofluorobenzene	102	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.002
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	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 ca
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/14/23

Date Received: 04/06/23

Project: ARE-Seattle No.32 380831 196954, F&BI 304084

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

Laboratory Code: 304123-07 (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	3 vo	5 vo	50-150	50 vo
Chloromethane	mg/kg (ppm)	2	<0.5	26 vo	30 vo	50-150	14
Vinyl chloride	mg/kg (ppm)	2	<0.05	27 vo	30 vo	50-150	11
Bromomethane	mg/kg (ppm)	2	<0.5	50	52	50-150	4
Chloroethane	mg/kg (ppm)	2	<0.5	45 vo	49 vo	50-150	9
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	29 vo	34 vo	50-150	16
Acetone	mg/kg (ppm)	10	<5	47 vo	78	50-150	50 vo
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	48 vo	52	50-150	8
Hexane	mg/kg (ppm)	2	<0.25	13 vo	16 vo	50-150	21 vo
Methylene chloride	mg/kg (ppm)	2	<0.5	64	68	50-150	6
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	82	86	50-150	5
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	64	68	50-150	6
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	70	75	50-150	7
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	74	80	50-150	8
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	83	87	50-150	5
Chloroform	mg/kg (ppm)	2	<0.05	76	84	50-150	10
2-Butanone (MEK)	mg/kg (ppm)	10	<1	51	78	50-150	42 vo
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	84	89	50-150	6
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	70	77	50-150	10
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	65	72	50-150	10
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	65	72	50-150	10
Benzene	mg/kg (ppm)	2	<0.03	74	80	50-150	8
Trichloroethene	mg/kg (ppm)	2	<0.02	72	78	50-150	8
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	68	73	50-150	7
Bromodichloromethane	mg/kg (ppm)	2	<0.05	81	87	50-150	7
Dibromomethane	mg/kg (ppm)	2	<0.05	72	79	50-150	9
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	72	80	50-150	11
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	75	83	50-150	10
Toluene	mg/kg (ppm)	2	<0.05	82	90	50-150	9
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	75	85	50-150	12
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	83	92	50-150	10
2-Hexanone	mg/kg (ppm)	10	<0.5	62	77	50-150	22 vo
1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	75	83	50-150	10
Tetrachloroethene	mg/kg (ppm)	2	<0.025	85	94	50-150	10
Dibromochloromethane	mg/kg (ppm)	2	<0.05	82	93	50-150	13
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	86	95	50-150	10
Chlorobenzene	mg/kg (ppm)	2	<0.05	82	89	50-150	8
Ethylbenzene	mg/kg (ppm)	2	<0.05	89	97	50-150	9
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	85	91	50-150	7
m,p-Xylene	mg/kg (ppm)	4	<0.1	84	91	50-150	8
o-Xylene	mg/kg (ppm)	2	<0.05	83	89	50-150	7
Styrene	mg/kg (ppm)	2	<0.05	82	90	50-150	9
Isopropylbenzene	mg/kg (ppm)	2	<0.05	84	90	50-150	7
Bromoform	mg/kg (ppm)	2	<0.05	88	95	50-150	8
n-Propylbenzene	mg/kg (ppm)	2	<0.05	79	88	50-150	11
Bromobenzene	mg/kg (ppm)	2	<0.05	85	95	50-150	11
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	79	86	50-150	8
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	86	95	50-150	10
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	73	87	50-150	17
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	78	87	50-150	11
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	77	86	50-150	11
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	82	92	50-150	11
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	79	87	50-150	10
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	85	94	50-150	10
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	85	95	50-150	11
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	88	99	50-150	12
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	84	97	50-150	14
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	86	93	50-150	8
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	76	81	50-150	6
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	90	99	50-150	10
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	96	103	50-150	7
Naphthalene	mg/kg (ppm)	2	<0.05	76	83	50-150	9
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	89	97	50-150	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/14/23

Date Received: 04/06/23

Project: ARE-Seattle No.32 380831 196954, F&BI 304084

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	50	10-150
Chloromethane	mg/kg (ppm)	2	61	21-140
Vinyl chloride	mg/kg (ppm)	2	81	35-135
Bromomethane	mg/kg (ppm)	2	128	20-151
Chloroethane	mg/kg (ppm)	2	101	21-147
Trichlorofluoromethane	mg/kg (ppm)	2	99	47-143
Acetone	mg/kg (ppm)	10	55	13-169
1,1-Dichloroethene	mg/kg (ppm)	2	95	49-138
Hexane	mg/kg (ppm)	2	88	61-141
Methylene chloride	mg/kg (ppm)	2	88	25-146
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	98	65-129
trans-1,2-Dichloroethene	mg/kg (ppm)	2	98	62-126
1,1-Dichloroethane	mg/kg (ppm)	2	96	64-131
2,2-Dichloropropane	mg/kg (ppm)	2	109	76-150
cis-1,2-Dichloroethene	mg/kg (ppm)	2	106	62-127
Chloroform	mg/kg (ppm)	2	99	67-129
2-Butanone (MEK)	mg/kg (ppm)	10	74	19-171
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	107	73-123
1,1,1-Trichloroethane	mg/kg (ppm)	2	103	66-125
1,1-Dichloropropene	mg/kg (ppm)	2	96	70-131
Carbon tetrachloride	mg/kg (ppm)	2	97	53-135
Benzene	mg/kg (ppm)	2	100	70-130
Trichloroethene	mg/kg (ppm)	2	97	62-116
1,2-Dichloropropane	mg/kg (ppm)	2	88	70-130
Bromodichloromethane	mg/kg (ppm)	2	102	70-130
Dibromomethane	mg/kg (ppm)	2	95	70-130
4-Methyl-2-pentanone	mg/kg (ppm)	10	94	64-137
cis-1,3-Dichloropropene	mg/kg (ppm)	2	99	68-137
Toluene	mg/kg (ppm)	2	105	70-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2	96	70-130
1,1,2-Trichloroethane	mg/kg (ppm)	2	104	70-130
2-Hexanone	mg/kg (ppm)	10	77	55-145
1,3-Dichloropropane	mg/kg (ppm)	2	99	70-130
Tetrachloroethene	mg/kg (ppm)	2	116	69-131
Dibromochloromethane	mg/kg (ppm)	2	102	61-137
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	109	70-130
Chlorobenzene	mg/kg (ppm)	2	102	70-130
Ethylbenzene	mg/kg (ppm)	2	111	70-130
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	102	56-134
m,p-Xylene	mg/kg (ppm)	4	105	70-130
o-Xylene	mg/kg (ppm)	2	101	70-130
Styrene	mg/kg (ppm)	2	100	70-130
Isopropylbenzene	mg/kg (ppm)	2	101	67-131
Bromoform	mg/kg (ppm)	2	108	70-130
n-Propylbenzene	mg/kg (ppm)	2	97	70-130
Bromobenzene	mg/kg (ppm)	2	105	70-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	94	70-130
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	103	70-130
1,2,3-Trichloropropane	mg/kg (ppm)	2	91	70-130
2-Chlorotoluene	mg/kg (ppm)	2	96	70-130
4-Chlorotoluene	mg/kg (ppm)	2	92	70-130
tert-Butylbenzene	mg/kg (ppm)	2	95	70-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	96	70-130
sec-Butylbenzene	mg/kg (ppm)	2	101	68-131
p-Isopropyltoluene	mg/kg (ppm)	2	100	70-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	106	70-130
1,4-Dichlorobenzene	mg/kg (ppm)	2	101	70-130
1,2-Dichlorobenzene	mg/kg (ppm)	2	101	70-130
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	84	70-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	106	66-140
Hexachlorobutadiene	mg/kg (ppm)	2	109	67-141
Naphthalene	mg/kg (ppm)	2	93	69-119
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	106	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 high; 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.

304084
Report To Jerry Boyd
Company TRC
Address 1150 NW Maple Suite 310
City, State, ZIP Issaquah, WA
Phone 425-358-0889 Email jboyd@trccompanies.com

SAMPLE CHAIN OF CUSTODY

04/06/23

VS-D3/A2

Page # 1 of 2SAMPLERS (signature) Natalie DierxPROJECT NAME
ARE - Seattle No. 32
(380831)PO #
196954

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

						ANALYSES REQUESTED												Notes
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						
TSB-5: 02	01 A.E	4/6/23	0831	S	5				X	X								
TSB-5: 07	02		0949															
TSB-5: 11	03		1025						X	X								
TSB-5: 15	04		1048															
TSB-5: 21	05		1110						X	X								
TSB-5: 26	06		1201															
TSB-5: 30	07		1208						X	X								
TSB-5: 35	08		1239															
TSB-5: 40	09		1316						X	X								
TSB-5: 45	10		1323															

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Natalie Dierx</u>	Natalie Dierx	TRC	4/6/23	1757
Received by: <u>Andre Lagron</u>	Andre Lagron	FBI	4/6/23	17:57
Relinquished by:	Samples received at 3°C			
Received by:				

Report To Serry Boyd
 Company TRC
 Address 1150 NW Maple Suite 310
 City, State, ZIP Issaquah, WA
 Phone 425-358-0081 Email jboyd@TRCcompanies.com

304084

SAMPLE CHAIN OF CUSTODY

04/06/23

VS-D3/A2

Page # 2 of 2

SAMPLERS (signature) <u>Natalie Dierx</u>	
PROJECT NAME <u>ARE - Seattle No. 32</u> <u>(380831)</u>	PO # <u>196954</u>
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					
TSB-6: 02	11 A.E	4/6/23	1112	S	5				X	X							
TSB-6: 05	12		1133														
TSB-6: 10	13		1610						X	X							
TSB-6: 15	14		1624														
TSB-6: 21	15		1645						X	X							
TSB-6: 25	16		1707														
TSB-6: 30	17		1711						X	X							

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Natalie Dierx</u>	Natalie Dierx	TRC	4/6/23	1800
Received by: <u>Andre Lagren</u>	Andre Lagren	FBI	4/6/23	1800
Relinquished by:	Samples received at <u>30C</u>			
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

April 17, 2023

Jerry Boyd, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: ARE Seattle No 32 380831, F&BI 304116

Dear Mr Boyd:

Included are the results from the testing of material submitted on April 7, 2023 from the ARE Seattle No 32 380831, F&BI 304116 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: Cynthia Moon
TRC0417R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 7, 2023 by Friedman & Bruya, Inc. from the TRC Environmental ARE Seattle No 32 380831, F&BI 304116 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
304116 -01	TSB-6:35
304116 -02	TSB-6:40
304116 -03	TSB-6:45
304116 -04	TSB-7:02
304116 -05	TSB-7:05
304116 -06	TSB-7:10
304116 -07	TSB-7:15
304116 -08	TSB-7:20
304116 -09	TSB-7:26
304116 -10	TSB-7:30

Several 8260D compounds failed below the acceptance criteria in the matrix spike samples. The laboratory control samples met the acceptance criteria, therefore the data were likely due to sample matrix effect.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/17/23

Date Received: 04/07/23

Project: ARE Seattle No 32 380831, F&BI 304116

Date Extracted: 04/10/23

Date Analyzed: 04/10/23

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID**

Results Reported on a Dry Weight Basis

Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE
WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION
WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 50-150)
TSB-7:02 304116-04	ND	ND	ND	105
TSB-7:10 304116-06	ND	ND	ND	106
TSB-7:20 304116-08	ND	ND	ND	105
TSB-7:30 304116-10	ND	ND	ND	104
Method Blank 03-888 MB	ND	ND	ND	104

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	TSB-6:40	Client:	TRC Environmental
Date Received:	04/07/23	Project:	ARE Seattle No 32 380831
Date Extracted:	04/11/23	Lab ID:	304116-02 1/0.25
Date Analyzed:	04/11/23	Data File:	041128.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	79	128
Toluene-d8	98	84	121
4-Bromofluorobenzene	88	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	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	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:	TSB-7:02	Client:	TRC Environmental
Date Received:	04/07/23	Project:	ARE Seattle No 32 380831
Date Extracted:	04/11/23	Lab ID:	304116-04 1/0.25
Date Analyzed:	04/11/23	Data File:	041129.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	109	79	128
Toluene-d8	104	84	121
4-Bromofluorobenzene	91	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	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	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:	TSB-7:10	Client:	TRC Environmental
Date Received:	04/07/23	Project:	ARE Seattle No 32 380831
Date Extracted:	04/11/23	Lab ID:	304116-06 1/0.25
Date Analyzed:	04/11/23	Data File:	041130.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	115	79	128
Toluene-d8	103	84	121
4-Bromofluorobenzene	91	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	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	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:	TSB-7:20	Client:	TRC Environmental
Date Received:	04/07/23	Project:	ARE Seattle No 32 380831
Date Extracted:	04/11/23	Lab ID:	304116-08 1/0.25
Date Analyzed:	04/11/23	Data File:	041131.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	79	128
Toluene-d8	103	84	121
4-Bromofluorobenzene	89	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	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	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:	TSB-7:30	Client:	TRC Environmental
Date Received:	04/07/23	Project:	ARE Seattle No 32 380831
Date Extracted:	04/11/23	Lab ID:	304116-10 1/0.25
Date Analyzed:	04/11/23	Data File:	041132.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	101	84	121
4-Bromofluorobenzene	89	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	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	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:	TRC Environmental
Date Received:	Not Applicable	Project:	ARE Seattle No 32 380831
Date Extracted:	04/11/23	Lab ID:	03-0722 mb 1/0.25
Date Analyzed:	04/11/23	Data File:	041110.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	84	120
Toluene-d8	102	73	128
4-Bromofluorobenzene	102	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.002
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	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: 04/17/23

