Urban Environmental Partners llc

REMEDIAL INVESTIGATION WORKPLAN

Rainier Mall Property

4208 Rainier Avenue South, Seattle, WA 98118

King County Parcel #7950301480

February 21, 2020

Prepared for:

Lake Union Partners

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1.0 Introduction

On behalf of Lake Union Partners, Urban Environmental Partners (UEP) has prepared this Remedial Investigation (RI) Workplan for King County Tax Parcel #7950301480, addressed at 4208 Rainier Avenue South in Seattle, Washington (the Property) (Exhibit A: Figures 1 and 2).

The report was prepared for submittal to the Washington State Department of Ecology (Ecology), in conjunction with an application for acceptance into the Voluntary Cleanup Program (VCP).

1.1 Document Purpose

The purpose of an RI is to collect data necessary to effectively characterize the "Site" and develop a Conceptual Site Model (CSM).

According to WAC Chapter 173-340-200, a "Site" is defined as the full vertical and lateral extent of contamination, in all affected media, that has resulted from the release of hazardous substances into the environment.

This document will present the remaining perceived data gaps at the Site and outline the next steps planned to establish sufficient Site characterization.

2.0 Background

The following section provides a description of the Property, a presentation of the physical settings of the Property, and a summary of environmental investigations and interim actions conducted at the Site to date.

2.1 Location, Address, and Legal Description

The Property consists of a single, irregularly-shaped King County Tax Parcel (#7950301480), comprising 2.33 acres, addressed at 4208 Rainier Avenue South in Seattle, Washington (Exhibit A: Figures 1 and 2). The Property is accessed from the north side of South Genesee Street on the south side of the Property. The following is an abbreviated legal description of the Property as provided by the King County Department of Assessments:

SQUIRES LAKESIDE ADD & POR VAC ALLEY ADJ LESS ST
Plat Block: 9
Plat Lot: 7 THRU 38

2.2 Current Improvements, Land Use, and Occupant Information

The Property is currently improved with an 36,071 square foot (sf) vacant retail structure on the north side of the parcel, and associated asphalt parking lot on the south side of the parcel.

2.3 Historical Land Use Summary

According to historical land use research conducted by Hahn and Associates, Inc. (Hahn) in 2000, the property was formerly developed with up to three separate dry cleaning facilities on the southwestern portion of the Property (Exhibit A: Figure 2). These dry cleaners reportedly operated in two distinct locations between approximately 1930 and 1968; the buildings were reportedly removed from the Property between 1985 and 1990.

According to King County Assessor's records, the current single-story retail building was constructed on the Property in 1960 and was previously occupied by a Safeway and mixed-use retail mall. Historical building plans indicate the structure was constructed on approximately 170 treated wood piles. Wood piles of this era were commonly treated with creosote, which contains chemicals such as polycyclic aromatic hydrocarbons (PAHs).

2.4 Physical Settings

Category	Description	Source
Topographic Characteristics		
Property Elevation	Approximately 45 feet above mean sea level.	USGS Topographic Map Seattle South, WA (2014)
Topographic Gradient	The Property lies within a topographic depression known as Rainier Valley. Land slopes from both west to east and east to west toward the Property.	USGS Topographic Map Seattle South, WA (2014)
Hydrologic Characteristics		
Surface Water Runoff	Surface water runoff is managed via several stormwater catch basins installed within the asphalt parking area.	Site Visit
Nearest Water Body	Lake Washington: Approximately 2,700 feet to the northeast of the Property.	USGS Topographic Map Seattle South, WA (2014)
Flood Zones	Zone X: Areas determined to be outside 500-year floodplain.	FEMA Map Panel 53033C0635F
Wetlands	The Property does not appear to lie within the National Wetland Inventory	USGS Topographic Map Seattle South, WA (2014)

Category	Description	Source
Geologic Characteristics		
Primary Soil Types	Vashon Recessional Lacustrine Deposits, primarily consisting of laminated silt and clay with low to high plasticity, with local sand layers, peat, and other organic sediments.	USGS. The Geologic Map of Seattle – A Progress Report, 2005
Hydrogeologic Characteristics		
Depth to Nearest Groundwater	Approximately 7 to 16 feet below ground surface (bgs).	SoundEarth Strategies Inc. (SoundEarth) Supplemental Subsurface Investigation Summary Letter. October 29, 2018.
Groundwater Flow Direction	Groundwater flow direction has been measured to the south/southeast.	SoundEarth. Supplemental Subsurface Investigation Summary Letter. October 29, 2018.
Nearest Groundwater Supply Wells	The nearest groundwater supply well is located over 2 miles to the southwest of the Property in an inferred down gradient hydrologic position.	Ecology Well Log Search

2.5 Summary of Previous Investigations

This section summarizes the release discovery and subsequent environmental investigations conducted at the Site.

2.5.1 Hahn and Associates, Inc. Phase I and II Environmental Site Assessments, 2000

In 2000, Hahn performed a Phase I Environmental Site Assessment (ESA) for the Property which identified the historical presence of up to three dry cleaning operations, operating in two distinct locations on the southwestern portion of the Property (Exhibit A: Figure 2). This land use practice was identified as a Recognized Environmental Condition (REC) due to the common use, storage, and improper disposal hazardous cleaning solvents, and further assessment was recommended.

Hahn subsequently oversaw the advancement of eight borings (B-1 through B-8 [Exhibit A: Figure 3]) on the Property to evaluate the environmental quality of soil and groundwater in the vicinity of these former cleaners.

Investigation Findings

One soil sample, collected from boring B-1 at a depth of 19.5 bgs, contained concentrations of tetrachloroethylene (PCE) and trichloroethylene (TCE) in excess of their respective Model Toxics Control Act (MTCA) Method A Cleanup Levels for Unrestricted Land Use (Exhibit A: Figure 4, Exhibit B: Table 1).

Groundwater samples collected from borings B-1 and B-4 also contained concentrations of PCE, TCE, 1,1-dichloroethylene (1,1-DCE) and/or Vinyl Chloride (VC) in excess of their respective MTCA Method A Cleanup Levels.

The groundwater sample collected from boring B-7 contained a detectable concentration of PCE, however the value was well below its MTCA Method A Cleanup Level (Exhibit A: Figure 5, Exhibit B: Table 5).

The results of the investigation indicated that a significant release of chlorinated volatile organic compounds (cVOCs) had occurred in the vicinity of the southern dry cleaning operations.

A small release may have also occurred in the vicinity of the northern dry cleaning operations, however the impacts appeared to be de-minimus in nature and were not subject to remedial action based on MTCA cleanup requirements.

2.5.2 SoundEarth Strategies, Inc. –Subsurface Investigation, 2017

Between January and March of 2017, SoundEarth conducted a subsurface investigation to evaluate the nature and extent of the cVOC release identified by Hahn in 2000. The investigation consisted of the advancement of 13 borings (SB01 through SB08 and B01 through B05); B01 was completed as a 2-inch diameter groundwater monitoring well (B01/MW01) (Exhibit A: Figure 2).

Investigation Findings

Soil samples collected from borings SB01, SB02, SB08, B01, B02, B03, and B04 contained concentrations of PCE, TCE, and/or Vinyl Chloride in excess of their respective MTCA Method A Cleanup Level (Exhibit A: Figure 4, Exhibit B: Table 1).

A groundwater sample collected from monitoring well MW01 in January of 2018 contained a concentration of PCE well in excess of its MTCA Method A Cleanup Level. TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE, and VC were not detected above their laboratory reporting limits, however the reporting limits themselves were in excess of their respective MTCA Method A Cleanup Levels due to laboratory dilution (Exhibit A: Figure 5, Exhibit B: Table 5).

2.5.3 SoundEarth Strategies, Inc. – Soil Vapor Assessment, 2017

In December of 2017, SoundEarth performed a soil vapor assessment to better understand the cVOC source area and extent of shallow soil impacts. Fifty-six passive soil vapor probes were advanced on the southern portion of the Property and into the adjacent sidewalk rights-of-way (Exhibit A: Figure 8).

Investigation Findings

Only 5 of the 56 soil vapor samples contained detectable concentrations of cVOCs. These results provided inconclusive data with respect to the investigation purpose as an obvious source area was not found, nor was there a direct correlation with existing data or cVOC concentration gradient evident.

2.5.4 SoundEarth Strategies, Inc. – Subsurface Investigation, 2018

In 2018, SoundEarth conducted a multi-phase supplemental subsurface investigation to further define the extent of the cVOC release and to characterize the fill material across the Property. The investigation consisted of the advancement of 21 borings (B06 through B18 and TB01 through TB08); B07, B09, B15 through B18, TB07 and TB08 were completed as 2-inch diameter groundwater monitoring wells (B07/MW03, B09/MW02, B15/MW07, B16/MW06, B17/MW09, B18/MW08, TB07/MW04, and TB08/MW05)(Exhibit A: Figure 3). Borings B12, B15, and B16 were advanced near the western Property boundary, at angles of approximately 46-48 degrees toward the adjacent ROW, to collect soil samples beneath utility obstructions in the sidewalk.

Investigation Findings

The soil sample collected from TB05 at a depth of 5 feet bgs contained a concentration of oil-range petroleum hydrocarbons (ORPH) exceeding its MTCA Method A Cleanup Level.

Soil samples collected from borings B06, B12, B14, B16, B18, and TB08 contained concentrations of PCE and/or TCE in excess of their respective MTCA Method A Cleanup Levels (Exhibit A: Figure 4, Exhibit B: Table 1).

The groundwater samples collected from monitoring wells MW05, MW08, and MW09 contained concentrations of PCE, TCE, cis-1,2-DCE, and VC in excess of their respective MTCA Method A Cleanup Levels (Exhibit A: Figure 5, Exhibit B: Table 5).

2.5.5 Urban Environmental Partners – Subsurface Investigation, 2019

In April of 2019, UEP conducted a subsurface investigation to evaluate potential cVOC impacts beneath the southern adjacent ROW (South Genesee Street). The investigation consisted of the advancement of 2 borings (UB10 and UB11); both were completed as 2-inch diameter groundwater monitoring wells (UB10/MW10 and UB11/MW11)(Exhibit A: Figure 3).

Investigation Findings

Two soil samples collected from UB10 at depths of 25 and 28 feet bgs, respectively, contained concentrations of PCE and/or TCE in excess of their respective MTCA Method A Cleanup Levels (Exhibit A: Figure 4, Exhibit B: Table 1).

The groundwater sample collected from monitoring well MW10 contained concentrations of PCE, TCE, cis-1,2-DCE, and VC in excess of their respective MTCA Method A Cleanup Levels (Exhibit A: Figure 5, Exhibit B: Table 5).

2.5.6 Aestus – GeoTrax CSM+™ Ultra-High Resolution Site Characterization, 2019 (ongoing)

In December of 2019, Aestus, LLC (Aestus) began its GeoTrax Survey™ electrical resistivity imaging (ERI) work at the Site. The goal was, and is, to have Aestus assist in further assessing the nature and extent of the cVOC release, including evaluation of potential geologic controls/preferential flowpaths, and levels of naturally occurring bioactivity using its electrical hydrogeology scanning technology and update the Conceptual Site Model (CSM) with higher data density to facilitate successful remediation and minimize the risk of trailing liabilities.