Date Received: 04/07/23

Project: ARE Seattle No 32 380831, F&BI 304116

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

Laboratory Code: 304123-07 (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	3 vo	5 vo	50-150	50 vo
Chloromethane	mg/kg (ppm)	2	<0.5	26 vo	30 vo	50-150	14
Vinyl chloride	mg/kg (ppm)	2	<0.05	27 vo	30 vo	50-150	11
Bromomethane	mg/kg (ppm)	2	<0.5	50	52	50-150	4
Chloroethane	mg/kg (ppm)	2	<0.5	45 vo	49 vo	50-150	9
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	29 vo	34 vo	50-150	16
Acetone	mg/kg (ppm)	10	<5	47 vo	78	50-150	50 vo
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	48 vo	52	50-150	8
Hexane	mg/kg (ppm)	2	<0.25	13 vo	16 vo	50-150	21 vo
Methylene chloride	mg/kg (ppm)	2	<0.5	64	68	50-150	6
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	82	86	50-150	5
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	64	68	50-150	6
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	70	75	50-150	7
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	74	80	50-150	8
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	83	87	50-150	5
Chloroform	mg/kg (ppm)	2	<0.05	76	84	50-150	10
2-Butanone (MEK)	mg/kg (ppm)	10	<1	51	78	50-150	42 vo
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	84	89	50-150	6
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	70	77	50-150	10
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	65	72	50-150	10
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	65	72	50-150	10
Benzene	mg/kg (ppm)	2	<0.03	74	80	50-150	8
Trichloroethene	mg/kg (ppm)	2	<0.02	72	78	50-150	8
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	68	73	50-150	7
Bromodichloromethane	mg/kg (ppm)	2	<0.05	81	87	50-150	7
Dibromomethane	mg/kg (ppm)	2	<0.05	72	79	50-150	9
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	72	80	50-150	11
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	75	83	50-150	10
Toluene	mg/kg (ppm)	2	<0.05	82	90	50-150	9
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	75	85	50-150	12
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	83	92	50-150	10
2-Hexanone	mg/kg (ppm)	10	<0.5	62	77	50-150	22 vo
1,3-Dichloropropane	mg/kg (ppm)	2	<0.05	75	83	50-150	10
Tetrachloroethene	mg/kg (ppm)	2	<0.025	85	94	50-150	10
Dibromochloromethane	mg/kg (ppm)	2	<0.05	82	93	50-150	13
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	86	95	50-150	10
Chlorobenzene	mg/kg (ppm)	2	<0.05	82	89	50-150	8
Ethylbenzene	mg/kg (ppm)	2	<0.05	89	97	50-150	9
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	85	91	50-150	7
m,p-Xylene	mg/kg (ppm)	4	<0.1	84	91	50-150	8
o-Xylene	mg/kg (ppm)	2	<0.05	83	89	50-150	7
Styrene	mg/kg (ppm)	2	<0.05	82	90	50-150	9
Isopropylbenzene	mg/kg (ppm)	2	<0.05	84	90	50-150	7
Bromoform	mg/kg (ppm)	2	<0.05	88	95	50-150	8
n-Propylbenzene	mg/kg (ppm)	2	<0.05	79	88	50-150	11
Bromobenzene	mg/kg (ppm)	2	<0.05	85	95	50-150	11
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	79	86	50-150	8
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	86	95	50-150	10
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	73	87	50-150	17
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	78	87	50-150	11
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	77	86	50-150	11
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	82	92	50-150	11
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	79	87	50-150	10
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	85	94	50-150	10
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	85	95	50-150	11
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	88	99	50-150	12
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	84	97	50-150	14
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	86	93	50-150	8
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	76	81	50-150	6
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	90	99	50-150	10
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	96	103	50-150	7
Naphthalene	mg/kg (ppm)	2	<0.05	76	83	50-150	9
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	89	97	50-150	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/17/23

Date Received: 04/07/23

Project: ARE Seattle No 32 380831, F&BI 304116

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	50	10-150
Chloromethane	mg/kg (ppm)	2	61	21-140
Vinyl chloride	mg/kg (ppm)	2	81	35-135
Bromomethane	mg/kg (ppm)	2	128	20-151
Chloroethane	mg/kg (ppm)	2	101	21-147
Trichlorofluoromethane	mg/kg (ppm)	2	99	47-143
Acetone	mg/kg (ppm)	10	55	13-169
1,1-Dichloroethene	mg/kg (ppm)	2	95	49-138
Hexane	mg/kg (ppm)	2	88	61-141
Methylene chloride	mg/kg (ppm)	2	88	25-146
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	98	65-129
trans-1,2-Dichloroethene	mg/kg (ppm)	2	98	62-126
1,1-Dichloroethane	mg/kg (ppm)	2	96	64-131
2,2-Dichloropropane	mg/kg (ppm)	2	109	76-150
cis-1,2-Dichloroethene	mg/kg (ppm)	2	106	62-127
Chloroform	mg/kg (ppm)	2	99	67-129
2-Butanone (MEK)	mg/kg (ppm)	10	74	19-171
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	107	73-123
1,1,1-Trichloroethane	mg/kg (ppm)	2	103	66-125
1,1-Dichloropropene	mg/kg (ppm)	2	96	70-131
Carbon tetrachloride	mg/kg (ppm)	2	97	53-135
Benzene	mg/kg (ppm)	2	100	70-130
Trichloroethene	mg/kg (ppm)	2	97	62-116
1,2-Dichloropropane	mg/kg (ppm)	2	88	70-130
Bromodichloromethane	mg/kg (ppm)	2	102	70-130
Dibromomethane	mg/kg (ppm)	2	95	70-130
4-Methyl-2-pentanone	mg/kg (ppm)	10	94	64-137
cis-1,3-Dichloropropene	mg/kg (ppm)	2	99	68-137
Toluene	mg/kg (ppm)	2	105	70-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2	96	70-130
1,1,2-Trichloroethane	mg/kg (ppm)	2	104	70-130
2-Hexanone	mg/kg (ppm)	10	77	55-145
1,3-Dichloropropane	mg/kg (ppm)	2	99	70-130
Tetrachloroethene	mg/kg (ppm)	2	116	69-131
Dibromochloromethane	mg/kg (ppm)	2	102	61-137
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	109	70-130
Chlorobenzene	mg/kg (ppm)	2	102	70-130
Ethylbenzene	mg/kg (ppm)	2	111	70-130
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	102	56-134
m,p-Xylene	mg/kg (ppm)	4	105	70-130
o-Xylene	mg/kg (ppm)	2	101	70-130
Styrene	mg/kg (ppm)	2	100	70-130
Isopropylbenzene	mg/kg (ppm)	2	101	67-131
Bromoform	mg/kg (ppm)	2	108	70-130
n-Propylbenzene	mg/kg (ppm)	2	97	70-130
Bromobenzene	mg/kg (ppm)	2	105	70-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	94	70-130
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	103	70-130
1,2,3-Trichloropropane	mg/kg (ppm)	2	91	70-130
2-Chlorotoluene	mg/kg (ppm)	2	96	70-130
4-Chlorotoluene	mg/kg (ppm)	2	92	70-130
tert-Butylbenzene	mg/kg (ppm)	2	95	70-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	96	70-130
sec-Butylbenzene	mg/kg (ppm)	2	101	68-131
p-Isopropyltoluene	mg/kg (ppm)	2	100	70-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	106	70-130
1,4-Dichlorobenzene	mg/kg (ppm)	2	101	70-130
1,2-Dichlorobenzene	mg/kg (ppm)	2	101	70-130
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	84	70-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	106	66-140
Hexachlorobutadiene	mg/kg (ppm)	2	109	67-141
Naphthalene	mg/kg (ppm)	2	93	69-119
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	106	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 high; 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.

304116

SAMPLE CHAIN OF CUSTODY

04/07/23

VS-D3/A3

Report To Jerry BoydCompany TRCAddress 1180 WW Maple St Suite 310City, State, ZIP Issaquah, WAPhone _____ Email JBoyd@trccompanies.com

SAMPLERS (signature)

PROJECT NAME

ARE Seattle No 32
380831

REMARKS

Project specific RLs? - Yes / No

PO #

INVOICE TO

Page # 1 of 1

TURNAROUND TIME

☒ Standard turnaround☐ RUSH

Rush charges authorized by: _____

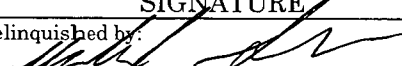
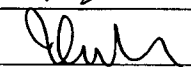
SAMPLE DISPOSAL

☒ 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				
TSB-6:35	01 A-E	4/7/23	09:09	S	5											
TSB-6:40	02		09:32							X						
TSB-6:45	03		09:39													
TSB-7:02	04		1106						X	X						
TSB-7:05	05		1116													
TSB-7:10	06		1138						X	X						
TSB-7:15	07		1301													
TSB-7:20	08		1351						X	X						
TSB-7:26	09		1547													
TSB-7:30	10		1556						X	X						

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Michael Andrews	TRC	4/7/23	1643
Received by: 	VINH	FBI	4-7-23	1643
Relinquished by:	Samples received at 6°C			
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

April 17, 2023

Jerry Boyd, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: ARE Seattle No.32 380831 196954, F&BI 304133

Dear Mr Boyd:

Included are the results from the testing of material submitted on April 10, 2023 from the ARE Seattle No.32 380831 196954, F&BI 304133 project. There are 7 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: Cynthia Moon
TRC0417R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 10, 2023 by Friedman & Bruya, Inc. from the TRC Environmental ARE Seattle No.32 380831 196954, F&BI 304133 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
304133 -01	TSB-7:35
304133 -02	TSB-7:40
304133 -03	TSB-7:45

Several 8260D compounds failed below the acceptance criteria in the matrix spike samples. The laboratory control samples met the acceptance criteria, therefore the data were likely due to sample matrix effect.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/17/23

Date Received: 04/10/23

Project: ARE Seattle No.32 380831 196954, F&BI 304133

Date Extracted: 04/11/23

Date Analyzed: 04/11/23

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID**

Results Reported on a Dry Weight Basis

Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE
WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION
WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 50-150)
TSB-7:40 304133-02	ND	ND	ND	105
Method Blank 03-888 MB2	ND	ND	ND	104

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

Client Sample ID:	TSB-7:40	Client:	TRC Environmental
Date Received:	04/10/23	Project:	ARE Seattle No.32 380831
Date Extracted:	04/11/23	Lab ID:	304133-02 1/0.25
Date Analyzed:	04/11/23	Data File:	041127.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	79	128
Toluene-d8	101	84	121
4-Bromofluorobenzene	92	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	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	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:	TRC Environmental
Date Received:	Not Applicable	Project:	ARE Seattle No.32 380831
Date Extracted:	04/11/23	Lab ID:	03-0722 mb 1/0.25
Date Analyzed:	04/11/23	Data File:	041110.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	84	120
Toluene-d8	102	73	128
4-Bromofluorobenzene	102	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.001
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.002
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	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: 04/17/23

Date Received: 04/10/23

Project: ARE Seattle No.32 380831 196954, F&BI 304133

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

Laboratory Code: 304123-07 (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	3 vo	5 vo	50-150	50 vo
Chloromethane	mg/kg (ppm)	2	<0.5	26 vo	30 vo	50-150	14
Vinyl chloride	mg/kg (ppm)	2	<0.05	27 vo	30 vo	50-150	11
Bromomethane	mg/kg (ppm)	2	<0.5	50	52	50-150	4
Chloroethane	mg/kg (ppm)	2	<0.5	45 vo	49 vo	50-150	9
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	29 vo	34 vo	50-150	16
Acetone	mg/kg (ppm)	10	<5	47 vo	78	50-150	50 vo
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	48 vo	52	50-150	8
Hexane	mg/kg (ppm)	2	<0.25	13 vo	16 vo	50-150	21 vo
Methylene chloride	mg/kg (ppm)	2	<0.5	64	68	50-150	6
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	82	86	50-150	5
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	64	68	50-150	6
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	70	75	50-150	7
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	74	80	50-150	8
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	83	87	50-150	5
Chloroform	mg/kg (ppm)	2	<0.05	76	84	50-150	10
2-Butanone (MEK)	mg/kg (ppm)	10	<1	51	78	50-150	42 vo
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	84	89	50-150	6
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	70	77	50-150	10
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	65	72	50-150	10
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	65	72	50-150	10
Benzene	mg/kg (ppm)	2	<0.03	74	80	50-150	8
Trichloroethene	mg/kg (ppm)	2	<0.02	72	78	50-150	8
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	68	73	50-150	7
Bromodichloromethane	mg/kg (ppm)	2	<0.05	81	87	50-150	7
Dibromomethane	mg/kg (ppm)	2	<0.05	72	79	50-150	9
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	72	80	50-150	11
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	75	83	50-150	10
Toluene	mg/kg (ppm)	2	<0.05	82	90	50-150	9
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	75	85	50-150	12
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	83	92	50-150	10
2-Hexanone	mg/kg (ppm)	10	<0.5	62	77	50-150	22 vo
1,3-Dichloropropane	mg/kg (ppm)	2	<0.05	75	83	50-150	10
Tetrachloroethene	mg/kg (ppm)	2	<0.025	85	94	50-150	10
Dibromochloromethane	mg/kg (ppm)	2	<0.05	82	93	50-150	13
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	86	95	50-150	10
Chlorobenzene	mg/kg (ppm)	2	<0.05	82	89	50-150	8
Ethylbenzene	mg/kg (ppm)	2	<0.05	89	97	50-150	9
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	85	91	50-150	7
m,p-Xylene	mg/kg (ppm)	4	<0.1	84	91	50-150	8
o-Xylene	mg/kg (ppm)	2	<0.05	83	89	50-150	7
Styrene	mg/kg (ppm)	2	<0.05	82	90	50-150	9
Isopropylbenzene	mg/kg (ppm)	2	<0.05	84	90	50-150	7
Bromoform	mg/kg (ppm)	2	<0.05	88	95	50-150	8
n-Propylbenzene	mg/kg (ppm)	2	<0.05	79	88	50-150	11
Bromobenzene	mg/kg (ppm)	2	<0.05	85	95	50-150	11
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	79	86	50-150	8
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	86	95	50-150	10
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	73	87	50-150	17
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	78	87	50-150	11
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	77	86	50-150	11
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	82	92	50-150	11
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	79	87	50-150	10
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	85	94	50-150	10
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	85	95	50-150	11
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	88	99	50-150	12
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	84	97	50-150	14
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	86	93	50-150	8
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	76	81	50-150	6
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	90	99	50-150	10
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	96	103	50-150	7
Naphthalene	mg/kg (ppm)	2	<0.05	76	83	50-150	9
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	89	97	50-150	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/17/23

Date Received: 04/10/23

Project: ARE Seattle No.32 380831 196954, F&BI 304133

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	50	10-150
Chloromethane	mg/kg (ppm)	2	61	21-140
Vinyl chloride	mg/kg (ppm)	2	81	35-135
Bromomethane	mg/kg (ppm)	2	128	20-151
Chloroethane	mg/kg (ppm)	2	101	21-147
Trichlorofluoromethane	mg/kg (ppm)	2	99	47-143
Acetone	mg/kg (ppm)	10	55	13-169
1,1-Dichloroethene	mg/kg (ppm)	2	95	49-138
Hexane	mg/kg (ppm)	2	88	61-141
Methylene chloride	mg/kg (ppm)	2	88	25-146
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	98	65-129
trans-1,2-Dichloroethene	mg/kg (ppm)	2	98	62-126
1,1-Dichloroethane	mg/kg (ppm)	2	96	64-131
2,2-Dichloropropane	mg/kg (ppm)	2	109	76-150
cis-1,2-Dichloroethene	mg/kg (ppm)	2	106	62-127
Chloroform	mg/kg (ppm)	2	99	67-129
2-Butanone (MEK)	mg/kg (ppm)	10	74	19-171
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	107	73-123
1,1,1-Trichloroethane	mg/kg (ppm)	2	103	66-125
1,1-Dichloropropene	mg/kg (ppm)	2	96	70-131
Carbon tetrachloride	mg/kg (ppm)	2	97	53-135
Benzene	mg/kg (ppm)	2	100	70-130
Trichloroethene	mg/kg (ppm)	2	97	62-116
1,2-Dichloropropane	mg/kg (ppm)	2	88	70-130
Bromodichloromethane	mg/kg (ppm)	2	102	70-130
Dibromomethane	mg/kg (ppm)	2	95	70-130
4-Methyl-2-pentanone	mg/kg (ppm)	10	94	64-137
cis-1,3-Dichloropropene	mg/kg (ppm)	2	99	68-137
Toluene	mg/kg (ppm)	2	105	70-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2	96	70-130
1,1,2-Trichloroethane	mg/kg (ppm)	2	104	70-130
2-Hexanone	mg/kg (ppm)	10	77	55-145
1,3-Dichloropropane	mg/kg (ppm)	2	99	70-130
Tetrachloroethene	mg/kg (ppm)	2	116	69-131
Dibromochloromethane	mg/kg (ppm)	2	102	61-137
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	109	70-130
Chlorobenzene	mg/kg (ppm)	2	102	70-130
Ethylbenzene	mg/kg (ppm)	2	111	70-130
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	102	56-134
m,p-Xylene	mg/kg (ppm)	4	105	70-130
o-Xylene	mg/kg (ppm)	2	101	70-130
Styrene	mg/kg (ppm)	2	100	70-130
Isopropylbenzene	mg/kg (ppm)	2	101	67-131
Bromoform	mg/kg (ppm)	2	108	70-130
n-Propylbenzene	mg/kg (ppm)	2	97	70-130
Bromobenzene	mg/kg (ppm)	2	105	70-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	94	70-130
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	103	70-130
1,2,3-Trichloropropane	mg/kg (ppm)	2	91	70-130
2-Chlorotoluene	mg/kg (ppm)	2	96	70-130
4-Chlorotoluene	mg/kg (ppm)	2	92	70-130
tert-Butylbenzene	mg/kg (ppm)	2	95	70-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	96	70-130
sec-Butylbenzene	mg/kg (ppm)	2	101	68-131
p-Isopropyltoluene	mg/kg (ppm)	2	100	70-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	106	70-130
1,4-Dichlorobenzene	mg/kg (ppm)	2	101	70-130
1,2-Dichlorobenzene	mg/kg (ppm)	2	101	70-130
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	84	70-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	106	66-140
Hexachlorobutadiene	mg/kg (ppm)	2	109	67-141
Naphthalene	mg/kg (ppm)	2	93	69-119
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	106	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 high; 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.

304133

Report To Jerry BoydCompany TRCAddress 1150 NW Maple Suite 310City, State, ZIP Issaquah, WAPhone 425-358-0089 Email jboyd@trccompanies.comSAMPLE CHAIN OF CUSTODY 04/10/23

A1/VS-01

Page # 1 of 1SAMPLERS (signature) [Signature]

PROJECT NAME

ARE Seattle No. 32
380831

PO #

196954

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						
TSB-7:35	01 A-E	4/10/23	1307	S	5													
TSB-7:40	02		1351						X	X								
TSB-7:45	03	↓	1357															

Samples received at 1 °CFriedman & Bruya, Inc.
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	Natalie Dierr	TRC	4/10/23	14:51
Received by: <u>[Signature]</u>	ANH PHAN	FBB	04/10/23	14:51
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

May 17, 2023

Jerry Boyd, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 601 Dexter Ave 196954, F&BI 305038

Dear Mr Boyd:

Included are the results from the testing of material submitted on May 2, 2023 from the 601 Dexter Ave 196954, F&BI 305038 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: Cynthia Moon
TRC0517R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 2, 2023 by Friedman & Bruya, Inc. from the TRC Environmental 601 Dexter Ave 196954, F&BI 305038 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
305038-01	TSV-1
305038-02	AA-1
305038-03	TSV-2

APH EC5-8 aliphatics was detected in the MA-APH method blank at a level greater than one tenth the concentration detected in the samples. The data were flagged accordingly.

The carbon tetrachloride concentration in sample TSV-1 and ethanol concentration in TSV-2 exceeded the calibration range of the instrument. The data were flagged accordingly.

The TO-15 laboratory control sample exceeded the acceptance criteria for several analytes. The compounds were not detected, therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	TSV-1	Client:	TRC Environmental
Date Received:	05/02/23	Project:	601 Dexter Ave 196954
Date Collected:	05/02/23	Lab ID:	305038-01 1/3.3
Date Analyzed:	05/12/23	Data File:	051117.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	540 fb
APH EC9-12 aliphatics	140
APH EC9-10 aromatics	<82

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	AA-1	Client:	TRC Environmental
Date Received:	05/02/23	Project:	601 Dexter Ave 196954
Date Collected:	05/02/23	Lab ID:	305038-02 1/3.2
Date Analyzed:	05/12/23	Data File:	051118.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	430 fb
APH EC9-12 aliphatics	<80
APH EC9-10 aromatics	<80

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	TSV-2	Client:	TRC Environmental
Date Received:	05/02/23	Project:	601 Dexter Ave 196954
Date Collected:	05/02/23	Lab ID:	305038-03 1/5.0
Date Analyzed:	05/12/23	Data File:	051119.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	940 fb
APH EC9-12 aliphatics	180
APH EC9-10 aromatics	<120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	601 Dexter Ave 196954
Date Collected:	Not Applicable	Lab ID:	03-1088 mb
Date Analyzed:	05/11/23	Data File:	051110.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	110 lc
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: TSV-1	Client: TRC Environmental
Date Received: 05/02/23	Project: 601 Dexter Ave 196954
Date Collected: 05/02/23	Lab ID: 305038-01 1/3.3
Date Analyzed: 05/12/23	Data File: 051117.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	5.9	3.5	1,2-Dichloropropane	<0.76	<0.16
Dichlorodifluoromethane	47	9.5	1,4-Dioxane	<1.2	<0.33
Chloromethane	<12	<5.9	2,2,4-Trimethylpentane	<15	<3.3
F-114	<6.9	<0.99	Methyl methacrylate	<14	<3.3
Vinyl chloride	<0.84	<0.33	Heptane	<14	<3.3
1,3-Butadiene	<0.15 j	<0.066 j	Bromodichloromethane	<0.22 j	<0.033 j
Butane	<16	<6.6	Trichloroethene	0.53	0.099
Bromomethane	<13	<3.3	cis-1,3-Dichloropropene	<3	<0.66
Chloroethane	<8.7	<3.3	4-Methyl-2-pentanone	<15	<3.6
Vinyl bromide	<1.4	<0.33	trans-1,3-Dichloropropene	<1.5	<0.33
Ethanol	93	49	Toluene	<62	<16
Acrolein	1	0.46	1,1,2-Trichloroethane	<0.18 j	<0.033 j
Pentane	<19	<6.6	2-Hexanone	<14	<3.3
Trichlorofluoromethane	12	2.2	Tetrachloroethene	23	3.4
Acetone	31	13	Dibromochloromethane	<0.28 j	<0.033 j
2-Propanol	<28	<12	1,2-Dibromoethane (EDB)	<0.25 j	<0.033 j
1,1-Dichloroethene	<1.3	<0.33	Chlorobenzene	<1.5	<0.33
trans-1,2-Dichloroethene	<1.3	<0.33	Ethylbenzene	1.6	0.36
Methylene chloride	<110	<33	1,1,2,2-Tetrachloroethane	<0.45 j	<0.066 j
t-Butyl alcohol (TBA)	<40	<13	Nonane	<17	<3.3
3-Chloropropene	<10	<3.3	Isopropylbenzene	<32	<6.6
CFC-113	<2.7	<0.35	2-Chlorotoluene	<17	<3.3
Carbon disulfide	<21	<6.6	Propylbenzene	<16	<3.3
Methyl t-butyl ether (MTBE)	<24	<6.6	4-Ethyltoluene	<16	<3.3
Vinyl acetate	<23	<6.6	m,p-Xylene	4.0	0.91
1,1-Dichloroethane	<1.3	<0.33	o-Xylene	1.9	0.44
cis-1,2-Dichloroethene	<1.3	<0.33	Styrene	<2.8	<0.66
Hexane	<12	<3.3	Bromoform	<6.8	<0.66
Chloroform	23	4.7	Benzyl chloride	<0.17 j	<0.033 j
Ethyl acetate	<24	<6.6	1,3,5-Trimethylbenzene	<16	<3.3
Tetrahydrofuran	6.7	2.3	1,2,4-Trimethylbenzene	<16	<3.3
2-Butanone (MEK)	<19	<6.6	1,3-Dichlorobenzene	<2	<0.33
1,2-Dichloroethane (EDC)	<0.13 j	<0.033 j	1,4-Dichlorobenzene	<0.75 j	<0.13 j
1,1,1-Trichloroethane	<1.8	<0.33	1,2-Dichlorobenzene	<2	<0.33
Carbon tetrachloride	790 ve	130 ve	1,2,4-Trichlorobenzene	<2.4	<0.33
Benzene	<1.1	<0.33	Naphthalene	<0.86	<0.16
Cyclohexane	<23	<6.6	Hexachlorobutadiene	<0.7 j	<0.066 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID: AA-1	Client: TRC Environmental
Date Received: 05/02/23	Project: 601 Dexter Ave 196954
Date Collected: 05/02/23	Lab ID: 305038-02 1/3.2
Date Analyzed: 05/12/23	Data File: 051118.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	7	4.1	1,2-Dichloropropane	<0.74	<0.16
Dichlorodifluoromethane	89	18	1,4-Dioxane	<1.2	<0.32
Chloromethane	<12	<5.8	2,2,4-Trimethylpentane	<15	<3.2
F-114	<6.7	<0.96	Methyl methacrylate	<13	<3.2
Vinyl chloride	<0.82	<0.32	Heptane	<13	<3.2
1,3-Butadiene	<0.14 j	<0.064 j	Bromodichloromethane	<0.21 j	<0.032 j
Butane	<15	<6.4	Trichloroethene	0.84 j	0.16 j
Bromomethane	<12	<3.2	cis-1,3-Dichloropropene	<2.9	<0.64
Chloroethane	<8.4	<3.2	4-Methyl-2-pentanone	<15	<3.5
Vinyl bromide	<1.4	<0.32	trans-1,3-Dichloropropene	<1.5	<0.32
Ethanol	<24	<13	Toluene	<60	<16
Acrolein	0.73	0.32	1,1,2-Trichloroethane	<0.17 j	<0.032 j
Pentane	<19	<6.4	2-Hexanone	<13	<3.2
Trichlorofluoromethane	<7.2	<1.3	Tetrachloroethene	30	4.4
Acetone	27	12	Dibromochloromethane	<0.27 j	<0.032 j
2-Propanol	<28	<11	1,2-Dibromoethane (EDB)	<0.25 j	<0.032 j
1,1-Dichloroethene	<1.3	<0.32	Chlorobenzene	<1.5	<0.32
trans-1,2-Dichloroethene	<1.3	<0.32	Ethylbenzene	<1.4	<0.32
Methylene chloride	<110	<32	1,1,2,2-Tetrachloroethane	<0.44 j	<0.064 j
t-Butyl alcohol (TBA)	<39	<13	Nonane	<17	<3.2
3-Chloropropene	<10	<3.2	Isopropylbenzene	<31	<6.4
CFC-113	<2.6	<0.34	2-Chlorotoluene	<17	<3.2
Carbon disulfide	<20	<6.4	Propylbenzene	<16	<3.2
Methyl t-butyl ether (MTBE)	<23	<6.4	4-Ethyltoluene	<16	<3.2
Vinyl acetate	<23	<6.4	m,p-Xylene	<2.8	<0.64
1,1-Dichloroethane	<1.3	<0.32	o-Xylene	<1.4	<0.32
cis-1,2-Dichloroethene	<1.3	<0.32	Styrene	<2.7	<0.64
Hexane	<11	<3.2	Bromoform	<6.6	<0.64
Chloroform	1.3	0.27	Benzyl chloride	<0.17 j	<0.032 j
Ethyl acetate	<23	<6.4	1,3,5-Trimethylbenzene	<16	<3.2
Tetrahydrofuran	<1.9	<0.64	1,2,4-Trimethylbenzene	<16	<3.2
2-Butanone (MEK)	<19	<6.4	1,3-Dichlorobenzene	<1.9	<0.32
1,2-Dichloroethane (EDC)	<0.13 j	<0.032 j	1,4-Dichlorobenzene	<0.73 j	<0.12 j
1,1,1-Trichloroethane	<1.7	<0.32	1,2-Dichlorobenzene	<1.9	<0.32
Carbon tetrachloride	30	4.8	1,2,4-Trichlorobenzene	<2.4	<0.32
Benzene	<1	<0.32	Naphthalene	<0.84	<0.16
Cyclohexane	<22	<6.4	Hexachlorobutadiene	<0.68 j	<0.064 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID: TSV-2	Client: TRC Environmental
Date Received: 05/02/23	Project: 601 Dexter Ave 196954
Date Collected: 05/02/23	Lab ID: 305038-03 1/5.0
Date Analyzed: 05/12/23	Data File: 051119.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	30	18	1,2-Dichloropropane	<1.2	<0.25
Dichlorodifluoromethane	270	54	1,4-Dioxane	<1.8	<0.5
Chloromethane	<19	<9	2,2,4-Trimethylpentane	<23	<5
F-114	<10	<1.5	Methyl methacrylate	<20	<5
Vinyl chloride	<1.3	<0.5	Heptane	<20	<5
1,3-Butadiene	<0.22 j	<0.1 j	Bromodichloromethane	<0.34 j	<0.05 j
Butane	28	12	Trichloroethene	2.0	0.37
Bromomethane	<19	<5	cis-1,3-Dichloropropene	<4.5	<1
Chloroethane	<13	<5	4-Methyl-2-pentanone	<23	<5.5
Vinyl bromide	<2.2	<0.5	trans-1,3-Dichloropropene	<2.3	<0.5
Ethanol	190 ve	100 ve	Toluene	<94	<25
Acrolein	1	0.44	1,1,2-Trichloroethane	<0.27 j	<0.05 j
Pentane	<30	<10	2-Hexanone	<20	<5
Trichlorofluoromethane	29	5.2	Tetrachloroethene	48	7.1
Acetone	56	24	Dibromochloromethane	<0.43 j	<0.05 j
2-Propanol	<43	<17	1,2-Dibromoethane (EDB)	<0.38 j	<0.05 j
1,1-Dichloroethene	<2	<0.5	Chlorobenzene	<2.3	<0.5
trans-1,2-Dichloroethene	<2	<0.5	Ethylbenzene	2.5	0.56
Methylene chloride	<170	<50	1,1,2,2-Tetrachloroethane	<0.69 j	<0.1 j
t-Butyl alcohol (TBA)	<61	<20	Nonane	<26	<5
3-Chloropropene	<16	<5	Isopropylbenzene	<49	<10
CFC-113	<4	<0.53	2-Chlorotoluene	<26	<5
Carbon disulfide	<31	<10	Propylbenzene	<25	<5
Methyl t-butyl ether (MTBE)	<36	<10	4-Ethyltoluene	<25	<5
Vinyl acetate	<35	<10	m,p-Xylene	5.9	1.4
1,1-Dichloroethane	<2	<0.5	o-Xylene	2.9	0.66
cis-1,2-Dichloroethene	<2	<0.5	Styrene	<4.3	<1
Hexane	32	9.2	Bromoform	<10	<1
Chloroform	5.1	1.0	Benzyl chloride	<0.26 j	<0.05 j
Ethyl acetate	<36	<10	1,3,5-Trimethylbenzene	<25	<5
Tetrahydrofuran	7.2	2.4	1,2,4-Trimethylbenzene	<25	<5
2-Butanone (MEK)	38	13	1,3-Dichlorobenzene	<3	<0.5
1,2-Dichloroethane (EDC)	<0.2 j	<0.05 j	1,4-Dichlorobenzene	<1.1 j	<0.19 j
1,1,1-Trichloroethane	7	1.3	1,2-Dichlorobenzene	<3	<0.5
Carbon tetrachloride	120	19	1,2,4-Trichlorobenzene	<3.7	<0.5
Benzene	<1.6	<0.5	Naphthalene	<1.3	<0.25
Cyclohexane	<34	<10	Hexachlorobutadiene	<1.1 j	<0.1 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	601 Dexter Ave 196954
Date Collected:	Not Applicable	Lab ID:	03-1088 mb
Date Analyzed:	05/11/23	Data File:	051110.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	<1.2	<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 j	<0.02 j	Bromodichloromethane	<0.067 j	<0.01 j
Butane	<4.8	<2	Trichloroethene	<0.11 j	<0.02 j
Bromomethane	<3.9	<1	cis-1,3-Dichloropropene	<0.91	<0.2
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<4.6	<1.1
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5	<4	Toluene	<19	<5
Acrolein	<0.11	<0.05	1,1,2-Trichloroethane	<0.055 j	<0.01 j
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 j	<0.01 j
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077 j	<0.01 j
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 j	<0.02 j
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<3.1	<1	Isopropylbenzene	<9.8	<2
CFC-113	<0.81	<0.11	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 j	<0.01 j	Benzyl chloride	<0.052 j	<0.01 j
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 j	<0.01 j	1,4-Dichlorobenzene	<0.23 j	<0.038 j
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 j	<0.02 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/17/23