ERI works by imparting an electrical current into the ground, and then measuring voltage at one or more other locations along a straight survey line/transect. Based on these data, the apparent resistivity of subsurface materials is calculated using Ohm's Law. These measurements are then inverted to provide measurements of model resistivity or true resistivity at regular points. Aestus uses specialty ERI methods developed specifically for the environmental industry with enough sensitivity and resolution to image NAPLs and associated aqueous phase impacts as well as hydrogeology and bioactivity.

Aestus performed 10 transect lines, each consisting of 56 stainless steel electrodes, installed in a straight line at specific intervals to a depth of approximately 12 inches. The electrodes stakes were connected via geophysical cables and the cables were connected to Aestus' data acquisition field instruments. Once each survey line was laid out in the field, Aestus' specialized data acquisition methods gathered a significant amount of data related to the electrical properties of the subsurface. Following field data collection, Aestus used their proprietary data processing techniques to develop a final electrical resistivity 2D image of the subsurface for each transect location. The 2D image depth is one-fifth of the transect line length on the ground surface.

The magnitude of subsurface resistivity values will vary from site to site based on a number of factors, and is related to geology composition, the chemistry of the groundwater and other fluids trapped in the pore spaces within the soil matrix, and the presence or absence of buried debris and structures. For a typical site, fine materials such as clay and silt are generally less resistive (i.e., more conductive) while coarse sand and gravel are generally more resistive (i.e., less conductive). Should the soil (clay or sand) be dry, it will appear more resistive when dry and less resistive when wet.

Subsurface areas impacted with fresh or unweathered light or dense non-aqueous liquids (LNAPLs or DNAPLs, respectively) and related dissolved phase contamination, typically present as more resistive anomalous zones relative to areas that contain only non-impacted soils and pore fluids. Areas containing

NAPL impacted soils often present as a roughly spherical or lenticular blob shape (obloid) and will typically be identified by more resistive values.

Conversely, the presence of chloride and/or other ions create lower resistivity (i.e., higher electrical conductivity) in in the subsurface. Aestus also routinely detects bioactive zones in the subsurface which create a very electrically conductive signature (less resistive) due to shifting groundwater chemistry and the presence of nanowires between the bacteria and other organisms which may be present. Bioactivity signatures are typically the strongest electrical signal in Aestus' imagery which sometimes results in electrically conductive anomalies being indicative of NAPL surrounded by bioactivity (i.e., weathered NAPL) versus the highly resistive electrical signature that is typical for unweathered NAPL.

Because Aestus' subsurface imaging technology is not a quantitative analytical tool, it does not immediately identify or quantify the chemical, geological, and biological (bioactivity) composition of anomalies detected. Data integration of historical, and follow-up confirmation drilling is necessary to effectively "convert" or calibrate the electrical signatures back to the subsurface features of interest, such as physical (geology signatures), chemical (contamination presence/absence and relative concentration), and biological signatures (indicating potential presence/absence of bioactivity). The data integrated for calibration and interpretation purposes typically includes but is not limited to boring logs, analytical sample data, and fluid level measurements.

Investigation Findings

As of the date of this workplan, Aestus has submitted its Interim Report after completing field data acquisition of electrical imagery and integration of historical drilling data provided to Aestus by UEP. These new data have identified several areas of interest apart from the known zones of impacts proximate to the former dry cleaners at the southwest corner of the property. Specifically these areas exhibited anomalous electrically resistive or conductive properties which may be consistent with the presence of subsurface isolated zones or preferential flowpaths containing contaminant impacts and/or ongoing naturally occurring bioactivity.

Aestus has provided potential confirmation drilling locations to ground truth these hypotheses and update the CSM. The 2D continuous imagery provide specific geospatial confirmation drilling target(s) to confirm presence or absence of contaminant concentrations of concern. Primary areas of interest are generally depicted on Figure 9 in Exhibit A and include the following:

Area 1 – Potential Deeper Flowpath Proximate to Former Dry Cleaner at SW Corner of Site

The GeoTrax Survey™ imagery indicate an electrically anomalous layered zones proximate to existing impacted monitoring wells which may be consistent with a preferential flowpath affecting horizontal and vertical migration of impacts.

Area 2 – Former Dry Cleaner Building at Northwest Corner of Site

The GeoTrax Survey™ imagery identified a resistor/conductor pair in the area of the northern former dry cleaner. Previous investigations in this area have not identified COCs at elevated concentrations; however the survey results could potentially indicate a secondary contaminant source.

Additionally, the area slightly north of the former cleaner showed the highest electrical resistivity values detected by Aestus' GeoTrax Survey™ imaging. High electrical resistivity values can also be caused by dry or coarse grain soils and/or fill materials, however this area of the site presents quite differently than other areas on an electrical image basis, therefore Aestus suggested that this area be vetted via confirmation drilling to verify the updated CSM is complete.

Area 3 – Potential Subsurface Channel Feature Oriented North-South

The GeoTrax Survey™ identified what appears to be a channel-like subsurface feature of anomalously low resistivity (high electrical conductivity) oriented north to south within the central portion of the Property. This anomalous zone extended vertically from approximately 5-25 feet bgs, and could be indicative of a preferential flow path containing the presence of impacts with ongoing bio-degradation.

3.0 Conceptual Site Model

This section provides a summary of the CSM, which includes a discussion of the contaminants of concern (COCs), the media of concern, the distribution of contamination in soil and groundwater at the Site, and the perceived current data gaps.

3.1 Contaminants of Concern

Based on the results of previous investigations, the primary COCs for the Site include PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE, and VC.

The petroleum related contaminants detected on the Site appear to be associated with uncontrolled fill material and does not appear to be related to a release on the Property.

3.2 Media of Concern

Based on the results of previous investigations, soil and groundwater are the confirmed media of concern for the Site.

Indoor air is an anticipated media of concern for future on-Site structures based on COC concentrations detected in shallow groundwater. Five of the ten monitoring wells have contained COC concentrations in excess of the MTCA Method B Groundwater Screening Level for potential vapor intrusion.

3.3 Distribution of Contamination in Soil

The lateral extent of soil contamination at the Site appears to be limited to the southwestern portion of the Property, beneath the asphalt parking area, within the parcel boundaries. The northern limits are defined by the absence of impacts in borings B-5, B-6, B07, and B08; the eastern limits are defined by the absence of impacts in borings B08, B09, SB04, and B-4; the southern impacts are defined by the absence of impacts in borings B-4, B-3, SB05, TB07, B-2, and B13; and the western impacts are defined by the absence of impacts in the angle borings B12 and B16 at locations beneath the western adjacent ROW.

The PCE and/or TCE detected in boring UB10 at 25 and 28 feet bgs is suspected to be anomalous. This sample was taken in the saturated zone is likely more representative of the dissolved phase plume in groundwater.

The vertical extent of soil contamination appears to range from approximately 10 feet bgs to approximately 20 feet bgs across the majority of the Site, with a small area extending to approximately 32.5 feet bgs in the vicinity of B01/MW01.

3.4 Distribution of Contamination in Groundwater

The lateral extent of groundwater contamination at the Site appears to be limited to the southwestern portion of the Property, beneath the asphalt parking area, extending beneath the adjacent ROW to the south (South Genesee Street).

The northern plume boundary is defined by the absence of impacts in monitoring well MW03. The eastern plume boundary is defined by the slightly elevated VC concentration and absence of remaining cVOCs in monitoring well MW02; this suggests this is very near the leading edge. The southern plume boundary remains undefined based on the elevated concentrations of several COCs in MW10. The western plume boundary is defined by the absence of contamination in monitoring wells MW06 and MW07.

4.0 Data Gaps

Based on the results of previous investigations, the following data gaps have been identified for the Site.

4.1 Southern Extent of cVOC Contamination in Groundwater

The southern extent of cVOC contamination in groundwater has not been defined. The groundwater sample collected from monitoring well MW10 on April 21, 2019 contained concentrations of PCE, TCE, cis-1,2 DCE, and VC above their respective MCTA Method A Cleanup Levels, indicating the plume extends further south beneath South Genesee Street.

4.2 Potential Secondary Contaminant Source

Aestus' Geotrax Survey™ identified an area of interest near the former northern dry cleaner which could potentially represent a secondary source for Site COCs.

4.3 Preferential Flow Paths and Distribution of Site COCs

Aestus' Geotrax Survey™ identified two areas of interest that, when explored, may provide a better understanding of the contaminant fate and transport at the Site. This information could be critical when evaluating the feasibility of remedial alternatives.

4.4 PAH Mobility

Historical building plans indicate the northern structure on the Property was constructed on approximately 170 wood piles. Wood piles of this era were commonly treated with creosote, which contains chemicals such as PAHs. Data has not yet been collected to establish the mobility of these contaminants within soil surrounding the piles or their potential to impact groundwater.

5.0 Confirmation Sampling Workplan

5.1 Pre-Field Tasks

A private locating service will identify and trace subsurface utilities in an attempt to clear potential boring locations and the public "call before you dig" utility notification center will also be notified at least 48-hours in advance of field work.

UEP will produce a health and safety plan in accordance with MTCA and Part 1910.120 and Title 29 of the Code of Federal Regulations (29 CFR 1910.120), which identifies the physical and chemical hazards associated with the project.

5.2 Field Work

UEP proposes the advancement of eight soil borings, to a maximum depth of 46 feet below ground surface (bgs), using both hollow stem auger and direct push drilling techniques. Drilling will be completed by Washington State Licensed Drillers under the supervision of environmental professionals.

Seven of the eight borings will be completed as 2-inch diameter resource protection wells, screened at specific intervals detailed in Table 6 in Exhibit B.

Soil and interval groundwater samples will be collected from each boring using industry standard practices, including 5035 sampling techniques for analysis of Volatile Organic Compounds in soil, and reconnaissance groundwater sampling in accordance with the Environmental Protection Agency (EPA) 2005 publication Groundwater Sampling and Monitoring with Direct Push Technologies.

Groundwater samples will also be collected from the newly installed monitoring wells, after proper development, in accordance with American Society of Testing and Materials (ASTM) Guideline D6771-02 Standard Practice for Low-Flow Purging and Sampling for Wells and Devices Used for Ground-Water Quality Investigations. UEP will follow the following procedures when collecting groundwater samples:

- The caps from the monitoring wells will be removed and the groundwater level will be allowed to equilibrate to atmospheric pressure for a minimum of 20 minutes.
- The depth to groundwater in the monitoring wells will be measured relative to the top of the well casing using an electronic water-level meter.
- Each monitoring well will be purged at a low-flow rate (100 to 300 milliliters per minute) using a peristaltic pump (if possible) and dedicated polyethylene tubing. Temperature, pH, DO, turbidity, and specific conductivity will be monitored during purging using a water quality meter to determine when these parameters stabilized.

The proposed boring/monitoring well locations are shown on Figure 10 in Exhibit A.

Samples will be placed in a cooler and kept on ice until delivered to an Ecology Accredited Laboratory under standard chain of custody protocols. Samples will be analyzed for one or more of the Site specific COCs, as detailed in Table 6 in Exbibit B.

5.3 Field Documentation

The sequence and progress of sampling, and notes documenting the field events will be recorded on a Daily Activities Field Record. Soil conditions and soil core field screening results by boring and sample interval location will be recorded on a Field Boring Log. The contents of investigation derived waste will be recorder on marked drums by drilling location, using a welders crayon/paint pen, and recorded on an Inventory List on the Daily Activities Field Record. These records will be scanned and kept in the project file for reference until samples and waste drums are properly disposed of.

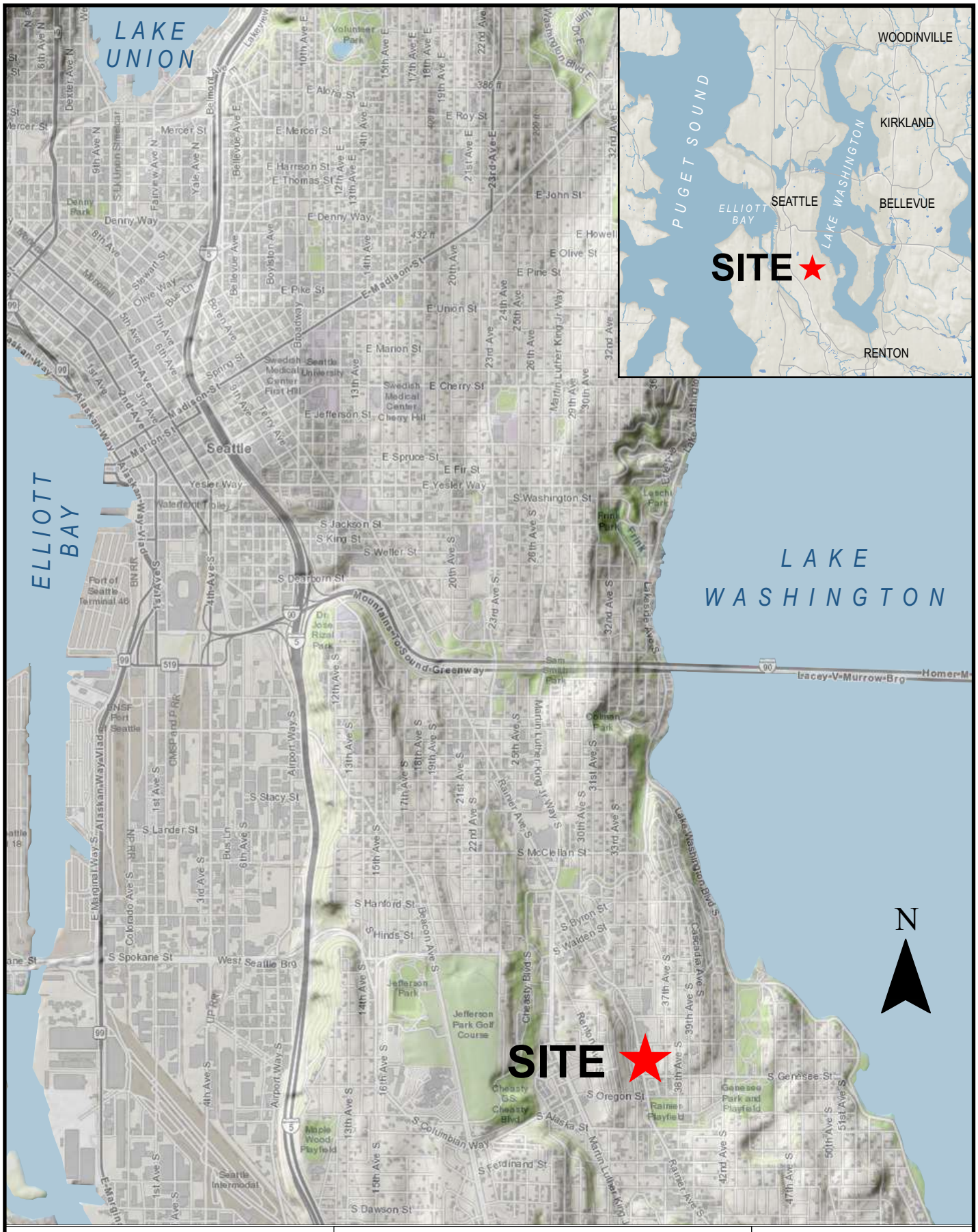
5.4 Data Analysis

In addition to internal review, the confirmation drilling data will be reported back to Aestus so that it can integrate these data and reinterpret its subsurface imagery and interpretation relative to Site hydrogeology, contaminant, and bioactivity CSM components, and issue their final report. This report with updated CSM information will be used as input for design of a final remedy for the Site and will be incorporated into the Site RI/Feasibility Study report.

6.0 References

- Aestus. 2020. *GeoTrax CSM+ Interim Report*. January 30.
- Hahn and Associates, Inc. 2000. *A Phase I Environmental Site Assessment: Rainier Mall*. May 23.
- Hahn and Associates, Inc. 2000. *Phase II Environmental Site Assessment: Rainier Mall*. August 1.
- SoundEarth Strategies, Inc. 2017. *Subsurface Investigation Summary Letter: Rainier Mall Property*. March 31.
- SoundEarth Strategies, Inc. 2018. *Draft Subsurface Investigation Summary Report: Rainier Mall North Property*. March 20.
- SoundEarth Strategies, Inc. 2018. *Draft Subsurface Investigation Summary Report: Rainier Mall South Property*. March 22.
- SoundEarth Strategies, Inc. 2018. *Draft Supplemental Subsurface Investigation Summary Letter: Rainier Mall Property*. October 29.

Exhibit A: Figures



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Rainier Mall Site
4208 Rainier Avenue South
Seattle, WA

Figure 1
Site Location Map

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Rainier Mall Site
4208 Rainier Avenue South
Seattle, WA

Figure 2
Site Plan

N

0 30 60

APPROXIMATE SCALE IN FEET

LEGEND

MW11	UEP MONITORING WELL
B07/MW03	GROUNDWATER MONITORING WELL
TB08/MW05	TERRA MONITORING WELL
SG03	SOIL GAS SAMPLE
SB08	PUSH-PROBE SOIL BORING
B04	HOLLOW-STEM AUGER SOIL BORING
B12	ANGLED HOLLOW-STEM AUGER SOIL BORING
B-8	SOIL BORING (HAHN AND ASSOCIATES, INC, 2000)
B05	SONIC SOIL BORING
TB06	TERRA GEOTECHNICAL BORING
	PROPERTY BOUNDARY
	CATCH BASIN
E E	UNDERGROUND ELECTRIC LINE
GAS GAS	GAS LINE
SS SS	SEWER LINE
SW SW	STORMWATER LINE
COM COM	COMMUNICATION LINE
	CROSS SECTION LOCATION

TB02
TB01
RETAIL BUILDING
SG01
SG02
TB04
SG03
TB05
RAINIER AVENUE SOUTH
A
B10
ESTIMATED LOCATION OF FORMER DRY CLEANERS
B-7
SB07
SB06
B11
B-6
B07/MW03
B08
TB03
36TH AVENUE
B-8
B-5
B14
B06
B04
B02
B16/MW06
B
B'
B18/MW08
SB08
B03
B09/MW02
TB08/MW05
B12
SB02
SB03
B15/MW07
B01
MW01
SB01
B05
B-1
B13
TB07/MW04
SB04
B-2
B-4
ESTIMATED LOCATION OF FORMER DRY CLEANERS
SB05
B-3
B17/MW09
TB06
MW11
MW10
A'
SOUTH GENESEE STREET

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Rainier Mall Site
4208 Rainier Avenue South
Seattle, WA