Date Received: 05/02/23

Project: 601 Dexter Ave 196954, F&BI 305038

Date Extracted: 05/10/23

Date Analyzed: 05/10/23

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

Results Reported as % Helium

Sample ID

Laboratory ID

Helium

TSV-1

305038-01

<0.6

AA-1

305038-03

<0.6

Method Blank

03-1085 MB

<0.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/17/23

Date Received: 05/02/23

Project: 601 Dexter Ave 196954, F&BI 305038

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

Laboratory Code: 304367-01 1/3.3 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	650	650	0
APH EC9-12 aliphatics	ug/m3	1,800	1,800	0
APH EC9-10 aromatics	ug/m3	<82	91	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	101	70-130
APH EC9-12 aliphatics	ug/m3	67	107	70-130
APH EC9-10 aromatics	ug/m3	67	101	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/17/23

Date Received: 05/02/23

Project: 601 Dexter Ave 196954, F&BI 305038

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

Laboratory Code: 304367-01 1/3.3 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Propene	ug/m3	<4	<4	nm
Dichlorodifluoromethane	ug/m3	910	890	2
Chloromethane	ug/m3	<12	<12	nm
F-114	ug/m3	<6.9	<6.9	nm
Vinyl chloride	ug/m3	<0.84	<0.84	nm
1,3-Butadiene	ug/m3	<0.15 j	<0.15 j	nm
Butane	ug/m3	<16	<16	nm
Bromomethane	ug/m3	<13	<13	nm
Chloroethane	ug/m3	<8.7	<8.7	nm
Vinyl bromide	ug/m3	<1.4	<1.4	nm
Ethanol	ug/m3	<25	<25	nm
Acrolein	ug/m3	0.57	0.59	3
Pentane	ug/m3	<19	<19	nm
Trichlorofluoromethane	ug/m3	<7.4	<7.4	nm
Acetone	ug/m3	19	18	5
2-Propanol	ug/m3	120	110	9
1,1-Dichloroethene	ug/m3	<1.3	<1.3	nm
trans-1,2-Dichloroethene	ug/m3	<1.3	<1.3	nm
Methylene chloride	ug/m3	<110	<110	nm
t-Butyl alcohol (TBA)	ug/m3	<40	<40	nm
3-Chloropropene	ug/m3	<10	<10	nm
CFC-113	ug/m3	<3.3	<3.3	nm
Carbon disulfide	ug/m3	<21	<21	nm
Methyl t-butyl ether (MTBE)	ug/m3	<24	<24	nm
Vinyl acetate	ug/m3	<23	<23	nm
1,1-Dichloroethane	ug/m3	<1.3	<1.3	nm
cis-1,2-Dichloroethene	ug/m3	<1.3	<1.3	nm
Hexane	ug/m3	<12	<12	nm
Chloroform	ug/m3	0.16 j	<0.16 j	nm
Ethyl acetate	ug/m3	41	39	5
Tetrahydrofuran	ug/m3	<1.9	<1.9	nm
2-Butanone (MEK)	ug/m3	<19	<19	nm
1,2-Dichloroethane (EDC)	ug/m3	<0.13 j	<0.13 j	nm
1,1,1-Trichloroethane	ug/m3	<1.8	<1.8	nm
Carbon tetrachloride	ug/m3	<1	<1	nm
Benzene	ug/m3	<1.1	<1.1	nm
Cyclohexane	ug/m3	<23	<23	nm
1,2-Dichloropropane	ug/m3	<0.76	<0.76	nm
1,4-Dioxane	ug/m3	<1.2	<1.2	nm
2,2,4-Trimethylpentane	ug/m3	<15	<15	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/17/23

Date Received: 05/02/23

Project: 601 Dexter Ave 196954, F&BI 305038

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

Laboratory Code: 304367-01 1/3.3 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl methacrylate	ug/m3	<14	<14	nm
Heptane	ug/m3	<14	<14	nm
Bromodichloromethane	ug/m3	<0.22 j	<0.22 j	nm
Trichloroethene	ug/m3	<0.35 j	<0.35 j	nm
cis-1,3-Dichloropropene	ug/m3	<3	<3	nm
4-Methyl-2-pentanone	ug/m3	<15	<15	nm
trans-1,3-Dichloropropene	ug/m3	<1.5	<1.5	nm
Toluene	ug/m3	<62	<62	nm
1,1,2-Trichloroethane	ug/m3	<0.18 j	<0.18 j	nm
2-Hexanone	ug/m3	<14	<14	nm
Tetrachloroethene	ug/m3	<22	<22	nm
Dibromochloromethane	ug/m3	<0.28 j	<0.28 j	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.25 j	0.25 j	nm
Chlorobenzene	ug/m3	<1.5	<1.5	nm
Ethylbenzene	ug/m3	<1.4	<1.4	nm
1,1,2,2-Tetrachloroethane	ug/m3	<0.45 j	<0.45 j	nm
Nonane	ug/m3	<17	<17	nm
Isopropylbenzene	ug/m3	<32	<32	nm
2-Chlorotoluene	ug/m3	<17	<17	nm
Propylbenzene	ug/m3	<16	<16	nm
4-Ethyltoluene	ug/m3	<16	<16	nm
m,p-Xylene	ug/m3	4.3	4.4	2
o-Xylene	ug/m3	1.9	2.0	5
Styrene	ug/m3	<2.8	<2.8	nm
Bromoform	ug/m3	<6.8	<6.8	nm
Benzyl chloride	ug/m3	<0.17 j	<0.17 j	nm
1,3,5-Trimethylbenzene	ug/m3	<16	<16	nm
1,2,4-Trimethylbenzene	ug/m3	<16	<16	nm
1,3-Dichlorobenzene	ug/m3	9.9	9.9	0
1,4-Dichlorobenzene	ug/m3	<0.75 j	<0.75 j	nm
1,2-Dichlorobenzene	ug/m3	<2	<2	nm
1,2,4-Trichlorobenzene	ug/m3	<2.4	<2.4	nm
Naphthalene	ug/m3	<0.86	<0.86	nm
Hexachlorobutadiene	ug/m3	<0.7 j	<0.7 j	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/17/23

Date Received: 05/02/23

Project: 601 Dexter Ave 196954, F&BI 305038

**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	91	70-130
Dichlorodifluoromethane	ug/m3	67	92	70-130
Chloromethane	ug/m3	28	105	70-130
F-114	ug/m3	94	95	70-130
Vinyl chloride	ug/m3	35	97	70-130
1,3-Butadiene	ug/m3	30	95	70-130
Butane	ug/m3	32	101	70-130
Bromomethane	ug/m3	52	92	70-130
Chloroethane	ug/m3	36	97	70-130
Vinyl bromide	ug/m3	59	109	70-130
Ethanol	ug/m3	25	101	70-130
Acrolein	ug/m3	31	96	70-130
Pentane	ug/m3	40	110	70-130
Trichlorofluoromethane	ug/m3	76	99	70-130
Acetone	ug/m3	32	126	70-130
2-Propanol	ug/m3	33	102	70-130
1,1-Dichloroethene	ug/m3	54	99	70-130
trans-1,2-Dichloroethene	ug/m3	54	97	70-130
Methylene chloride	ug/m3	94	98	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	91	70-130
Carbon disulfide	ug/m3	42	110	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	94	70-130
Vinyl acetate	ug/m3	48	104	70-130
1,1-Dichloroethane	ug/m3	55	98	70-130
cis-1,2-Dichloroethene	ug/m3	54	94	70-130
Hexane	ug/m3	48	97	70-130
Chloroform	ug/m3	66	100	70-130
Ethyl acetate	ug/m3	49	123	70-130
Tetrahydrofuran	ug/m3	40	104	70-130
2-Butanone (MEK)	ug/m3	40	102	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	101	70-130
1,1,1-Trichloroethane	ug/m3	74	98	70-130
Carbon tetrachloride	ug/m3	85	94	70-130
Benzene	ug/m3	43	96	70-130
Cyclohexane	ug/m3	46	103	70-130
1,2-Dichloropropane	ug/m3	62	104	70-130
1,4-Dioxane	ug/m3	49	97	70-130
2,2,4-Trimethylpentane	ug/m3	63	102	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/17/23

Date Received: 05/02/23

Project: 601 Dexter Ave 196954, F&BI 305038

**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	103	70-130
Heptane	ug/m3	55	103	70-130
Bromodichloromethane	ug/m3	90	105	70-130
Trichloroethene	ug/m3	73	103	70-130
cis-1,3-Dichloropropene	ug/m3	61	99	70-130
4-Methyl-2-pentanone	ug/m3	55	155 vo	70-130
trans-1,3-Dichloropropene	ug/m3	61	101	70-130
Toluene	ug/m3	51	99	70-130
1,1,2-Trichloroethane	ug/m3	74	109	70-130
2-Hexanone	ug/m3	55	101	70-130
Tetrachloroethene	ug/m3	92	100	70-130
Dibromochloromethane	ug/m3	120	102	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	102	70-130
Chlorobenzene	ug/m3	62	103	70-130
Ethylbenzene	ug/m3	59	98	70-130
1,1,2,2-Tetrachloroethane	ug/m3	93	106	70-130
Nonane	ug/m3	71	106	70-130
Isopropylbenzene	ug/m3	66	100	70-130
2-Chlorotoluene	ug/m3	70	109	70-130
Propylbenzene	ug/m3	66	104	70-130
4-Ethyltoluene	ug/m3	66	105	70-130
m,p-Xylene	ug/m3	120	94	70-130
o-Xylene	ug/m3	59	100	70-130
Styrene	ug/m3	58	104	70-130
Bromoform	ug/m3	140	101	70-130
Benzyl chloride	ug/m3	70	116	70-130
1,3,5-Trimethylbenzene	ug/m3	66	111	70-130
1,2,4-Trimethylbenzene	ug/m3	66	110	70-130
1,3-Dichlorobenzene	ug/m3	81	111	70-130
1,4-Dichlorobenzene	ug/m3	81	115	70-130
1,2-Dichlorobenzene	ug/m3	81	111	70-130
1,2,4-Trichlorobenzene	ug/m3	100	179 vo	70-130
Naphthalene	ug/m3	71	187 vo	70-130
Hexachlorobutadiene	ug/m3	140	112	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/17/23

Date Received: 05/02/23

Project: 601 Dexter Ave 196954, F&BI 305038

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

Laboratory Code: 305083-03 (Duplicate)

Analyte	Sample Result (%)	Duplicate Result (%)	Relative Percent Difference	Acceptance Criteria
Helium	<0.6	<0.6	nm	0-20

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 Jerry Boyd

Company TRC

Address 1130 NW Maple St, Ste 300

City, State, ZIP Seattle, WA 98027

Phone 425-395-0010 Email JBoyd@TRCcompairs.com

SAMPLERS (signature)

PROJECT NAME & ADDRESS	
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PO #

NOTES:

INVOICE TO

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 VOCs	APH	Helium	Notes
TSV-1	01	B538	G9	IA / <u>SG</u>	5-2-23	29	1130	4	1135	<u>(X)</u>		<u>X</u>	<u>(X)</u>	X	
AA-1	02	²³⁰¹ 9981	F1	IA / <u>SG</u>	5-2-23	29	1129	4	1134	<u>(X)</u>		<u>X</u>	<u>(X)</u>	X	Don't analyze Ac HC
TSV-2	03	9981	242	IA / <u>SG</u>	5-2-23	29	1233	4	1302	<u>(X)</u>		<u>X</u>	<u>(X)</u>	X	
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Friedman & Bruya, Inc.
5500 4th Avenue South

Seattle, WA 98108

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Madison Taylor	TRC	7/2/23	1344
Received by: 	Nhan Phan	FEBT	5/2/23	1344
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

May 18, 2023

Jerry Boyd, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 601 Dexter 380831 196954, F&BI 305086

Dear Mr Boyd:

Included are the results from the testing of material submitted on May 4, 2023 from the 601 Dexter 380831 196954, F&BI 305086 project. There are 35 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: Cynthia Moon
TRC0518R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 4, 2023 by Friedman & Bruya, Inc. from the TRC Environmental 601 Dexter 380831 196954, F&BI 305086 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
305086 -01	TMW-2
305086 -02	DMW-11S
305086 -03	TMW-3
305086 -04	DMW-10S
305086 -05	DMW-4S
305086 -06	DUP-1
305086 -07	DMW-14S
305086 -08	DMW-12S
305086 -09	DMW-13S
305086 -10	TMW-1
305086 -11	TB

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

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/23

Date Received: 05/04/23

Project: 601 Dexter 380831 196954, F&BI 305086

Date Extracted: 05/08/23

Date Analyzed: 05/08/23

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-G_x**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
TMW-2 305086-01	3,500	124
DMW-11S 305086-02	1,300	113
TMW-3 305086-03	240 x	105
DMW-10S 305086-04	380	111
DMW-4S 305086-05 1/10	5,300	111
DUP-1 305086-06	3,200	130
DMW-14S 305086-07	<100	106
DMW-12S 305086-08	<100	107
DMW-13S 305086-09	<100	106
TMW-1 305086-10	<100	106
Method Blank 03-947 MB	<100	107

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/23

Date Received: 05/04/23

Project: 601 Dexter 380831 196954, F&BI 305086

Date Extracted: 05/05/23

Date Analyzed: 05/05/23

**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 ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 50-150)
TMW-2 305086-01	520 x	<250	132
DMW-11S 305086-02	110 x	<250	86
TMW-3 305086-03	900 x	1,600 x	175
DMW-10S 305086-04	64 x	<250	134
DMW-4S 305086-05	1,200 x	<250	136
DUP-1 305086-06	480 x	<250	127
DMW-14S 305086-07	<50	<250	129
DMW-12S 305086-08	<50	<250	126
DMW-13S 305086-09	<50	<250	128
TMW-1 305086-10	<50	<250	131
Method Blank 03-1135 MB	<50	<250	124