Figure 3
Exploration Location Plan

Boring ID	Sample ID	Sampled By	Date Sampled	Depth (ft/bgs)	Analytical Results[1] - Milligrams per Kilogram (mg/kg)					
					PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC
B-1	5015-000628-005	Hahn	6/28/2000	19.5	83.3	0.272	<0.005	--	<0.005	<0.01
B-3	5015-000628-018	Hahn	6/28/2000	4.5	<0.005	<0.005	<0.005	--	<0.005	<0.01
B-6	5015-000628-018	Hahn	6/28/2000	7	<0.005	<0.005	<0.005	--	<0.005	<0.01
B-8	5015-000629-039	Hahn	6/28/2000	4.5	<0.005	<0.005	<0.005	--	<0.005	<0.01
SB01	SB01-5.0	SoundEarth	1/18/2017	5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB01-10.0			10	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB01-20.0			20	29	0.31	<0.05	<0.05	--	<0.05
	SB01-22.5			22.5	1.8	<0.02	<0.05	<0.05	--	<0.05
	SB01-24.5			24.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
SB02	SB02-5.0	SoundEarth	1/18/2017	5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB02-10.0			10	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB02-12.5			12.5	<0.025	<0.02	6.7	0.052	--	2.2
	SB01-24.5			16	4.1	2.2	1.1	<0.05	--	0.052
SB03	SB03-12.5	SoundEarth	1/18/2017	12.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB03-16.0			16	<0.025	<0.02	<0.05	<0.05	--	<0.05
SB04	SB04-5.0	SoundEarth	1/18/2017	5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB04-12.5			12.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB04-16.0			16	<0.025	<0.02	<0.05	<0.05	--	<0.05
SB05	SB05-5.0	SoundEarth	1/18/2017	5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB05-12.5			12.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB05-16.0			16	<0.025	<0.02	<0.05	<0.05	--	<0.05
SB06	SB06-10.0	SoundEarth	1/18/2017	10	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB06-24.0			24	<0.025	<0.02	<0.05	<0.05	--	<0.05
SB07	SB07-10.0	SoundEarth	1/18/2017	10	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB07-16.0			16	<0.025	<0.02	<0.05	<0.05	--	<0.05
SB08	SB08-5.0	SoundEarth	1/18/2017	5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB08-10			10	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB08-12.5			12.5	<0.025	0.029	1.3	0.086	--	<0.05
	SB08-16.0			16	7.1	8.6	10	0.056	--	0.24
B01/MW01	B01-12.5	SoundEarth	2/9/2017	12.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	B01-17.5			17.5	58	0.45	<0.05	<0.05	--	<0.05
	B01-20			20	510	0.33	<0.05	<0.05	--	<0.05
	B01-22.5			22.5	20	0.28	<0.05	<0.05	--	<0.05
	B01-27.5			27.5	0.40ht	0.073ht	<0.05ht	<0.05ht	--	<0.05ht
	B01-32.5			32.5	0.31ht	<0.02ht	<0.05ht	<0.05ht	--	<0.05ht
	B01-35			35	0.049ht	<0.02ht	<0.05ht	<0.05ht	--	<0.05ht
B02	B02-10	SoundEarth	2/9/2017	10.0	<0.025	<0.02	0.13	<0.05	--	<0.05
	B02-15			15.0	0.085	4.9	6.7	0.25	--	0.097
	B02-20			20.0	<0.025	<0.02	<0.05	<0.05	--	<0.05
B03	B03-12.5	SoundEarth	2/9/2017	12.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	B03-15			15.0	<0.025	<0.02	0.082	<0.05	--	<0.05
	B03-17.5			17.5	0.36	1.5	1.1	<0.05	--	<0.05
	B03-20			20.0	0.67	0.57	0.41	<0.05	--	<0.05
	B03-22.5			22.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
B04	B04-10	SoundEarth	2/9/2017	10.0	<0.025	<0.02	<0.05	<0.05	--	<0.05
	B04-12.5			12.5	<0.025	0.10	0.79	0.12	--	<0.05
	B04-17.5			17.5	<0.025	<0.02	0.32	<0.05	--	<0.05
B05	B05-40	SoundEarth	3/22/2017	40.0	<0.025	<0.02	<0.05	<0.05	--	<0.05
TB01	TB01-15	SoundEarth	1/24/2018	15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
TB02	TB02-15	SoundEarth	1/24/2018	15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
TB05	TB05-05	SoundEarth	1/25/2018	5	<0.025	<0.02	--	--	<0.05	<0.05
TB07	TB07-05	SoundEarth	1/26/2018	5	<0.025	<0.02	<0.05	--	<0.05	<0.05
	TB07-15			15.0	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	TB07-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	TB07-30			30	<0.025	<0.02	<0.05	--	<0.05	<0.05
TB08	TB08-10	SoundEarth	1/26/2018	10.0	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	TB02-12.5			12.5	0.46	0.55	0.21	--	<0.05	<0.05
	TB08-17.5			17.5	24	1.7	0.45	--	<0.05	<0.05
	TB08-20			20.0	2.0	0.17	0.06	--	<0.05	<0.05
	TB08-25			25	<0.025	<0.02	<0.05	--	<0.05	<0.05
B06	B06-12.5	SoundEarth	1/26/2018	12.5	<0.025	0.097	0.15	--	<0.05	<0.05
	B06-15			15	<0.025	0.19	0.47	<0.05	<0.05	<0.05
	B06-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B06-50			50	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B07	B07-12.5	SoundEarth	1/25/2018	12.5	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B07-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B08	B08-15	SoundEarth	1/25/2018	15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B08-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B09	B09-17.5	SoundEarth	1/25/2018	17.5	<0.025	<0.02	<0.05	--	<0.05	<0.05
	B09-20			20	<0.025	<0.02	<0.05	--	<0.05	<0.05
B10	B10-2.5	SoundEarth	1/26/2018	2.5	<0.025	<0.02	--	--	<0.05	<0.05
B11	B11-15	SoundEarth	1/26/2018	15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B12	B12-10.5	SoundEarth	2/7/2018	10.5–11.5	1.2	3.1	0.88	<0.05	<0.05	<0.05
	B12-14			14–15	0.097	0.023	<0.05	<0.05	<0.05	<0.05
	B12-17			17–18	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B12-20			20–21	<0.025	<0.02	<0.05	--	<0.05	<0.05
B13	B13-15	SoundEarth	2/7/2018	15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B14	B14-15	SoundEarth	2/7/2018	15	<0.025	0.13	0.40	<0.05	<0.05	<0.05
B15	B15-11	SoundEarth	10/1/2018	10.5–11.5	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B15-14			14–15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B15-17			17–18	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B15-20			20–21	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B16	B16-11	SoundEarth	10/1/2018	10.5–11.5	<0.025	0.072	<0.05	<0.05	<0.05	<0.05
	B16-14			14–15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B16-17			17–18	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B16-20			20–21	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B17	B17-15	SoundEarth	10/2/2018	15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B17-17.5			17.5	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B17-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B18	B18-10	SoundEarth	10/2/2018	10	<0.025	<0.02	0.51	<0.05	<0.05	<0.05
	B18-12.5			12.5	2.1	1.7	0.93	<0.05	<0.05	<0.05
	B18-15			15	1.8	0.43	0.38	<0.05	<0.05	<0.05
	B18-17.5			17.5	0.085	0.030	<0.05	<0.05	<0.05	<0.05
	B18-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
UB10	UB10-10	UEP	4/20/2019	10	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB10-15			15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB10-18			18	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB10-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB10-25			25	<0.025	0.049	<0.05	<0.05	<0.05	<0.05
	UB10-28			28	0.11	0.083	<0.05	<0.05	<0.05	<0.05
UB11	UB11-13	UEP	4/20/2019	13	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB11-15			15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB11-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB11-25			25	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB11-28			28	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
Ecology MTCA Method A Cleanup Levels Unless Otherwise Specified					**0.05**	**0.03**	**160**	**1,600[3]**	**4,000[1]**	**0.67[4]**

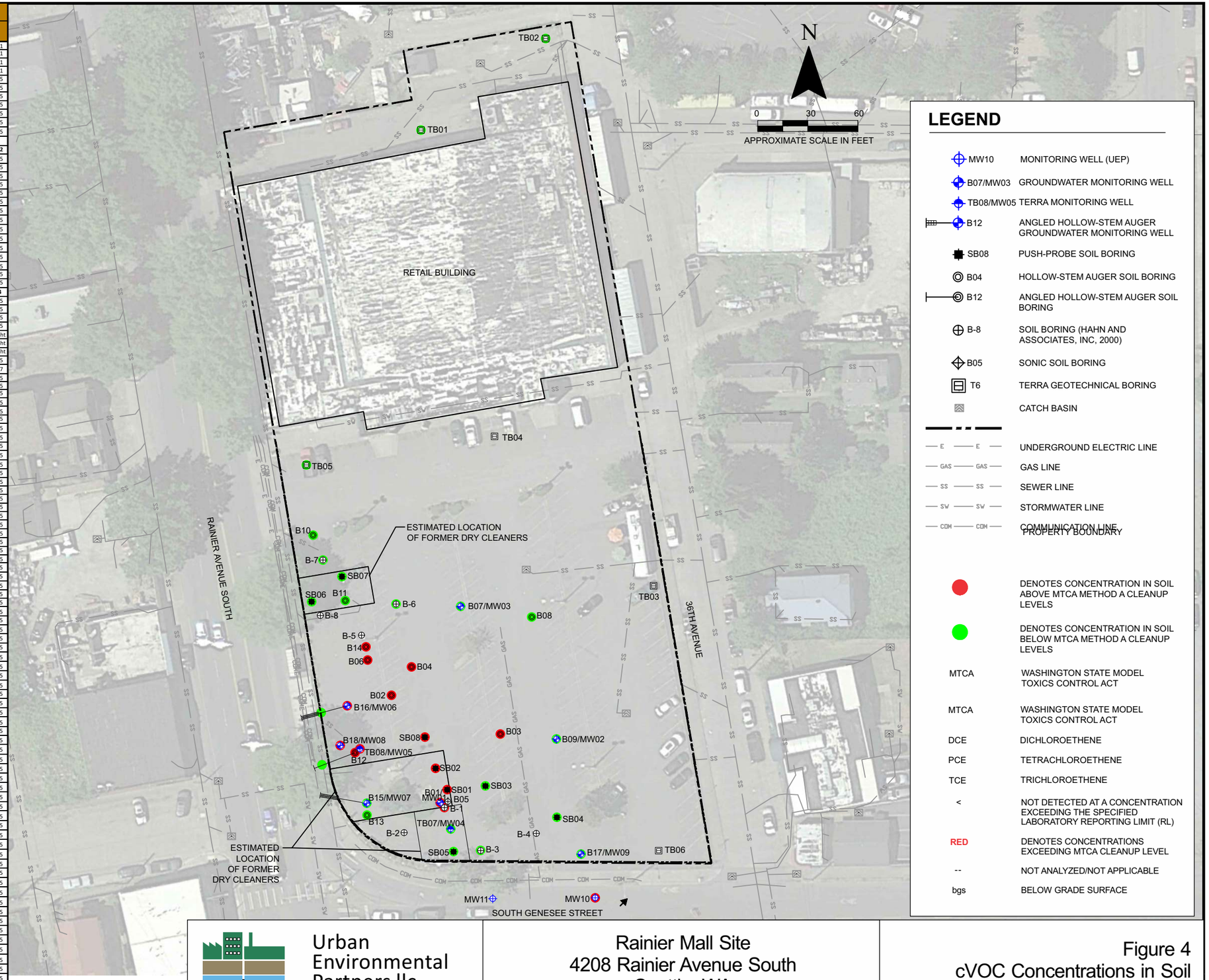

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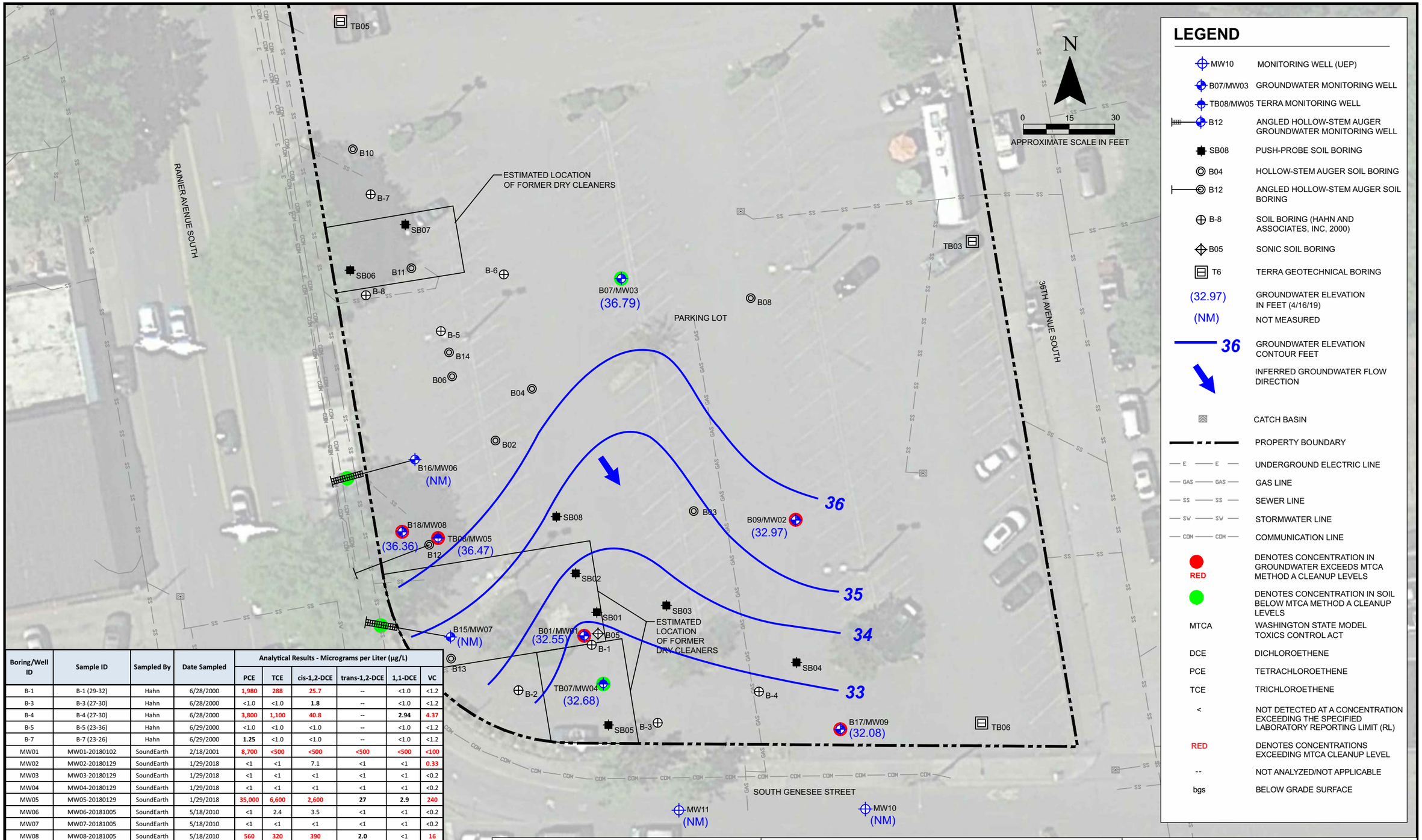
Figure 4
cVOC Concentrations in Soil



LEGEND

MW10	MONITORING WELL (UEP)
B07/MW03	GROUNDWATER MONITORING WELL
TB08/MW05	TERRA MONITORING WELL
B12	ANGLED HOLLOW-STEM AUGER GROUNDWATER MONITORING WELL
SB08	PUSH-PROBE SOIL BORING
B04	HOLLOW-STEM AUGER SOIL BORING
B12	ANGLED HOLLOW-STEM AUGER SOIL BORING
B-8	SOIL BORING (HAHN AND ASSOCIATES, INC, 2000)
B05	SONIC SOIL BORING
T6	TERRA GEOTECHNICAL BORING
(32.97)	GROUNDWATER ELEVATION IN FEET (4/16/19)
(NM)	NOT MEASURED
36	GROUNDWATER ELEVATION CONTOUR FEET
	INFERRED GROUNDWATER FLOW DIRECTION
	CATCH BASIN
	PROPERTY BOUNDARY
E E	UNDERGROUND ELECTRIC LINE
GAS GAS	GAS LINE
SS SS	SEWER LINE
SW SW	STORMWATER LINE
COM COM	COMMUNICATION LINE
RED	DENOTES CONCENTRATION IN GROUNDWATER EXCEEDS MTCA METHOD A CLEANUP LEVELS
	DENOTES CONCENTRATION IN SOIL BELOW MTCA METHOD A CLEANUP LEVELS
MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT
DCE	DICHLOROETHENE
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
<	NOT DETECTED AT A CONCENTRATION EXCEEDING THE SPECIFIED LABORATORY REPORTING LIMIT (RL)
RED	DENOTES CONCENTRATIONS EXCEEDING MTCA CLEANUP LEVEL
--	NOT ANALYZED/NOT APPLICABLE
bgs	BELOW GRADE SURFACE

Boring/Well ID	Sample ID	Sampled By	Date Sampled	Analytical Results - Micrograms per Liter (µg/L)					
				PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC
B-1	B-1 (29-32)	Hahn	6/28/2000	1,980	288	25.7	--	<1.0	<1.2
B-3	B-3 (27-30)	Hahn	6/28/2000	<1.0	<1.0	1.8	--	<1.0	<1.2
B-4	B-4 (27-30)	Hahn	6/28/2000	3,800	1,100	40.8	--	2.94	4.37
B-5	B-5 (23-36)	Hahn	6/29/2000	<1.0	<1.0	<1.0	--	<1.0	<1.2
B-7	B-7 (23-26)	Hahn	6/29/2000	1.25	<1.0	<1.0	--	<1.0	<1.2
MW01	MW01-20180102	SoundEarth	2/18/2001	8,700	<500	<500	<500	<500	<100
MW02	MW02-20180129	SoundEarth	1/29/2018	<1	<1	7.1	<1	<1	0.33
MW03	MW03-20180129	SoundEarth	1/29/2018	<1	<1	<1	<1	<1	<0.2
MW04	MW04-20180129	SoundEarth	1/29/2018	<1	<1	<1	<1	<1	<0.2
MW05	MW05-20180129	SoundEarth	1/29/2018	35,000	6,600	2,600	27	2.9	240
MW06	MW06-20181005	SoundEarth	5/18/2010	<1	2.4	3.5	<1	<1	<0.2
MW07	MW07-20181005	SoundEarth	5/18/2010	<1	<1	<1	<1	<1	<0.2
MW08	MW08-20181005	SoundEarth	5/18/2010	560	320	390	2.0	<1	16
MW09	MW09-20181005	SoundEarth	5/18/2010	20	59	36	<1	<1	1.7
	MW9	UEP	4/21/2019	38	110	93	1.2	<1	7.4
MW10	MW10	UEP	4/21/2019	41	54	22	<1	<1	0.24
MW11	MW11	UEP	4/21/2019	<1	<1	<1	<1	<1	<0.2
Ecology MTCA Method A Cleanup Levels Unless Otherwise Specified				5	5	16	160	400	0.2

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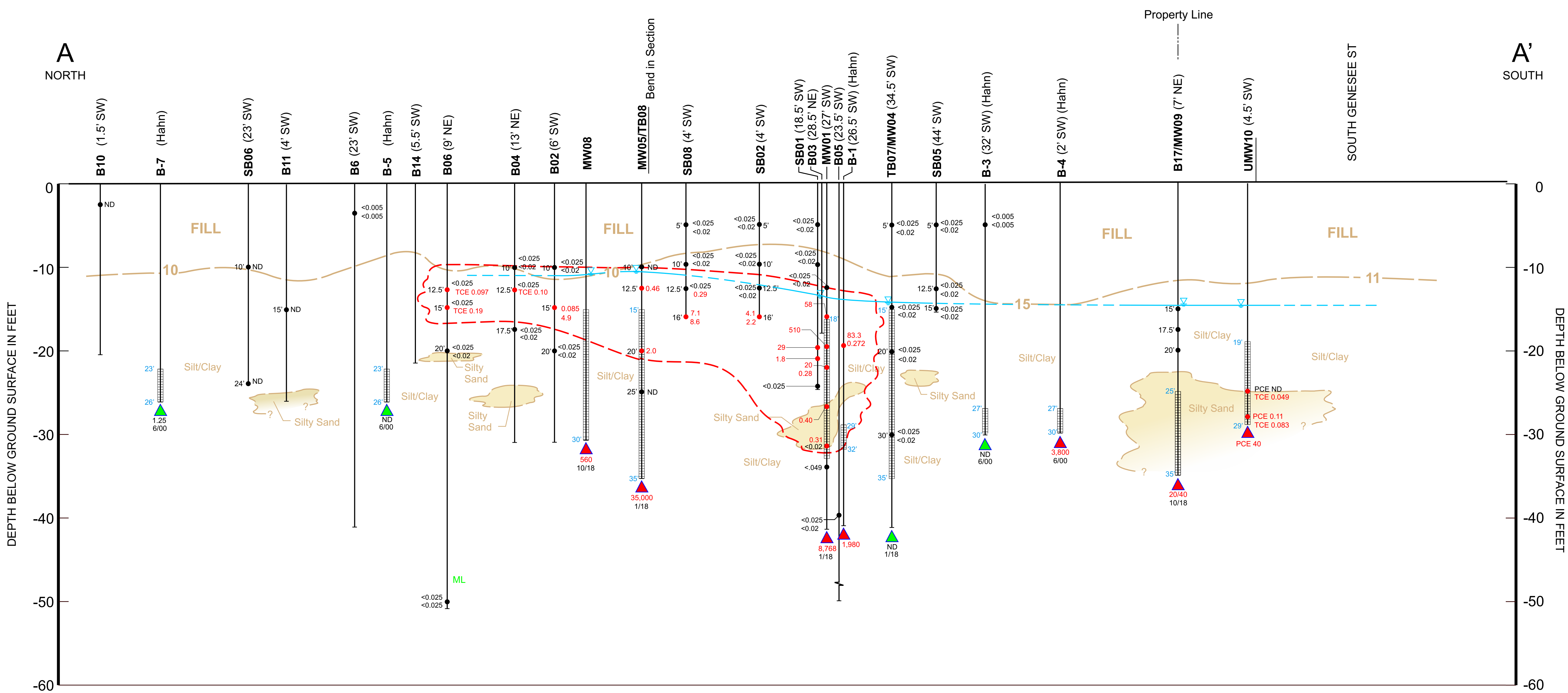
Figure 5
cVOC Concentrations in Groundwater



LEGEND

(1' SOUTH) OFFSET 1' SOUTH

MONITORING WELL

SCREEN INTERVAL

GROUNDWATER LEVEL

APPROXIMATE EXTENT OF PCE-IMPACTED SOIL

CONCENTRATIONS OF CHEMICALS OF CONCERN IN SOIL (mg/kg):

- CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL
- CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL

SOIL RESULTS (mg/kg):

<0.025	PCE
0.29	TCE

GROUNDWATER PCE IN µg/L

RED DENOTES CONCENTRATIONS EXCEEDING MTCA METHOD A CLEANUP LEVELS

mg/kg	MILLIGRAMS PER KILOGRAM
µg/L	MICROGRAMS PER LITER
RED	DENOTES CONCENTRATIONS EXCEEDING MTCA METHOD A CLEANUP LEVELS
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT
bgs	BELOW GROUND SURFACE
VC	VINYL CHLORIDE

Horizontal Scale in Feet
0 25 50
0 12.5 25
Vertical Scale in Feet
Vertical Exaggeration X 2

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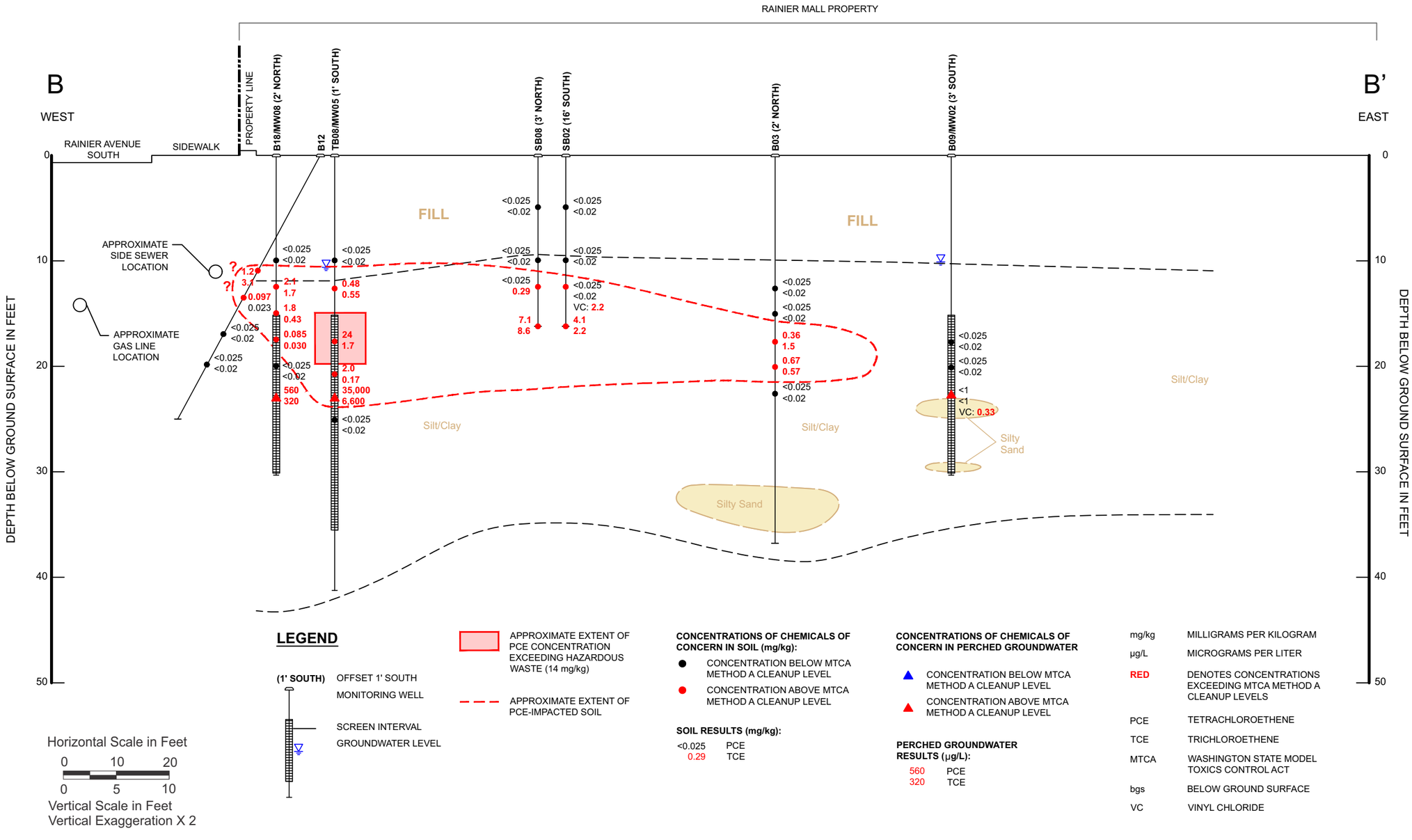
Figure 6
Cross Section A-A'