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	TMW-2	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/08/23	Lab ID:	305086-01
Date Analyzed:	05/08/23	Data File:	050810.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	71	132
Toluene-d8	116	68	139
4-Bromofluorobenzene	99	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	7.6
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	2.0
Hexane	18	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	22
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	4.4
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	16
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	1.2
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	3.2
Benzene	1.2	sec-Butylbenzene	9.4
Trichloroethene	<0.5	p-Isopropyltoluene	9.8
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	2.9
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:	DMW-11S	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/08/23	Lab ID:	305086-02
Date Analyzed:	05/08/23	Data File:	050814.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	71	132
Toluene-d8	101	68	139
4-Bromofluorobenzene	100	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	35
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	18
Hexane	<5	o-Xylene	1.6
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	11
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	9.7
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	18
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	41
Benzene	1.4	sec-Butylbenzene	2.1
Trichloroethene	<0.5	p-Isopropyltoluene	2.1
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	6.2
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:	TMW-3	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/08/23	Lab ID:	305086-03
Date Analyzed:	05/08/23	Data File:	050815.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	71	132
Toluene-d8	86	68	139
4-Bromofluorobenzene	84	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
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

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	DMW-10S	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/08/23	Lab ID:	305086-04
Date Analyzed:	05/08/23	Data File:	050816.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	71	132
Toluene-d8	100	68	139
4-Bromofluorobenzene	101	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	19
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	9.1
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	4.6
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	3.3
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	6.2
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	19
Benzene	0.78	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
1,1,2-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:	DMW-4S	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/08/23	Lab ID:	305086-05
Date Analyzed:	05/08/23	Data File:	050838.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	71	132
Toluene-d8	116	68	139
4-Bromofluorobenzene	110	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	64
Acetone	<50 ca	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	25
Hexane	23	o-Xylene	2.0
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	40
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	51
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	84
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	1.2
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	130
Benzene	<0.35	sec-Butylbenzene	11
Trichloroethene	<0.5	p-Isopropyltoluene	19
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	1.7	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	56
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:	DUP-1	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/08/23	Lab ID:	305086-06
Date Analyzed:	05/08/23	Data File:	050817.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	71	132
Toluene-d8	117	68	139
4-Bromofluorobenzene	97	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	7.4
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	16	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	19
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	4.6
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	16
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	1.2
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	2.9
Benzene	1.2	sec-Butylbenzene	9.2
Trichloroethene	<0.5	p-Isopropyltoluene	8.8
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	2.6
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:	DMW-14S	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/08/23	Lab ID:	305086-07
Date Analyzed:	05/08/23	Data File:	050832.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	71	132
Toluene-d8	89	68	139
4-Bromofluorobenzene	99	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
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	0.65	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:	DMW-12S	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/08/23	Lab ID:	305086-08
Date Analyzed:	05/08/23	Data File:	050833.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	71	132
Toluene-d8	103	68	139
4-Bromofluorobenzene	101	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
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:	DMW-13S	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/08/23	Lab ID:	305086-09
Date Analyzed:	05/08/23	Data File:	050834.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	91	71	132
Toluene-d8	95	68	139
4-Bromofluorobenzene	101	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
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:	TMW-1	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/08/23	Lab ID:	305086-10
Date Analyzed:	05/08/23	Data File:	050835.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	112	71	132
Toluene-d8	101	68	139
4-Bromofluorobenzene	101	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
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:	TRC Environmental
Date Received:	Not Applicable	Project:	601 Dexter 380831
Date Extracted:	05/08/23	Lab ID:	03-1073 mb
Date Analyzed:	05/08/23	Data File:	050807.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	71	132
Toluene-d8	101	68	139
4-Bromofluorobenzene	99	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
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

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	TMW-2	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	305086-01 1/2
Date Analyzed:	05/11/23	Data File:	051108.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	88	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	0.087
Chrysene	0.084
Benzo(a)pyrene	0.065
Benzo(b)fluoranthene	0.10
Benzo(k)fluoranthene	0.044
Indeno(1,2,3-cd)pyrene	0.044
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	DMW-11S	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	305086-02 1/2
Date Analyzed:	05/11/23	Data File:	051109.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	109	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	0.072
Chrysene	0.085
Benzo(a)pyrene	0.074
Benzo(b)fluoranthene	0.13
Benzo(k)fluoranthene	0.045
Indeno(1,2,3-cd)pyrene	0.063
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	TMW-3	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	305086-03 1/2
Date Analyzed:	05/11/23	Data File:	051110.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	102	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	DMW-10S	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	305086-04 1/2
Date Analyzed:	05/11/23	Data File:	051111.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	85	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	DMW-4S	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	305086-05 1/2
Date Analyzed:	05/11/23	Data File:	051112.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	113	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	DUP-1	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	305086-06 1/2
Date Analyzed:	05/11/23	Data File:	051113.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	110	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	03-1155 mb
Date Analyzed:	05/11/23	Data File:	051107.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	115	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	TMW-2	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	305086-01
Date Analyzed:	05/11/23	Data File:	051105.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	MG

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	40	11	96
Decachlorobiphenyl	48	25	127

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DMW-11S	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	305086-02
Date Analyzed:	05/11/23	Data File:	051106.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	MG

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	36	11	96
Decachlorobiphenyl	49	25	127

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	TMW-3	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	305086-03
Date Analyzed:	05/12/23	Data File:	051205.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	MG

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	25	11	96
Decachlorobiphenyl	33	25	127

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DMW-10S	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	305086-04
Date Analyzed:	05/11/23	Data File:	051108.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	MG

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	36	11	96
Decachlorobiphenyl	60	25	127

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DMW-4S	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	305086-05
Date Analyzed:	05/11/23	Data File:	051109.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	MG

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	34	11	96
Decachlorobiphenyl	56	25	127

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DUP-1	Client:	TRC Environmental
Date Received:	05/04/23	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	305086-06
Date Analyzed:	05/11/23	Data File:	051110.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	MG

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	44	11	96
Decachlorobiphenyl	56	25	127

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	601 Dexter 380831
Date Extracted:	05/10/23	Lab ID:	03-1146 mb2
Date Analyzed:	05/10/23	Data File:	051007.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	MG

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	67	11	96
Decachlorobiphenyl	26	25	127

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/23

Date Received: 05/04/23

Project: 601 Dexter 380831 196954, F&BI 305086

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

Laboratory Code: 305086-10 (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	92	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/23

Date Received: 05/04/23

Project: 601 Dexter 380831 196954, F&BI 305086

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

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	65-151	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/23

Date Received: 05/04/23

Project: 601 Dexter 380831 196954, F&BI 305086

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

Laboratory Code: 305086-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Dichlorodifluoromethane	ug/L (ppb)	10	<1	122	27-164
Chloromethane	ug/L (ppb)	10	<10	105	34-141
Vinyl chloride	ug/L (ppb)	10	<0.02	117	16-176
Bromomethane	ug/L (ppb)	10	<5	99	10-193
Chloroethane	ug/L (ppb)	10	<1	113	50-150
Trichlorofluoromethane	ug/L (ppb)	10	<1	103	50-150
Acetone	ug/L (ppb)	50	<50	71	15-179
1,1-Dichloroethene	ug/L (ppb)	10	<1	104	50-150
Hexane	ug/L (ppb)	10	18	113 b	49-161
Methylene chloride	ug/L (ppb)	10	<5	109	40-143
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	<1	99	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	103	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	104	50-150
2,2-Dichloropropane	ug/L (ppb)	10	<1	103	62-152
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	103	50-150
Chloroform	ug/L (ppb)	10	<1	97	50-150
2-Butanone (MEK)	ug/L (ppb)	50	<20	85	34-168
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<0.2	107	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	100	50-150
1,1-Dichloropropene	ug/L (ppb)	10	<1	101	50-150
Carbon tetrachloride	ug/L (ppb)	10	<0.5	97	50-150
Benzene	ug/L (ppb)	10	1.2	101	50-150
Trichloroethene	ug/L (ppb)	10	<0.5	95	43-133
1,2-Dichloropropane	ug/L (ppb)	10	<1	141	50-150
Bromodichloromethane	ug/L (ppb)	10	<0.5	101	50-150
Dibromomethane	ug/L (ppb)	10	<1	100	50-150
4-Methyl-2-pentanone	ug/L (ppb)	50	<10	115	50-150
cis-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	93	48-145
Toluene	ug/L (ppb)	10	<1	99	50-150
trans-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	94	37-152
1,1,2-Trichloroethane	ug/L (ppb)	10	<0.5	142	50-150
2-Hexanone	ug/L (ppb)	50	<10	103	50-150
1,3-Dichloropropene	ug/L (ppb)	10	<1	100	50-150
Tetrachloroethene	ug/L (ppb)	10	<1	100	50-150
Dibromochloromethane	ug/L (ppb)	10	<0.5	90	33-164
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	<1	97	50-150
Chlorobenzene	ug/L (ppb)	10	<1	98	50-150
Ethylbenzene	ug/L (ppb)	10	7.6	107 b	50-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	<1	100	50-150
m,p-Xylene	ug/L (ppb)	20	2.0	101	50-150
o-Xylene	ug/L (ppb)	10	<1	98	50-150
Styrene	ug/L (ppb)	10	<1	91	50-150
Isopropylbenzene	ug/L (ppb)	10	22	55 b	50-150
Bromoform	ug/L (ppb)	10	<5	92	23-161
n-Propylbenzene	ug/L (ppb)	10	4.4	91 b	50-150
Bromobenzene	ug/L (ppb)	10	<1	90	50-150
1,3,5-Trimethylbenzene	ug/L (ppb)	10	16	92 b	50-150
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	<0.2	98	57-162
1,2,3-Trichloropropane	ug/L (ppb)	10	<1	105	33-151
2-Chlorotoluene	ug/L (ppb)	10	<1	112	50-150
4-Chlorotoluene	ug/L (ppb)	10	<1	113	50-150
tert-Butylbenzene	ug/L (ppb)	10	1.2	94	50-150
1,2,4-Trimethylbenzene	ug/L (ppb)	10	3.2	90 b	50-150
sec-Butylbenzene	ug/L (ppb)	10	9.4	98 b	46-139
p-Isopropyltoluene	ug/L (ppb)	10	9.8	94 b	46-140
1,3-Dichlorobenzene	ug/L (ppb)	10	<1	96	50-150
1,4-Dichlorobenzene	ug/L (ppb)	10	<1	95	50-150
1,2-Dichlorobenzene	ug/L (ppb)	10	<1	94	50-150
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	<10	112	50-150
1,2,4-Trichlorobenzene	ug/L (ppb)	10	<1	100	50-150
Hexachlorobutadiene	ug/L (ppb)	10	<0.5	99	42-150
Naphthalene	ug/L (ppb)	10	2.9	98 b	50-150
1,2,3-Trichlorobenzene	ug/L (ppb)	10	<1	97	44-155

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/23

Date Received: 05/04/23

Project: 601 Dexter 380831 196954, F&BI 305086

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	108	102	49-149	6
Chloromethane	ug/L (ppb)	10	89	100	34-143	12
Vinyl chloride	ug/L (ppb)	10	105	106	43-149	1
Bromomethane	ug/L (ppb)	10	107	107	28-182	0
Chloroethane	ug/L (ppb)	10	115	116	59-157	1
Trichlorofluoromethane	ug/L (ppb)	10	95	100	59-141	5
Acetone	ug/L (ppb)	50	71	70	20-139	1
1,1-Dichloroethene	ug/L (ppb)	10	98	100	67-138	2
Hexane	ug/L (ppb)	10	104	90	50-161	14
Methylene chloride	ug/L (ppb)	10	96	98	29-192	2
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	92	94	70-130	2
trans-1,2-Dichloroethene	ug/L (ppb)	10	96	97	70-130	1
1,1-Dichloroethane	ug/L (ppb)	10	96	98	70-130	2
2,2-Dichloropropane	ug/L (ppb)	10	106	115	71-148	8
cis-1,2-Dichloroethene	ug/L (ppb)	10	99	101	70-130	2
Chloroform	ug/L (ppb)	10	94	95	70-130	1
2-Butanone (MEK)	ug/L (ppb)	50	88	102	50-157	15
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	98	100	70-130	2
1,1,1-Trichloroethane	ug/L (ppb)	10	95	97	70-130	2
1,1-Dichloropropene	ug/L (ppb)	10	98	100	70-130	2
Carbon tetrachloride	ug/L (ppb)	10	93	97	70-130	4
Benzene	ug/L (ppb)	10	97	98	70-130	1
Trichloroethene	ug/L (ppb)	10	93	93	70-130	0
1,2-Dichloropropane	ug/L (ppb)	10	105	104	70-130	1
Bromodichloromethane	ug/L (ppb)	10	89	89	70-130	0
Dibromomethane	ug/L (ppb)	10	94	97	70-130	3
4-Methyl-2-pentanone	ug/L (ppb)	50	96	102	70-130	6
cis-1,3-Dichloropropene	ug/L (ppb)	10	96	95	70-130	1
Toluene	ug/L (ppb)	10	100	100	70-130	0
trans-1,3-Dichloropropene	ug/L (ppb)	10	99	98	70-130	1
1,1,2-Trichloroethane	ug/L (ppb)	10	99	100	70-130	1
2-Hexanone	ug/L (ppb)	50	97	100	66-132	3
1,3-Dichloropropane	ug/L (ppb)	10	100	102	70-130	2
Tetrachloroethene	ug/L (ppb)	10	100	98	70-130	2
Dibromochloromethane	ug/L (ppb)	10	96	95	63-142	1
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	97	98	70-130	1
Chlorobenzene	ug/L (ppb)	10	101	99	70-130	2
Ethylbenzene	ug/L (ppb)	10	101	102	70-130	1
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	98	101	70-130	3
m,p-Xylene	ug/L (ppb)	20	101	101	70-130	0
o-Xylene	ug/L (ppb)	10	101	101	70-130	0
Styrene	ug/L (ppb)	10	92	91	70-130	1
Isopropylbenzene	ug/L (ppb)	10	90	88	70-130	2
Bromoform	ug/L (ppb)	10	96	97	50-157	1
n-Propylbenzene	ug/L (ppb)	10	97	94	70-130	3
Bromobenzene	ug/L (ppb)	10	98	95	70-130	3
1,3,5-Trimethylbenzene	ug/L (ppb)	10	98	101	52-150	3
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	98	98	75-140	0
1,2,3-Trichloropropane	ug/L (ppb)	10	98	92	40-153	6
2-Chlorotoluene	ug/L (ppb)	10	98	99	70-130	1
4-Chlorotoluene	ug/L (ppb)	10	97	99	70-130	2
tert-Butylbenzene	ug/L (ppb)	10	98	100	70-130	2
1,2,4-Trimethylbenzene	ug/L (ppb)	10	97	98	70-130	1
sec-Butylbenzene	ug/L (ppb)	10	97	99	70-130	2
p-Isopropyltoluene	ug/L (ppb)	10	99	99	70-130	0
1,3-Dichlorobenzene	ug/L (ppb)	10	96	96	70-130	0
1,4-Dichlorobenzene	ug/L (ppb)	10	96	95	70-130	1
1,2-Dichlorobenzene	ug/L (ppb)	10	95	102	70-130	7
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	93	101	70-130	8
1,2,4-Trichlorobenzene	ug/L (ppb)	10	104	103	70-130	1
Hexachlorobutadiene	ug/L (ppb)	10	103	99	70-130	4
Naphthalene	ug/L (ppb)	10	107	106	61-133	1
1,2,3-Trichlorobenzene	ug/L (ppb)	10	104	103	69-143	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/23

Date Received: 05/04/23

Project: 601 Dexter 380831 196954, F&BI 305086

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	ug/L (ppb)	5	97	99	66-131	2
Chrysene	ug/L (ppb)	5	106	106	66-129	0
Benzo(a)pyrene	ug/L (ppb)	5	96	100	66-129	4
Benzo(b)fluoranthene	ug/L (ppb)	5	107	98	55-144	9
Benzo(k)fluoranthene	ug/L (ppb)	5	101	106	58-139	5
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	5	90	85	62-136	6
Dibenz(a,h)anthracene	ug/L (ppb)	5	94	87	55-146	8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/23

Date Received: 05/04/23

Project: 601 Dexter 380831 196954, F&BI 305086

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
POLYCHLORINATED BIPHENYLS AS
AROCLOR 1016/1260 BY EPA METHOD 8082A**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	ug/L (ppb)	0.25	56	64	10-119	13
Aroclor 1260	ug/L (ppb)	0.25	62	68	10-144	9

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.