LEGEND

(1' SOUTH) OFFSET 1' SOUTH

MONITORING WELL

SCREEN INTERVAL

GROUNDWATER LEVEL

APPROXIMATE EXTENT OF PCE CONCENTRATION EXCEEDING HAZARDOUS WASTE (14 mg/kg)

APPROXIMATE EXTENT OF PCE-IMPACTED SOIL

CONCENTRATIONS OF CHEMICALS OF CONCERN IN SOIL (mg/kg):

- CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL
- CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL

SOIL RESULTS (mg/kg):

<0.025 PCE

0.29 TCE

CONCENTRATIONS OF CHEMICALS OF CONCERN IN PERCHED GROUNDWATER

- CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL
- CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL

PERCHED GROUNDWATER RESULTS (µg/L):

560 PCE

320 TCE

mg/kg	MILLIGRAMS PER KILOGRAM
µg/L	MICROGRAMS PER LITER
RED	DENOTES CONCENTRATIONS EXCEEDING MTCA METHOD A CLEANUP LEVELS
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT
bgs	BELOW GROUND SURFACE
VC	VINYL CHLORIDE

Horizontal Scale in Feet

0 10 20

0 5 10

Vertical Scale in Feet

Vertical Exaggeration X 2

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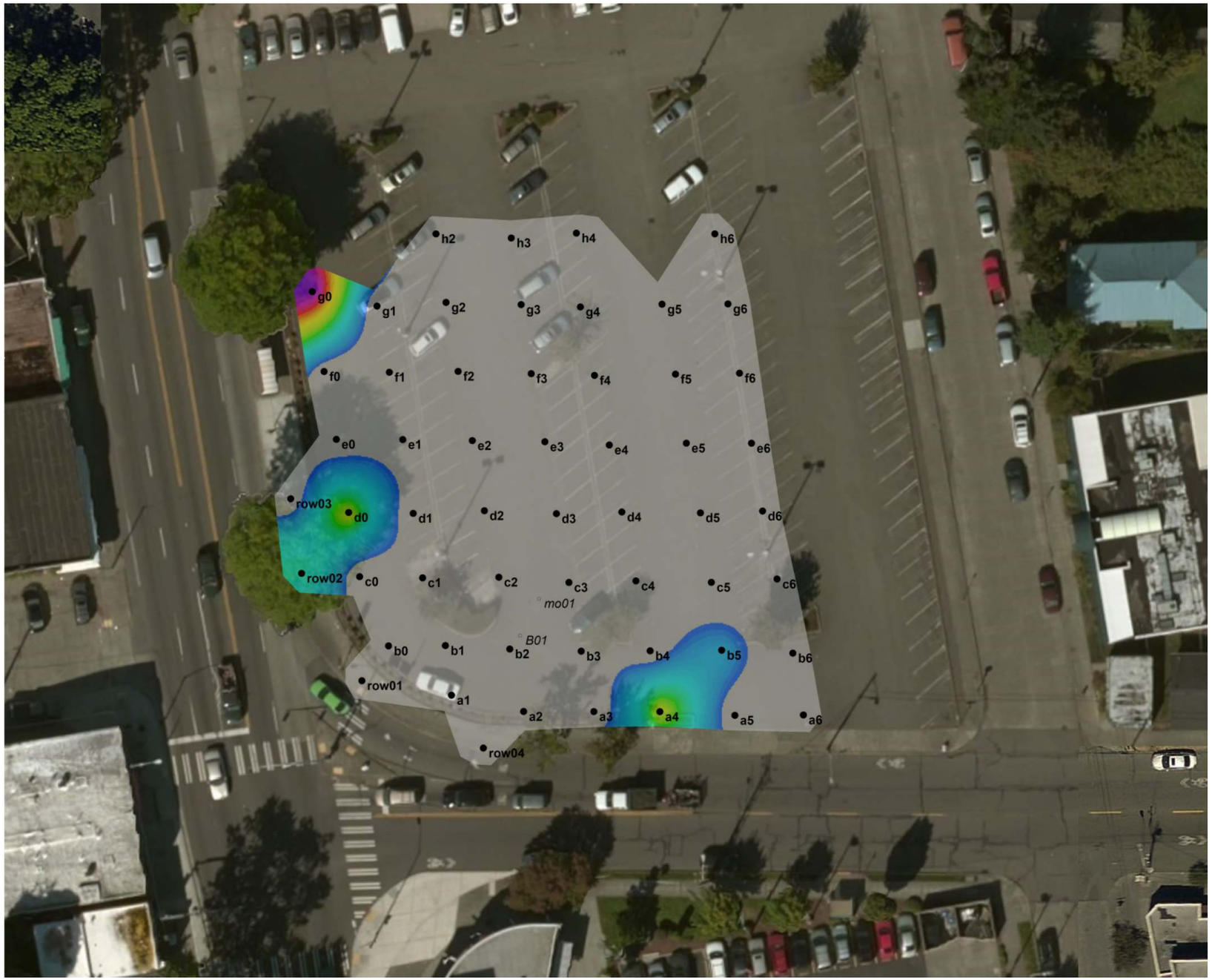
Seattle, WA

Figure 7
Cross Section B-B'



N

0 25 50

APPROXIMATE SCALE IN FEET

LEGEND

5.120
3.880
2.941
2.229
1.689
1.280
0.970
0.735
0.557
0.422
0.320
0.243
0.184
0.139
0.106
0.080
0.061
0.046
0.035
0.026
0.020

PCE
[µg]

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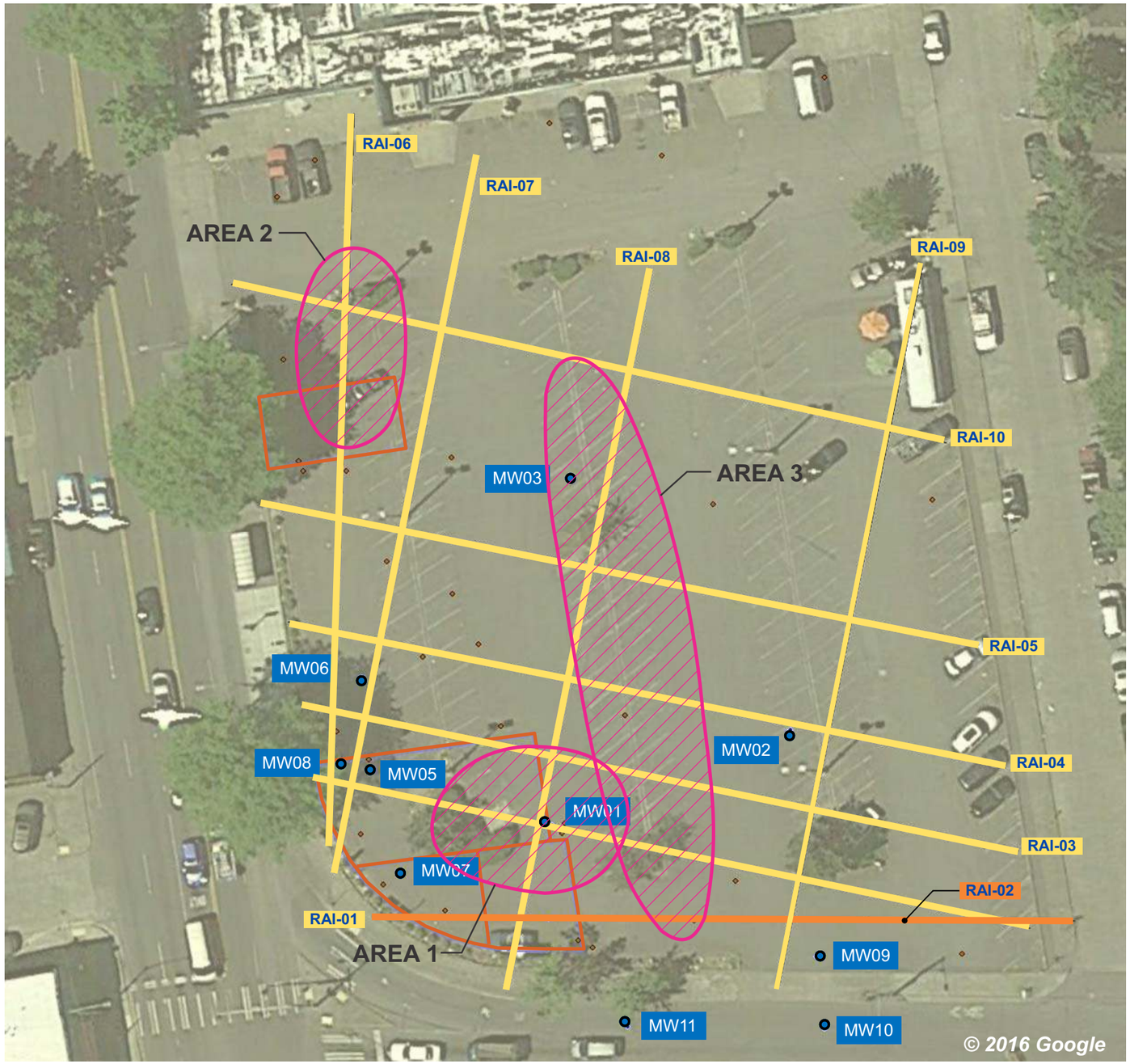
Seattle, WA

Figure 8
Soil Vapor Concentrations



LEGEND

GeoTrax Survey™
ORIENTATION AND DESIGNATION

RAI-01 — 1.25 METER ELECTRODE SPACING
LINE LENGTH ~226 FEET (~69 m)
IMAGE DEPTH ~ 45 FEET (~14 m)

RAI-02 — 1.2 METER ELECTRODE SPACING
LINE LENGTH ~216FEET (~66 m)
IMAGE DEPTH ~ 43 FEET (~13 m)

FORMER DRY CLEANER FACILITIES

MW01 — MONITORING WELL LOCATIONS

SOIL BORING LOCATIONS

AREA OF CONCERN

N

0 50 100
3.98
feet

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Rainier Mall Site
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Seattle, WA

Figure 9
GeoTrax Survey Results

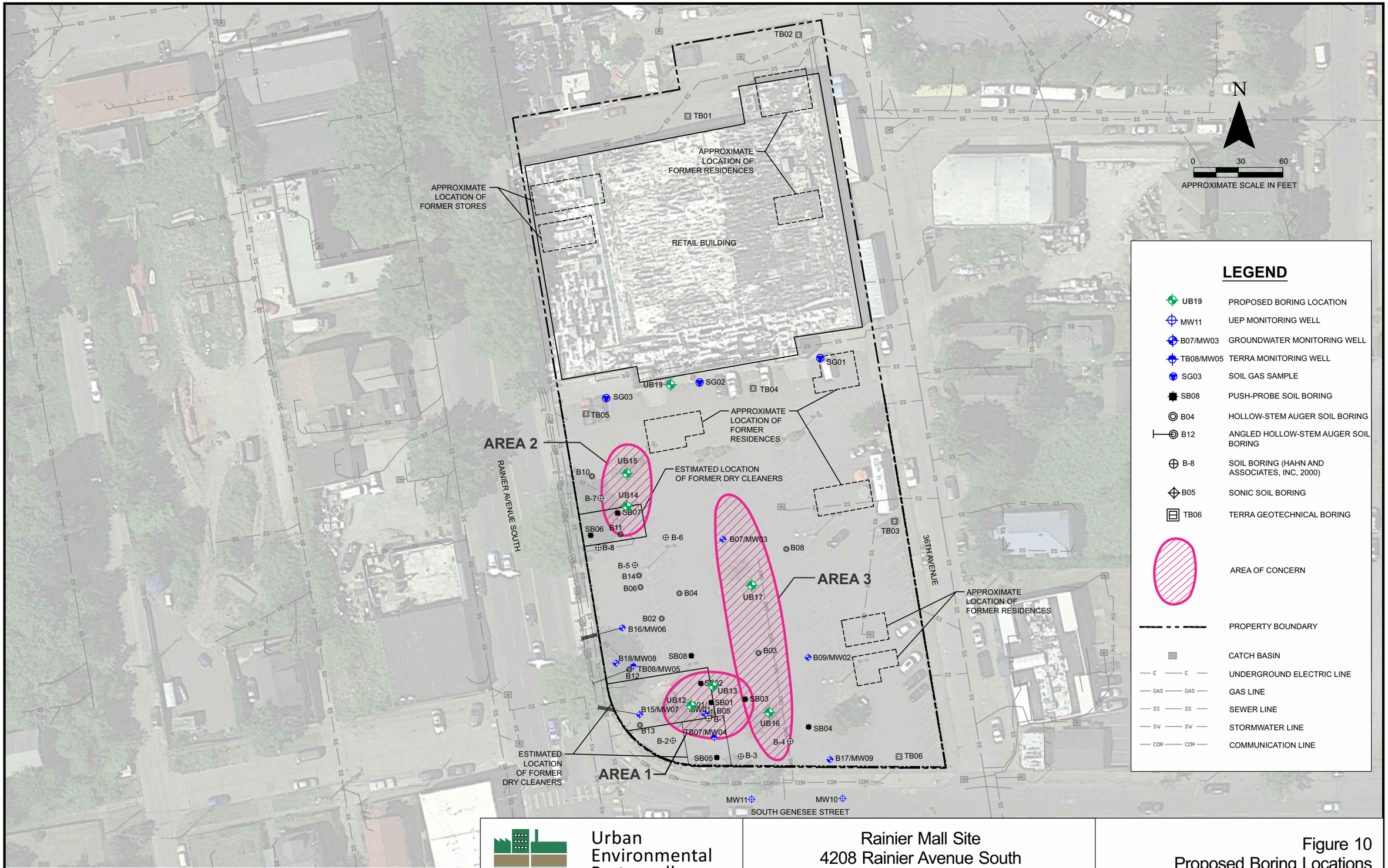

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Figure 10
Proposed Boring Locations

Exhibit B: Tables

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Table 1
Soil Analytical Results for
Chlorinated Volatile Organic Compounds
4208 Rainier Ave South, Seattle

Boring ID	Sample ID	Sampled By	Date Sampled	Depth (ft/bgs)	Analytical Results[1] - Milligrams per Kilogram (mg/kg)					
					PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC
B-1	5015-000628-005	Hahn	6/28/2000	19.5	83.3	0.272	<0.005	--	<0.005	<0.01
B-3	5015-000628-018	Hahn	6/28/2000	4.5	<0.005	<0.005	<0.005	--	<0.005	<0.01
B-6	5015-000628-018	Hahn	6/28/2000	7	<0.005	<0.005	<0.005	--	<0.005	<0.01
B-8	5015-000629-039	Hahn	6/28/2000	4.5	<0.005	<0.005	<0.005	--	<0.005	<0.01
SB01	SB01-5.0	SoundEarth	1/18/2017	5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB01-10.0			10	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB01-20.0			20	29	0.31	<0.05	<0.05	--	<0.05
	SB01-22.5			22.5	1.8	<0.02	<0.05	<0.05	--	<0.05
	SB01-24.5			24.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
SB02	SB02-5.0	SoundEarth	1/18/2017	5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB02-10.0			10	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB02-12.5			12.5	<0.025	<0.02	6.7	0.052	--	2.2
	SB01-24.5			16	4.1	2.2	1.1	<0.05	--	0.052
SB03	SB03-12.5	SoundEarth	1/18/2017	12.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB03-16.0			16	<0.025	<0.02	<0.05	<0.05	--	<0.05
SB04	SB04-5.0	SoundEarth	1/18/2017	5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB04-12.5			12.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB04-16.0			16	<0.025	<0.02	<0.05	<0.05	--	<0.05
SB05	SB05-5.0	SoundEarth	1/18/2017	5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB05-12.5			12.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB05-16.0			16	<0.025	<0.02	<0.05	<0.05	--	<0.05
SB06	SB06-10.0	SoundEarth	1/18/2017	10	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB06-24.0			24	<0.025	<0.02	<0.05	<0.05	--	<0.05
SB07	SB07-10.0	SoundEarth	1/18/2017	10	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB07-16.0			16	<0.025	<0.02	<0.05	<0.05	--	<0.05
SB08	SB08-5.0	SoundEarth	1/18/2017	5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB08-10			10	<0.025	<0.02	<0.05	<0.05	--	<0.05
	SB08-12.5			12.5	<0.025	0.029	1.3	0.086	--	<0.05
	SB08-16.0			16	7.1	8.6	10	0.056	--	0.24
B01/MW01	B01-12.5	SoundEarth	2/9/2017	12.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	B01-17.5			17.5	58	0.45	<0.05	<0.05	--	<0.05
	B01-20			20	510	0.33	<0.05	<0.05	--	<0.05
	B01-22.5			22.5	20	0.28	<0.05	<0.05	--	<0.05
	B01-27.5			27.5	0.40ht	0.073ht	<0.05ht	<0.05ht	--	<0.05ht
	B01-32.5			32.5	0.31ht	<0.02ht	<0.05ht	<0.05ht	--	<0.05ht
	B01-35			35	0.049ht	<0.02ht	<0.05ht	<0.05ht	--	<0.05ht
B02	B02-10	SoundEarth	2/9/2017	10.0	<0.025	<0.02	0.13	<0.05	--	<0.05
	B02-15			15.0	0.085	4.9	6.7	0.25	--	0.097
	B02-20			20.0	<0.025	<0.02	<0.05	<0.05	--	<0.05
B03	B03-12.5	SoundEarth	2/9/2017	12.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
	B03-15			15.0	<0.025	<0.02	0.082	<0.05	--	<0.05
	B03-17.5			17.5	0.36	1.5	1.1	<0.05	--	<0.05
	B03-20			20.0	0.67	0.57	0.41	<0.05	--	<0.05
	B03-22.5			22.5	<0.025	<0.02	<0.05	<0.05	--	<0.05
B04	B04-10	SoundEarth	2/9/2017	10.0	<0.025	<0.02	<0.05	<0.05	--	<0.05
	B04-12.5			12.5	<0.025	0.10	0.79	0.12	--	<0.05
	B04-17.5			17.5	<0.025	<0.02	0.32	<0.05	--	<0.05
B05	B05-40	SoundEarth	3/22/2017	40.0	<0.025	<0.02	<0.05	<0.05	--	<0.05
TB01	TB01-15	SoundEarth	1/24/2018	15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
TB02	TB02-15	SoundEarth	1/24/2018	15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
TB05	TB05-05	SoundEarth	1/25/2018	5	<0.025	<0.02	--	--	<0.05	<0.05
TB07	TB07-05	SoundEarth	1/26/2018	5	<0.025	<0.02	<0.05	--	<0.05	<0.05
	TB07-15			15.0	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	TB07-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	TB07-30			30	<0.025	<0.02	<0.05	--	<0.05	<0.05
TB08	TB08-10	SoundEarth	1/26/2018	10.0	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	TB02-12.5			12.5	0.46	0.55	0.21	--	<0.05	<0.05
	TB08-17.5			17.5	24	1.7	0.45	--	<0.05	<0.05
	TB08-20			20.0	2.0	0.17	0.06	--	<0.05	<0.05
	TB08-25			25	<0.025	<0.02	<0.05	--	<0.05	<0.05

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Table 1
Soil Analytical Results for
Chlorinated Volatile Organic Compounds
4208 Rainier Ave South, Seattle