305086

SAMPLE CHAIN OF CUSTODY

05/04/23

VW4/F4

Report To Jerry Boyd

Company TRC

Address 1160 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone 425.395.0010 Email jboyd@trccompanies.com

SAMPLERS (signature)

PROJECT NAME

601 Dexter

380831

PO #

196954

REMARKS

INVOICE TO

Project specific RLs? - Yes / No

Page # 1 of 1

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	CPAHs EPA 8270	PCBs EPA 8082				
TMW-2	01 A-I	5.3.2023	1141	Water	9	X	X			X	(X)	(X)				(X) per JB
DMW-115	02 A-I		1236			X	X			X	(X)	(X)				5/10/23 ME
TMW-3	03 A-H		1425			X	X			X	(X)	(X)				
DMW-105	04 A-I		1431			X	X			X	(X)	(X)				
DMW-45	05	5.3.2023	1600		9	X	X			X	(X)	(X)				
DUP-1	06	5.3.2023	—		9	X	X			X	(X)	(X)				
DMW-145	07	5.4.2023	0934			X	X			X						
DMW-125	08		0950			X	X			X						
DMW-135	09		1211			X	X			X						
TMW-1	10	5.4.2023	1315	Water	9	X	X			X						(NP)

TB

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

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by:	Madison Taylor	Madison Taylor		TRC	5.4.23	1448
Received by:	Nhan Phan	Nhan Phan		FBI	5.4.23	1448
Relinquished by:						
Received by:				Samples received at	4 °C	

Added at 146 5/4/23

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

July 24, 2023

Jerry Boyd, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 380831-601 Dexter 203752, F&BI 307199

Dear Mr Boyd:

Included are the results from the testing of material submitted on July 18, 2023 from the 380831-601 Dexter 203752, F&BI 307199 project. There are 10 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: Cynthia Moon
TRC0724R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 18, 2023 by Friedman & Bruya, Inc. from the TRC Environmental 380831-601 Dexter 203752, F&BI 307199 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
307199-01	TMW-3
307199-02	DMW-14S

The 8260D bromomethane calibration verification exceeded the acceptance criteria. This analyte was not detected in the sample, therefore the data were reported.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/23

Date Received: 07/18/23

Project: 380831-601 Dexter 203752, F&BI 307199

Date Extracted: 07/19/23

Date Analyzed: 07/20/23

**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 ₁₀ -C ₂₅)	(C ₂₅ -C ₃₆)	(% Recovery)
			(Limit 41-152)
TMW-3	<50	<250	105
307199-01			
Method Blank	<50	<250	113
03-1743 MB			

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/23

Date Received: 07/18/23

Project: 380831-601 Dexter 203752, F&BI 307199

Date Extracted: 07/19/23

Date Analyzed: 07/19/23

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

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
TMW-3 307199-01	4,300 x	<250	103
Method Blank 03-1743 MB	<50	<250	110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	DMW-14S	Client:	TRC Environmental
Date Received:	07/18/23	Project:	380831-601 Dexter 203752
Date Extracted:	07/20/23	Lab ID:	307199-02
Date Analyzed:	07/20/23	Data File:	072026.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	90	71	132
Toluene-d8	91	68	139
4-Bromofluorobenzene	103	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5 k	1,2-Dibromoethane (EDB)	<1
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

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	380831-601 Dexter 203752
Date Extracted:	07/20/23	Lab ID:	03-1713 mb
Date Analyzed:	07/20/23	Data File:	072007.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	71	132
Toluene-d8	99	68	139
4-Bromofluorobenzene	102	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5 k	1,2-Dibromoethane (EDB)	<1
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: 07/24/23

Date Received: 07/18/23

Project: 380831-601 Dexter 203752, F&BI 307199

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

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	100	108	65-151	8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/23

Date Received: 07/18/23

Project: 380831-601 Dexter 203752, F&BI 307199

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	100	112	72-139	11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/23

Date Received: 07/18/23

Project: 380831-601 Dexter 203752, F&BI 307199

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

Laboratory Code: 307192-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Dichlorodifluoromethane	ug/L (ppb)	10	<1	90	27-164
Chloromethane	ug/L (ppb)	10	<10	90	34-141
Vinyl chloride	ug/L (ppb)	10	<0.02	100	16-176
Bromomethane	ug/L (ppb)	10	<5	118	10-193
Chloroethane	ug/L (ppb)	10	<1	110	50-150
Trichlorofluoromethane	ug/L (ppb)	10	<1	93	50-150
Acetone	ug/L (ppb)	50	<50	68	15-179
1,1-Dichloroethene	ug/L (ppb)	10	<1	97	50-150
Hexane	ug/L (ppb)	10	<5	92	49-161
Methylene chloride	ug/L (ppb)	10	<5	100	40-143
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	<1	94	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	96	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	93	50-150
2,2-Dichloropropane	ug/L (ppb)	10	<1	89	62-152
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	91	50-150
Chloroform	ug/L (ppb)	10	<1	95	50-150
2-Butanone (MEK)	ug/L (ppb)	50	<20	90	34-168
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<0.2	98	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	94	50-150
1,1-Dichloropropene	ug/L (ppb)	10	<1	94	50-150
Carbon tetrachloride	ug/L (ppb)	10	<0.5	94	50-150
Benzene	ug/L (ppb)	10	<0.35	98	50-150
Trichloroethene	ug/L (ppb)	10	<0.5	95	43-133
1,2-Dichloropropane	ug/L (ppb)	10	<1	97	50-150
Bromodichloromethane	ug/L (ppb)	10	<0.5	98	50-150
Dibromomethane	ug/L (ppb)	10	<1	99	50-150
4-Methyl-2-pentanone	ug/L (ppb)	50	<10	95	50-150
cis-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	92	48-145
Toluene	ug/L (ppb)	10	<1	102	50-150
trans-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	96	37-152
1,1,2-Trichloroethane	ug/L (ppb)	10	<0.5	101	50-150
2-Hexanone	ug/L (ppb)	50	<10	94	50-150
1,3-Dichloropropane	ug/L (ppb)	10	<1	98	50-150
Tetrachloroethene	ug/L (ppb)	10	<1	102	50-150
Dibromochloromethane	ug/L (ppb)	10	<0.5	101	33-164
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	<1	101	50-150
Chlorobenzene	ug/L (ppb)	10	<1	101	50-150
Ethylbenzene	ug/L (ppb)	10	<1	95	50-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	<1	98	50-150
m,p-Xylene	ug/L (ppb)	20	<2	103	50-150
o-Xylene	ug/L (ppb)	10	<1	102	50-150
Styrene	ug/L (ppb)	10	<1	96	50-150
Isopropylbenzene	ug/L (ppb)	10	<1	100	50-150
Bromoform	ug/L (ppb)	10	<5	102	23-161
n-Propylbenzene	ug/L (ppb)	10	<1	98	50-150
Bromobenzene	ug/L (ppb)	10	<1	99	50-150
1,3,5-Trimethylbenzene	ug/L (ppb)	10	<1	98	50-150
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	<0.2	106	57-162
1,2,3-Trichloropropane	ug/L (ppb)	10	<1	98	33-151
2-Chlorotoluene	ug/L (ppb)	10	<1	99	50-150
4-Chlorotoluene	ug/L (ppb)	10	<1	98	50-150
tert-Butylbenzene	ug/L (ppb)	10	<1	98	50-150
1,2,4-Trimethylbenzene	ug/L (ppb)	10	<1	101	50-150
sec-Butylbenzene	ug/L (ppb)	10	<1	97	46-139
p-Isopropyltoluene	ug/L (ppb)	10	<1	97	46-140
1,3-Dichlorobenzene	ug/L (ppb)	10	<1	96	50-150
1,4-Dichlorobenzene	ug/L (ppb)	10	<1	98	50-150
1,2-Dichlorobenzene	ug/L (ppb)	10	<1	97	50-150
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	<10	94	50-150
1,2,4-Trichlorobenzene	ug/L (ppb)	10	<1	95	50-150
Hexachlorobutadiene	ug/L (ppb)	10	<0.5	85	42-150
Naphthalene	ug/L (ppb)	10	<1	95	50-150
1,2,3-Trichlorobenzene	ug/L (ppb)	10	<1	92	44-155

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/23

Date Received: 07/18/23

Project: 380831-601 Dexter 203752, F&BI 307199

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	108	100	49-149	8
Chloromethane	ug/L (ppb)	10	98	93	34-143	5
Vinyl chloride	ug/L (ppb)	10	108	104	43-149	4
Bromomethane	ug/L (ppb)	10	140	116	28-182	19
Chloroethane	ug/L (ppb)	10	119	116	59-157	3
Trichlorofluoromethane	ug/L (ppb)	10	109	97	59-141	12
Acetone	ug/L (ppb)	50	73	73	20-139	0
1,1-Dichloroethene	ug/L (ppb)	10	105	103	67-138	2
Hexane	ug/L (ppb)	10	99	102	50-161	3
Methylene chloride	ug/L (ppb)	10	102	100	29-192	2
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	101	98	70-130	3
trans-1,2-Dichloroethene	ug/L (ppb)	10	104	104	70-130	0
1,1-Dichloroethane	ug/L (ppb)	10	100	100	70-130	0
2,2-Dichloropropane	ug/L (ppb)	10	106	113	71-148	6
cis-1,2-Dichloroethene	ug/L (ppb)	10	98	101	70-130	3
Chloroform	ug/L (ppb)	10	103	101	70-130	2
2-Butanone (MEK)	ug/L (ppb)	50	95	94	50-157	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	107	107	70-130	0
1,1,1-Trichloroethane	ug/L (ppb)	10	103	100	70-130	3
1,1-Dichloropropene	ug/L (ppb)	10	103	103	70-130	0
Carbon tetrachloride	ug/L (ppb)	10	103	103	70-130	0
Benzene	ug/L (ppb)	10	105	104	70-130	1
Trichloroethene	ug/L (ppb)	10	103	102	70-130	1
1,2-Dichloropropane	ug/L (ppb)	10	102	100	70-130	2
Bromodichloromethane	ug/L (ppb)	10	105	101	70-130	4
Dibromomethane	ug/L (ppb)	10	104	99	70-130	5
4-Methyl-2-pentanone	ug/L (ppb)	50	107	99	70-130	8
cis-1,3-Dichloropropene	ug/L (ppb)	10	106	99	70-130	7
Toluene	ug/L (ppb)	10	103	104	70-130	1
trans-1,3-Dichloropropene	ug/L (ppb)	10	101	100	70-130	1
1,1,2-Trichloroethane	ug/L (ppb)	10	102	103	70-130	1
2-Hexanone	ug/L (ppb)	50	92	93	66-132	1
1,3-Dichloropropane	ug/L (ppb)	10	98	102	70-130	4
Tetrachloroethene	ug/L (ppb)	10	103	104	70-130	1
Dibromochloromethane	ug/L (ppb)	10	103	104	63-142	1
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	102	105	70-130	3
Chlorobenzene	ug/L (ppb)	10	100	100	70-130	0
Ethylbenzene	ug/L (ppb)	10	96	98	70-130	2
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	100	101	70-130	1
m,p-Xylene	ug/L (ppb)	20	105	106	70-130	1
o-Xylene	ug/L (ppb)	10	103	104	70-130	1
Styrene	ug/L (ppb)	10	97	97	70-130	0
Isopropylbenzene	ug/L (ppb)	10	101	101	70-130	0
Bromoform	ug/L (ppb)	10	102	101	50-157	1
n-Propylbenzene	ug/L (ppb)	10	104	102	70-130	2
Bromobenzene	ug/L (ppb)	10	103	101	70-130	2
1,3,5-Trimethylbenzene	ug/L (ppb)	10	102	100	52-150	2
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	106	105	75-140	1
1,2,3-Trichloropropane	ug/L (ppb)	10	100	111	40-153	10
2-Chlorotoluene	ug/L (ppb)	10	104	104	70-130	0
4-Chlorotoluene	ug/L (ppb)	10	105	100	70-130	5
tert-Butylbenzene	ug/L (ppb)	10	100	100	70-130	0
1,2,4-Trimethylbenzene	ug/L (ppb)	10	106	102	70-130	4
sec-Butylbenzene	ug/L (ppb)	10	103	103	70-130	0
p-Isopropyltoluene	ug/L (ppb)	10	103	102	70-130	1
1,3-Dichlorobenzene	ug/L (ppb)	10	101	97	70-130	4
1,4-Dichlorobenzene	ug/L (ppb)	10	102	98	70-130	4
1,2-Dichlorobenzene	ug/L (ppb)	10	103	100	70-130	3
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	93	92	70-130	1
1,2,4-Trichlorobenzene	ug/L (ppb)	10	99	96	70-130	3
Hexachlorobutadiene	ug/L (ppb)	10	95	94	70-130	1
Naphthalene	ug/L (ppb)	10	99	95	61-133	4
1,2,3-Trichlorobenzene	ug/L (ppb)	10	97	94	69-143	3

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 07/18/23

C2/VW1

307199
Report To Jerry Boyd
Company TRC
Address 1180 NW Maple St. Suite #310
City, State, ZIP Issaquah, WA 98027
Phone 425-395-0010 Email JBoyd@trccompanies.com
cc: cmoon@i

SAMPLERS (signature) <u>JW</u>	
PROJECT NAME <u>380831-601 Dexter</u>	PO # <u>203752</u>
REMARKS	INVOICE TO
Project specific RLs? - Yes / No	

Page # <u>1</u> of <u>1</u>
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					
TMW-3	01 A-B	07-17-23	1040	H ₂ O	2	X											* w/ and w/out Silica Gel Cleanup
DMW-145	02 A-C	07-17-23	1210	H ₂ O	3					X							

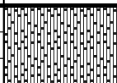
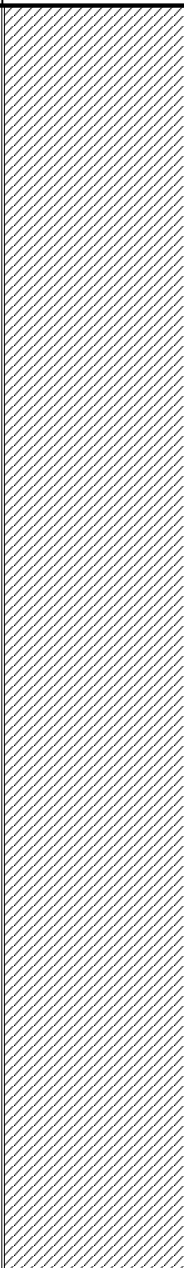
samples received at 0 °C

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

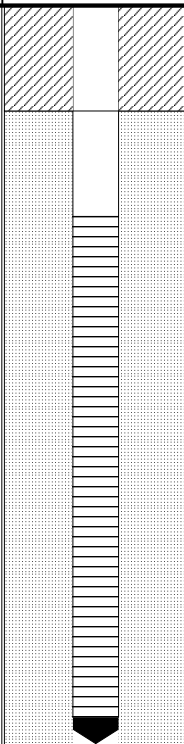
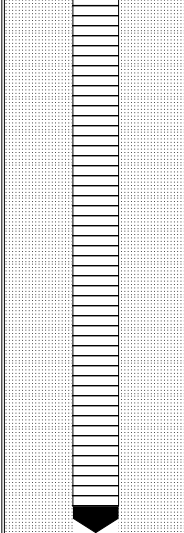
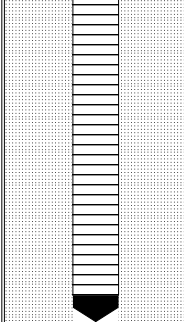
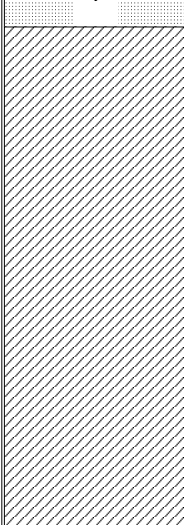
SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Jill Windsor</u>	<u>Jill Windsor</u>	<u>TRC</u>	<u>07-17-23</u>	<u>12:00</u>
Received by: <u>[Signature]</u>	<u>✓ JNH</u>	<u>FB1</u>	<u>7-18-23</u>	<u>12:00</u>
Relinquished by:				
Received by:				

Attachment B
Boring Logs from 2023 Subsurface Exploration

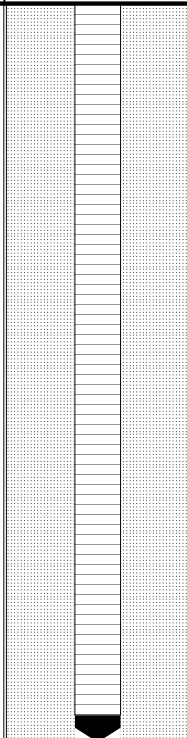
				BORING ID: TASB-1/TSV-1		
SITE ADDRESS 601 Dexter Ave N, Seattle WA				CLIENT: ARE		CASING MATERIAL AND SIZE: 0.25" Teflon Tubing
DRILLING CONTRACTOR: Holt				PROJECT #: 380831		SCREEN SIZE: 6" Stainless Steel Sintered Inlet Tips
DRILLING EQUIPMENT: Sonic Drill Rig				DATE: 2/20/2023		SCREEN INTERVAL: 24'-25.5'
DRILLING METHOD: Sonic Drill Rig				GROUND SURFACE ELEV. FT AMSL: 62.1'		FILTER PACK: Industrial Sand
LOGGED BY: E. Miller		BOREHOLE SIZE: 6"		TOTAL DEPTH: 50'		FILTER PACK INTERVAL: 24'-25.5'
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; TRC description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction
0		Asphalt				
1	SP	POORLY GRADED SAND WITH GRAVEL; brown, moist, 15% gravel, 5% silt, no odor		0		
2		SILTY SAND; 25% silt, brown, moist		0	TASB-1: 02	
3	SM					
4		POORLY GRADED SAND WITH GRAVEL; trace gravel, sand medium to coarse grain, brown, increasing silt with depth, no odor		0		
5	SP		100	1.7	TASB-1: 05	Teflon Tubing (1/4")
6				1.6		
7						
8	ML	SILT WITH SAND; silt with sand lens		0.5		Bentonite
9		SILTY SAND WITH GRAVEL; medium to fine sand, 15% silt, trace small gravel, brown, dry to moist, no odor				
10				0.6	TASB-1: 10	
11						
12				0.2		
13	SM					Casing
14						
15			100	0.2	TASB-1: 15	
16						
17				0.3		
18		POORLY GRADED SAND; medium to fine grains, trace silt (3%), dry, brown, no odor				
19						
20	SP			0.1	TASB-1: 20	
21				0.2		
22						
23		POORLY GRADED SAND WITH SILT AND GRAVEL; 10% silt, trace small gravel, medium to fine sand, light brown, dry, no odor		0.1		
24						
25	SP-SM		100	0.2	TASB-1: 25	Sand
26						Soil Vapor Probe
NOTES: Boring and vapor probe done at 30° angle. Note depths are linear feet and not below ground surface.						

				BORING ID: TASB-1/TSV-1					
SITE ADDRESS 601 Dexter Ave N, Seattle WA				CLIENT: ARE		CASING MATERIAL AND SIZE: 0.25" Teflon Tubing			
DRILLING CONTRACTOR: Holt				PROJECT #: 380831		SCREEN SIZE: 6" Stainless Steel Sintered Inlet Tips			
DRILLING EQUIPMENT: Sonic Drill Rig				DATE: 2/20/2023		SCREEN INTERVAL: 24'-25.5'			
DRILLING METHOD: Sonic Drill Rig				GROUND SURFACE ELEV. FT AMSL: 62.1'		FILTER PACK: Industrial Sand			
LOGGED BY: E. Miller			BOREHOLE SIZE: 6"	TOTAL DEPTH: 50'		FILTER PACK INTERVAL: 24'-25.5'			
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; TRC description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction			
26		POORLY GRADED SAND WITH GRAVEL; medium to very fine, trace very small gravel, grayish brown, dry, no odor. Increasing gravel with depth to 30% gravel		0.1	TASB-1: 30		Bentonite		
27									
28									
29									
30									
31	SP	POORLY GRADED SAND WITH GRAVEL; very fine to medium 7% silt, 10% small gravel, light brown, no odor, wet	100	0.1	TASB-1: 35				
32									
33									
34									
35									
36	SP	POORLY GRADED SAND WITH GRAVEL; as before, color change to gray.	100	0.1	TASB-1: 40				
37									
38									
39									
40									
41	SP		100	0.3 0.3	TASB-1: 45				
42									
43									
44									
45									
46	SP		100	0.2	TASB-1: 50				
47									
48									
49									
50									
End of Borehole									
NOTES: Boring and vapor probe done at 30° angle. Note depths are linear feet and not below ground surface.									
2 of 2									

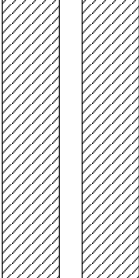
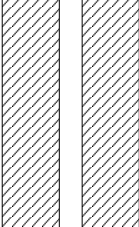
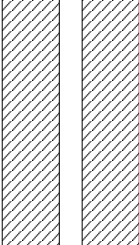
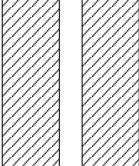
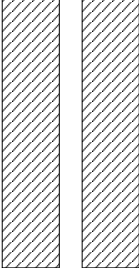
				BORING ID: TASB-2/TMW-1			
SITE ADDRESS 601 Dexter Ave N, Seattle WA				CLIENT: ARE		CASING MATERIAL AND SIZE: 2" Sch-40 PVC	
DRILLING CONTRACTOR: Holt				PROJECT #: 380831		SCREEN SIZE: 0.01"	
DRILLING EQUIPMENT: Sonic Drill Rig				DATE: 2/21/2023		SCREEN INTERVAL: 30'-40'	
DRILLING METHOD: Sonic Drilling				GROUND SURFACE ELEV. FT AMSL: 61.1'		FILTER PACK: Industrial Sand	
LOGGED BY: E. Miller			BOREHOLE SIZE: 6"	TOTAL DEPTH: 50'		FILTER PACK INTERVAL: 28'-41'	
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; TRC description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction	
0		Asphalt					Well Monument
1		WELL-GRADED SAND WITH GRAVEL; fine to very coarse, few granular-medium gravels, dark grayish brown, damp, loose, no odor.		0.7			
2					TASB-2: 02		
3				0.1			
4	SW			0.4			
5			100	0.3	TASB-2: 05		
6				0.2			
7				0.3			
8				0.4			
9	SP	Coarse sand lens POORLY GRADED SAND; very fine sand.		0.4			
10		POORLY GRADED SAND WITH GRAVEL; As before, but poorly graded with gravel that is granular size.		0.5			
11				17.8	TASB-2: 11		
12				1.6			
13	SP						
14				1.4			
15			100	1.1			
16				2	TASB-2: 16		
17							
18		POORLY GRADED SAND WITH SILT AND GRAVEL; fine-medium sand, few silt, minor gravel, very small-large gravel, light brown.		0.9			
19							
20	SP-SM			0.8			
21				3.6			
22				36.4	TASB-2: 22		
23	ML	SANDY SILT WITH GRAVEL; some very fine - fine sand, trace large gravel, brown, no odor		0.7			
24		WELL-GRADED SAND WITH GRAVEL; fine to very coarse sand		0.4			
25			100	1.2	TASB-2: 25		
26	SW						
NOTES: Boring and monitoring well done at 30° angle. Note depths are linear feet and not below ground surface.							
1 of 2							

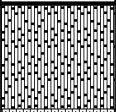
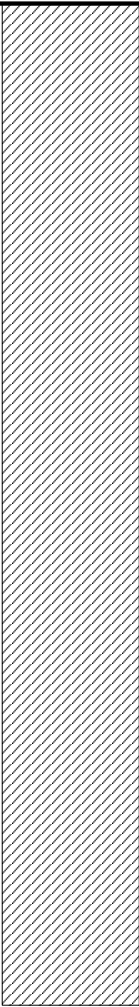
TRC				BORING ID: TASB-2/TMW-1			
SITE ADDRESS				CLIENT:		CASING MATERIAL AND SIZE:	
601 Dexter Ave N, Seattle WA				ARE		2" Sch-40 PVC	
DRILLING CONTRACTOR:				PROJECT #:		SCREEN SIZE:	
Holt				380831		0.01"	
DRILLING EQUIPMENT:				DATE:		SCREEN INTERVAL:	
Sonic Drill Rig				2/21/2023		30'-40'	
DRILLING METHOD:				GROUND SURFACE ELEV. FT AMSL:		FILTER PACK:	
Sonic Drilling				61.1'		Industrial Sand	
LOGGED BY:			BOREHOLE SIZE:	TOTAL DEPTH:		FILTER PACK INTERVAL:	
E. Miller			6"	50'		28'-41'	
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; TRC description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction	
26	SM	SILTY SAND WITH GRAVEL; fine sand w/ minor silt and few gravel, moist		0.7	TASB-2: 31		Sand
27				0.5			
28				0.6			
29				1.6			
30	SP	POORLY GRADED SAND WITH GRAVEL; few gravel, fine sands	100	4.7	TASB-2: 35		Well Screen
31				1.5			
32				0.7			
33				12.4			
34	SM	SILTY SAND WITH GRAVEL; fine sand w/ minor silt and few gravel, moist		2.3	TASB-2: 39		End Cap
35				3.8			
36				4.9			
37				0.7			
38	SM	SILTY SAND WITH GRAVEL; sand with some silt and trace gravel, coarse and poorly graded sand lens (4"), dark grayish brown		1.2	TASB-2: 45		Bentonite
39				0.6			
40				0.5			
41				1.2			
42	ML	SANDY SILT WITH GRAVEL; silt with fine, trace sand and trace gravel, gray, low plasticity, low dilatency	100	1.6			
43				0.2			
44				0.3			
45				0.2			
46				0.2			
47				0.2			
48							
49							
50	End of Borehole						
NOTES: Boring and monitoring well done at 30° angle. Note depths are linear feet and not below ground surface.							
2 of 2							

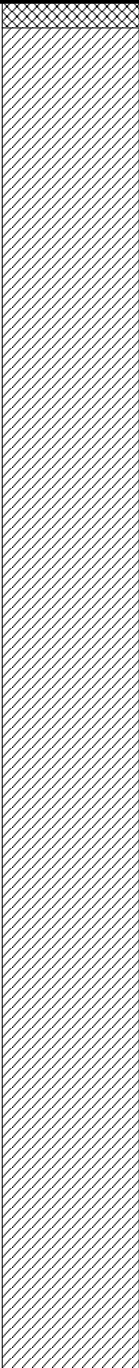
				BORING ID: TSB-3/TMW-2			
SITE ADDRESS 601 Dexter Ave N, Seattle WA				CLIENT: ARE		CASING MATERIAL AND SIZE: 2" Sch-40 PVC	
DRILLING CONTRACTOR: Holt				PROJECT #: 380831		SCREEN SIZE: 0.01"	
DRILLING EQUIPMENT: Sonic Drill Rig				DATE: 2/21/2023		SCREEN INTERVAL: 25-40' bgs	
DRILLING METHOD: Sonic Drilling				GROUND SURFACE ELEV. FT AMSL: 62.5'		FILTER PACK: Industrial Sand	
LOGGED BY: E. Miller			BOREHOLE SIZE: 6"	TOTAL DEPTH: 45' bgs		FILTER PACK INTERVAL: 24'-40' bgs	
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; TRC description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction	
0		Asphalt					Well Monument
1	SP	POORLY GRADED SAND WITH GRAVEL; poorly graded, fine sand with minor gravel, grayish brown, damp, no odor, loose		0.8			
2				1.6	TSB-3: 2		
3				1.1			
4	SM	SILTY SAND WITH GRAVEL; poorly graded fine sand with few silt and few gravel	100	0.7			
5				2.3	TSB-3: 5		
6				0.7			
7	SP	POORLY GRADED SAND WITH GRAVEL; poorly graded, fine sand with minor gravel, grayish brown, damp, no odor		0.8			Bentonite
8	SM	SILTY SAND WITH GRAVEL; fine sand with trace silt and well graded gravel, light gray Color change to grayish brown at 9'		1.1			
9				3.2			
10				4.5	TSB-3: 10		
11	SW	WELL-GRADED SAND WITH GRAVEL; well graded sand, fine to coarse sand with trace gravel. Coarse grain sand lens @11' (2" thick)		0.5			
12				0.4			
13				0.2			
14	SM	SILTY SAND; fine sand with minor silt, brown	100	1.4	TSB-3: 14		
15				0.1			
16				0.9			
17	SP	POORLY GRADED SAND WITH GRAVEL; coarse, very fine sand w/ few gravel, no odor, grayish brown		3.2	TSB-3: 17		
18				0.7			
19				0.8			
20				0.7			
21	ML	SILT WITH SAND; silt with some sand, light gray, moist		6.7			
22				7	TSB-3: 22		
23				1.2			
24	SP	POORLY GRADED SAND WITH GRAVEL; poorly graded, fine sand with few gravel and trace silt, small cobble present at 29', no odor, moist to wet		1.5			
25				5.3	TSB-3: 25		
26							
NOTES: Well was constructed on the morning of 2/22/2023							
1 of 2							

				BORING ID: TSB-3/TMW-2			
SITE ADDRESS 601 Dexter Ave N, Seattle WA				CLIENT: ARE		CASING MATERIAL AND SIZE: 2" Sch-40 PVC	
DRILLING CONTRACTOR: Holt				PROJECT #: 380831		SCREEN SIZE: 0.01"	
DRILLING EQUIPMENT: Sonic Drill Rig				DATE: 2/21/2023		SCREEN INTERVAL: 25-40' bgs	
DRILLING METHOD: Sonic Drilling				GROUND SURFACE ELEV. FT AMSL: 62.5'		FILTER PACK: Industrial Sand	
LOGGED BY: E. Miller			BOREHOLE SIZE: 6"	TOTAL DEPTH: 45' bgs		FILTER PACK INTERVAL: 24'-40' bgs	
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; TRC description; Other		Interval & % Recovery	PID (ppm)	Sample	Well Construction
26	SP	POORLY GRADED SAND WITH GRAVEL; poorly graded, fine sand with few gravel and trace silt, small cobble present at 29', no odor, moist to wet			1.1	TSB-3: 31	
27					0.8		
28					2.3		
29					0.7		
30	SM	SILTY SAND WITH GRAVEL; poorly graded, fine sand with some silt and few, small gravel, darkgray, moist to wet		100	0.7	TSB-3: 31	Sand
31					1.8		
32					1		
33					1.2		
34	SM			100	1.3	TSB-3: 38	Well Screen
35		SILTY SAND WITH GRAVEL; as above, brown, moist			1		
36		SILTY SAND WITH GRAVEL; as above, grayish brown, wet			2.5		
37							
38	SM			100	17.6	TSB-3: 38	End Cap
39					5.6		
40							
41		SILTY SAND WITH GRAVEL; poorly graded fine sand with few silt and few gravel, dark gray, no odor, wet			20.3		
42	SM			100	1.4	TSB-3: 41	Bentonite
43					0.2		
44					0.6		
45					0.7		
46	End of Borehole				TSB-3: 45		
47							
48							
49							
50							
NOTES: Well was constructed on the morning of 2/22/2023							
2 of 2							

				BORING ID: TSB-4/TMW-3			
SITE ADDRESS 601 Dexter Ave N, Seattle WA				CLIENT: ARE		CASING MATERIAL AND SIZE: 2" Sch-40 PVC	
DRILLING CONTRACTOR: Holt				PROJECT #: 380831		SCREEN SIZE: 0.01"	
DRILLING EQUIPMENT: Sonic Drill Rig				DATE: 4/4/2023		SCREEN INTERVAL: 25'-40' bgs	
DRILLING METHOD: Sonic Drill Rig				GROUND SURFACE ELEV. FT AMSL: 66.2'		FILTER PACK: Industrial Sand	
LOGGED BY: M. Andrews			BOREHOLE SIZE: 6"	TOTAL DEPTH: 45' bgs		FILTER PACK INTERVAL: 24'-45' bgs	
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; TRC description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction	
0		Concrete					Well Monument
1		SAND; poorly-graded very fine to fine, brown, trace small to medium gravel		0			
2	SP		100	0	TSB-4: 02		
3							
4				0.7			
5	ML	SILT WITH SAND; silt with some very fine sand, trace clay		1.7	TSB-4: 05		
6	SP	POORLY GRADED SAND; as before	100	0.8			
7					0		
8		SILTY SAND; very fine to fine, little silt, trace clay, brown, damp to moist, no odor					
9				0			
10	SM		100	0	TSB-4: 10		
11					1		
12							Bentonite
13			100	0.9			
14							
15		POORLY GRADED SAND fine to medium sand with trace silt, with some gravel, brown, damp to moist		3.9	TSB-4:15		
16	SP		100	0.9			
17					2.1		
18		SILTY SAND with fine to medium sand, some silt, brown, moist, no odor		1.5			
19							
20	SM		100	1.9			
21					6.9	TSB-4:21	
22				0.9			
23	SP-SM	POORLY GRADED SAND WITH SILT, few silt, brown, no odor, moist	100	6.5			
24		SILTY SAND as before					
25	SM			7.2	TSB-4:25		
26							
NOTES: Well constructed 4/5/2023							
1 of 2							

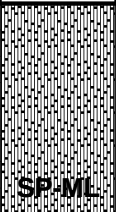
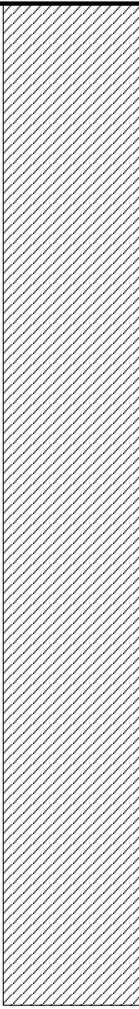
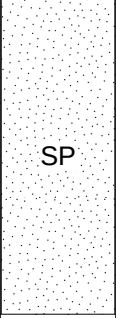
				BORING ID: TSB-5/TSV-2						
SITE ADDRESS 601 Dexter Ave N, Seattle WA				CLIENT: ARE		CASING MATERIAL AND SIZE: 0.25" Teflon Tubing				
DRILLING CONTRACTOR: Holt				PROJECT #: 380831		SCREEN SIZE: 6" Stainless Steel Sintered Inlet Tips				
DRILLING EQUIPMENT: Sonic Drill Rig				DATE: 4/7/2023		SCREEN INTERVAL: 24'-25' bgs				
DRILLING METHOD: Sonic Drill Rig				GROUND SURFACE ELEV. FT AMSL: 66.2'		FILTER PACK: Industrial Sand				
LOGGED BY: M. Andrews			BOREHOLE SIZE: 6"	TOTAL DEPTH: 45' bgs		FILTER PACK INTERVAL: 23'-26' bgs				
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; TRC description; Other		Interval & % Recovery	PID (ppm)	Sample	Well Construction			
0		Concrete			0			Well Monument		
1	SP	POORLY GRADED SAND fine to medium, trace silt, trace small gravel, brown, damp, no odor		100	0	TSB-5:02				Teflon Tubing (1/4")
2					0					
3					0					
4										
5					0					
6		SILTY SAND very fine to medium, some silt, trace small gravel, brown, damp, no odor, medium dense.		100	1.5	TSB-5:07		Bentonite		
7	2.4									
8	1.1									
9	0.8									
10	0.7									
11		SANDY SILT some very fine sand, brown, dense, moist, no odor		100	1.9	TSB-5:11		Sand		
12	1.5									
13										
14	2.5									
15	2.7									
16		POORLY GRADED SAND WITH SILT fine to medium, few silt, trace gravel, moist, brown		100	0.5	TSB-5:15		Soil Vapor Probe		
17	1.4									
18	0									
19										
20	0									
21	ML			100	3.3	TSB-5:21		Sand		
22										
23	1.7									
24	0.7									
25										
26	SP									
NOTES:										
1 of 2										

				BORING ID: TSB-5/TSV-2			
SITE ADDRESS 601 Dexter Ave N, Seattle WA				CLIENT: ARE		CASING MATERIAL AND SIZE: 0.25" Teflon Tubing	
DRILLING CONTRACTOR: Holt				PROJECT #: 380831		SCREEN SIZE: 6" Stainless Steel Sintered Inlet Tips	
DRILLING EQUIPMENT: Sonic Drill Rig				DATE: 4/7/2023		SCREEN INTERVAL: 24'-25' bgs	
DRILLING METHOD: Sonic Drill Rig				GROUND SURFACE ELEV. FT AMSL: 66.2'		FILTER PACK: Industrial Sand	
LOGGED BY: M. Andrews		BOREHOLE SIZE: 6"		TOTAL DEPTH: 45' bgs		FILTER PACK INTERVAL: 23'-26' bgs	
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; TRC description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction	
26		SILTY SAND very fine to fine, minor silt, trace gravel, trace clay, dry to moist, brown	100	2.3	TSB-5:26		Bentonite
27				2.9			
28				1.8			
29				1.9			
30	SM	SILTY SAND as before, color change to grayish brown	100	4.4	TSB-5:30		
31				1.8			
32							
33				1.4			
34	SM	POORLY GRADED SAND medium, grayish brown, wet	100	1.6	TSB-5:35		
35							
36				0			
37							
38	SP	SILTY SAND minor silt, color change to gray	100	0.1	TSB-5:40		
39				0			
40				0			
41				0			
42	SM	End of Borehole	100	0	TSB-5:45		
43							
44							
45				0			
46							
47							
48							
49							
50							
NOTES:							

				BORING ID: TSB-6		
SITE ADDRESS 601 Dexter Ave N, Seattle WA				CLIENT: ARE	CASING MATERIAL AND SIZE: N/A	
DRILLING CONTRACTOR: Holt				PROJECT #: 380831	SCREEN SIZE: N/A	
DRILLING EQUIPMENT: Sonic Drill Rig				DATE: 4/7/2023	SCREEN INTERVAL: N/A	
DRILLING METHOD: Sonic Drill Rig				GROUND SURFACE ELEV. FT AMSL: 66.2'	FILTER PACK: N/A	
LOGGED BY: M. Andrews		BOREHOLE SIZE: 6"	TOTAL DEPTH: 45' bgs		FILTER PACK INTERVAL: N/A	
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; TRC description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction
0		Concrete				
1		POORLY GRADED SAND fine to medium, trace small gravel, brown, damp, no odor, soft				
2				0.4	TSB-6:02	
3	SP		100	0.5		
4						
5				0.7	TSB-6:05	
6	SM	SILTY SAND very fine to fine, some silt (35%), trace clay, brown, moist, no odor		0		
7		POORLY GRADED SAND WITH SILT fine to medium, few silt, moist to damp, brown, soft, no odor				
8			100	0		
9						
10	SP-SM			0.7	TSB-6:10	
11				0		
12			100	0		
13				0		
14		SILTY SAND very fine to medium sand, with minor silt, few gravel, moist, dense, brown, increase in gravel to minor at 21 ft		0	TSB-6:15	
15						
16				0		
17			100	0		
18				0		
19				0		
20	SM			0		
21				0.7	TSB-6:21	
22						Bentonite
23			100	0.4		
24				0		
25				0	TSB-6:25	
26						
NOTES:						

			BORING ID: TSB-6			
SITE ADDRESS 601 Dexter Ave N, Seattle WA			CLIENT: ARE		CASING MATERIAL AND SIZE: N/A	
DRILLING CONTRACTOR: Holt			PROJECT #: 380831		SCREEN SIZE: N/A	
DRILLING EQUIPMENT: Sonic Drill Rig			DATE: 4/7/2023		SCREEN INTERVAL: N/A	
DRILLING METHOD: Sonic Drill Rig			GROUND SURFACE ELEV. FT AMSL: 66.2'		FILTER PACK: N/A	
LOGGED BY: M. Andrews		BOREHOLE SIZE: 6"	TOTAL DEPTH: 45' bgs		FILTER PACK INTERVAL: N/A	
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; TRC description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction
26						
27	SP	POORLY GRADED SAND fine to medium, trace silt, soft, brown, moist	100	0		
28						
29		SILTY SAND fine to medium, few silt, with minor gravel, dry to damp, no odor		0		
30				0	TSB-6:30	
31	SM					
32				0.5		
33			100			
34	SP	POORLY GRADED SAND medium to coarse, brown, moist, no odor		0		
35				0.4	TSB-6:35	
36	SM	SILTY SAND fine to medium, minor silt, grayish brown, moist to dry				
37				0.3		
38		SANDY SILT very fine to fine sand, brownish gray to gray, moist, low plasticity	100	0		
39	ML					
40				0.9	TSB-6:40	
41				0.7		
42	SM	SILTY SAND fine to coarse, few silt, few small gravel, brown, moist to wet, no odor	100	0.2		
43						
44	SW	WELL-GRADED SAND fine to very coarse with trace silt wet soft		0		
45		End of Borehole		0.4	TSB-6:45	
46						
47						
48						
49						
50						
NOTES:						

				BORING ID: TSB-7			
SITE ADDRESS 601 Dexter				CLIENT: ARE		CASING MATERIAL AND SIZE: N/A	
DRILLING CONTRACTOR: Holt				PROJECT #: 380831		SCREEN SIZE: N/A	
DRILLING EQUIPMENT: Sonic Drill Rig				DATE: 4/10/2023		SCREEN INTERVAL: N/A	
DRILLING METHOD: Sonic Drill Rig				GROUND SURFACE ELEV. FT AMSL: 66.2'		FILTER PACK: N/A	
LOGGED BY: M. Andrews			BOREHOLE SIZE: 6"	TOTAL DEPTH: 45' bgs		FILTER PACK INTERVAL: N/A	
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; TRC description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction	
0		Concrete				Concrete	
1		SILTY SAND fine to medium, minor silt, minor gravel, damp to dry, brown, no odor					
2			100	0.4	TSB-7:02		
3				0.7			
4	SM			1.8	TSB-7:05		
5							
6			100	0			
7							
8							
9	SP	POORLY GRADED SAND fine to medium with trace silt and trace small gravel, brown, soft, no odor	100	0			
10				0	TSB-7:10		
11				0			
12		SILTY SAND very fine to fine with minor silt and trace small gravel, damp, brown	100	0			
13	SM			0			
14				0.7	TSB-7:15		
15				0			
16							
17		SILT with minor sand fine to coarse and few small to medium gravel, very dense, low plasticity, grayish brown, dry to damp	100	0.1			
18				0.3	TSB-7:20		
19	ML						
20				0			
21				0.3			
22			100	0.4			
23		SILTY SAND very fine to medium with minor silt and few small gravel, dense, damp to moist, brownish gray, no odor				Bentonite	
24	SM						
25							
26							
NOTES:							

			BORING ID: TSB-7				
SITE ADDRESS 601 Dexter			CLIENT: ARE		CASING MATERIAL AND SIZE: N/A		
DRILLING CONTRACTOR: Holt			PROJECT #: 380831		SCREEN SIZE: N/A		
DRILLING EQUIPMENT: Sonic Drill Rig			DATE: 4/10/2023		SCREEN INTERVAL: N/A		
DRILLING METHOD: Sonic Drill Rig			GROUND SURFACE ELEV. FT AMSL: 66.2'		FILTER PACK: N/A		
LOGGED BY: M. Andrews		BOREHOLE SIZE: 6"	TOTAL DEPTH: 45' bgs		FILTER PACK INTERVAL: N/A		
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; TRC description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction	
26	 SP-ML	POORLY GRADED SAND WITH SILT fine to medium, with few silt and minor small gravel, soft, damp, brown, no odor	100	1.6	TSB-7:25		
27							
28				1.5			
29							
30				1	TSB-7:30		
31							
32			0.5				
33	 SM	SILTY SAND veru fine to fine with minor silt and few small gravel, medium dense, brown, moist, no odor	100	0.4			
34							
35				0.7	TSB-7:35		
36				0			
37	 ML	SILT, low plasticity, gray, wet to moist	100				
38				0			
39				0.7			
40	 SP	POORLY GRADED SAND fine to medium with trace small gravel, wet, brown, soft	100	0.7	TSB-7:40		
41							
42				0			
43				0			
44							
45				0	TSB-7:46		
46	End of Borehole						
47							
48							
49							
50							
NOTES:							