Boring ID	Sample ID	Sampled By	Date Sampled	Depth (ft/bgs)	Analytical Results[1] - Milligrams per Kilogram (mg/kg)					
					PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC
B06	B06-12.5	SoundEarth	1/26/2018	12.5	<0.025	0.097	**0.15**	--	<0.05	<0.05
	B06-15			15	<0.025	0.19	**0.47**	<0.05	<0.05	<0.05
	B06-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B06-50			50	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B07	B07-12.5	SoundEarth	1/25/2018	12.5	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B07-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B08	B08-15	SoundEarth	1/25/2018	15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B08-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B09	B09-17.5	SoundEarth	1/25/2018	17.5	<0.025	<0.02	<0.05	--	<0.05	<0.05
	B09-20			20	<0.025	<0.02	<0.05	--	<0.05	<0.05
B10	B10-2.5	SoundEarth	1/26/2018	2.5	<0.025	<0.02	--	--	<0.05	<0.05
B11	B11-15	SoundEarth	1/26/2018	15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B12	B12-10.5	SoundEarth	2/7/2018	10.5–11.5	1.2	3.1	**0.88**	<0.05	<0.05	<0.05
	B12-14			14–15	0.097	0.023	<0.05	<0.05	<0.05	<0.05
	B12-17			17–18	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B12-20			20–21	<0.025	<0.02	<0.05	--	<0.05	<0.05
B13	B13-15	SoundEarth	2/7/2018	15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B14	B14-15	SoundEarth	2/7/2018	15	<0.025	0.13	**0.40**	<0.05	<0.05	<0.05
B15	B15-11	SoundEarth	10/1/2018	10.5–11.5	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B15-14			14–15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B15-17			17–18	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B15-20			20–21	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B16	B16-11	SoundEarth	10/1/2018	10.5–11.5	<0.025	0.072	<0.05	<0.05	<0.05	<0.05
	B16-14			14–15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B16-17			17–18	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B16-20			20–21	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B17	B17-15	SoundEarth	10/2/2018	15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B17-17.5			17.5	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	B17-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
B18	B18-10	SoundEarth	10/2/2018	10	<0.025	<0.02	**0.51**	<0.05	<0.05	<0.05
	B18-12.5			12.5	2.1	1.7	**0.93**	<0.05	<0.05	<0.05
	B18-15			15	1.8	0.43	**0.38**	<0.05	<0.05	<0.05
	B18-17.5			17.5	0.085	0.030	<0.05	<0.05	<0.05	<0.05
	B18-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
UB10	UB10-10	UEP	4/20/2019	10	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB10-15			15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB10-18			18	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB10-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB10-25			25	<0.025	0.049	<0.05	<0.05	<0.05	<0.05
	UB10-28			28	0.11	0.083	<0.05	<0.05	<0.05	<0.05
UB11	UB11-13	UEP	4/20/2019	13	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB11-15			15	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB11-20			20	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB11-25			25	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
	UB11-28			28	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
Ecology MTCA Method A Cleanup Levels[2] Unless Otherwise Specified					**0.05**	**0.03**	**160[3]**	**1,600[3]**	**4,000[3]**	**0.67[4]**

Notes:

Red denotes concentration exceeding MTCA cleanup level.
< = Not Detected at a concentration exceeding the specified laboratory reporting limit (RL).
Sample analyses conducted by Friedman and Bruya, Inc. of Seattle, Washington
(1) Analyzed by EPA Method 8260C.
(2) MTCA Cleanup Regulation, Chapter 173-340 of WAC, Table 740-1 Method A Cleanup Levels for Soil, revised 2013.
(3) MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC Soil, Method B Noncancer, Direct Contact, CLARC Website: <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>
(4) MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC Soil, Method B Cancer, Direct Contact, CLARC Website: < https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>

-- = not analyzed/not applicable
bgs = below grade surface
UEP = Urban Environmental Partners llc
WAC = Washington Administrative Code
EPA = U.S. Environmental Protection Agency
PCE = tetrachloroethylene
TCE = trichloroethylene
DCE = dichloroethylene
VC = Vinyl Chloride
MTCA = Washington Model Toxics Control Act.
Hahn = Hahn and Associates, Inc.
SoundEarth = SoundEarth Strategies, Inc.

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Table 2
Soil Analytical Results for
Petroleum Hydrocarbons and Select Volatile Organic Compounds
4208 Rainier Ave South, Seattle

Boring ID	Sample ID	Sampled By	Date Sampled	Depth (ft/bgs)	Analytical Results - Milligrams per Kilogram (mg/kg)						
					GRPH	DRPH	ORPH	Benzene	Toluene	Ethylbenzene	Total Xylenes
TB01	TB01-15	SoundEarth	1/24/2018	15	**15**	**110**x	<250	--	--	--	--
TB02	TB02-15	SoundEarth	1/24/2018	15	<5	<50	<250	--	--	--	--
TB05	TB05-05	SoundEarth	1/24/2018	5	<5	**190**x	5,100	--	--	--	--
Ecology MTCA Method A Cleanup Levels[1] Unless Otherwise Specified					**100/30[2,3]**	**2,000[4]**	**2,000[4]**	**0.03[5]**	**7[5]**	**6[5]**	**9[5]**

Notes:

Red denotes concentration exceeding MTCA cleanup level.
< = Not Detected at a concentration exceeding the specified laboratory reporting limit (RL).
Sample analyses conducted by Friedman and Bruya, Inc. of Seattle, Washington
(1) MTCA Cleanup Regulation, Chapter 173-340 of WAC, Table 740-1 Method A Cleanup Levels for Soil, revised 2013.
(2) Analyzed by Method NWTPH-Gx or NWTPH-HCID.
(3) The GRPH CUL is 30 mg/kg when benzene is present, or 100 mg/kg without benzene
(4) Analyzed by Method NWTPH-Dx or NWTPH-HCID
(5) Analyzed by EPA Method 8021B.

-- = not analyzed/not applicable
bgs = below grade surface
NWTPH = Northwest Total Petroleum Hydrocarbon
WAC = Washington Administrative Code
EPA = U.S. Environmental Protection Agency
GRPH = Gasoline-Range Petroleum Hydrocarbons
DRPH = Diesel-Range Petroleum Hydrocarbons
ORPH = Oil-Range Petroleum Hydrocarbons
MTCA = Washington Model Toxics Control Act.
SoundEarth = SoundEarth Strategies, Inc.

Laboratory Notes:
x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

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Table 3
Soil Analytical Results for Total Metals
4208 Rainier Ave South, Seattle

Boring ID	Sample ID	Sampled By	Date Sampled	Depth (ft/bgs)	Analytical Results[1] - Milligrams per Kilogram (mg/kg)							
					Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
TB01	TB01-05	SoundEarth	1/24/2018	5	2.54	--	<1	18.8	4.82	<1	--	--
TB03	TB03-05	SoundEarth	1/24/2018	5	2.39	--	<1	28.2	4.26	<1	--	--
TB04	TB04-05	SoundEarth	1/24/2018	5	1.79	--	<1	12.1	8.10	<1	--	--
B06	B06-05	SoundEarth	1/24/2018	5	6.73	--	<1	18.0	8.81	<1	--	--
B09	B09-05	SoundEarth	1/24/2018	5	3.17	--	<1	26.8	4.06	<1	--	--
Ecology MTCA Method A Cleanup Levels[2] Unless Otherwise Specified					**20**	**16,000[3]**	**2**	**2,000**	**250**	**2**	**400[3]**	**400[3]**

Notes:

Red denotes concentration exceeding MTCA cleanup level.
< = Not Detected at a concentration exceeding the specified laboratory reporting limit (RL).
Sample analyses conducted by Friedman and Bruya, Inc. of Seattle, Washington
(1) Samples analyzed by EPA Method 6020A.
(2) MTCA Cleanup Regulation, Chapter 173-340 of WAC, Table 740-1 Method A Cleanup Levels for Soil, revised 2013.
(3) MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Noncancer, Direct Contact, CLARC Website <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>.

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bgs = below grade surface
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EPA = U.S. Environmental Protection Agency
MTCA = Washington Model Toxics Control Act.
SoundEarth = SoundEarth Strategies, Inc.

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Table 4
Soil Analytical Results for Polycyclic Aromatic Hydrocarbons
4208 Rainier Ave South, Seattle

Boring ID	Sample ID	Sampled By	Date Sampled	Depth (ft/bgs)	Analytical Results[1] - Milligrams per Kilogram (mg/kg)							Total Toxicity Equivalency Concentration[2]
					Benzo(a)-anthracene	Chrysene	Benzo(a)pyrene	Benzo(b)-fluoranthene	Benzo(k)-fluoranthene	Indeno(1,2,3cd)-pyrene	Dibenzo(a,h)-anthracene	
TB01	TB01-05	SoundEarth	1/24/2018	5	<0.02	<0.02	<0.1	<0.2	<0.2	<0.2	<0.2	ND
TB03	TB03-05	SoundEarth	1/24/2018	5	<0.02	<0.02	<0.1	<0.2	<0.2	<0.2	<0.2	ND
B09	B09-05	SoundEarth	1/24/2018	5	**0.015**	**0.028**	**0.022**	**0.031**	**0.012**	<0.010	<0.010	**0.029**
Ecology MTCA Method A Cleanup Levels[3] Unless Otherwise Specified					--	--	**0.1**	--	--	--	--	**0.1**

Notes:

Red denotes concentration exceeding MTCA cleanup level.
< or ND = Not Detected at a concentration exceeding the specified laboratory reporting limit (RL).
Sample analyses conducted by Friedman and Bruya, Inc. of Seattle, Washington
(1) Samples analyzed by GC/MS-SIM or EPA Method 8270D.
(2) Calculated Using Toxicity Equivalency Methodology in WAC 173-340-708(e)
(3) MTCA Cleanup Regulation, Chapter 173-340 of WAC, Table 740-1 Method A Cleanup Levels for Soil, revised 2013.

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MTCA = Washington Model Toxics Control Act.
SoundEarth = SoundEarth Strategies, Inc.

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Table 5
Groundwater Analytical Results for Chlorinated Volatile Organic Compounds
4208 Rainier Ave South, Seattle

Boring/Well ID	Sample ID	Sampled By	Date Sampled	Analytical Results - Micrograms per Liter (µg/L)					
				PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC
B-1	B-1 (29-32)	Hahn	6/28/2000	1,980	288	25.7	--	<1.0	<1.2
B-3	B-3 (27-30)	Hahn	6/28/2000	<1.0	<1.0	1.8	--	<1.0	<1.2
B-4	B-4 (27-30)	Hahn	6/28/2000	3,800	1,100	40.8	--	2.94	4.37
B-5	B-5 (23-36)	Hahn	6/29/2000	<1.0	<1.0	<1.0	--	<1.0	<1.2
B-7	B-7 (23-26)	Hahn	6/29/2000	1.25	<1.0	<1.0	--	<1.0	<1.2
MW01	MW01-20180102	SoundEarth	2/18/2001	8,700	<500	<500	<500	<500	<100
MW02	MW02-20180129	SoundEarth	1/29/2018	<1	<1	7.1	<1	<1	0.33
MW03	MW03-20180129	SoundEarth	1/29/2018	<1	<1	<1	<1	<1	<0.2
MW04	MW04-20180129	SoundEarth	1/29/2018	<1	<1	<1	<1	<1	<0.2
MW05	MW05-20180129	SoundEarth	1/29/2018	35,000	6,600	2,600	27	2.9	240
MW06	MW06-20181005	SoundEarth	5/18/2010	<1	2.4	3.5	<1	<1	<0.2
MW07	MW07-20181005	SoundEarth	5/18/2010	<1	<1	<1	<1	<1	<0.2
MW08	MW08-20181005	SoundEarth	5/18/2010	560	320	390	2.0	<1	16
MW09	MW09-20181005	SoundEarth	5/18/2010	20	59	36	<1	<1	1.7
	MW9	UEP	4/21/2019	38	110	93	1.2	<1	7.4
MW10	MW10	UEP	4/21/2019	41	54	22	<1	<1	0.24
MW11	MW11	UEP	4/21/2019	<1	<1	<1	<1	<1	<0.2
Ecology MTCA Method A Cleanup Levels[2] Unless Otherwise Specified				5	5	16[3]	160[3]	400[3]	0.2

Notes:

Red denotes concentration exceeding MTCA cleanup level.
< = Not Detected at a concentration exceeding the specified laboratory reporting limit (RL).
Sample analyses conducted by Friedman and Bruya, Inc. of Seattle, Washington
(1) Analyzed by EPA Method 8260C.
(2) MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Levels for Groundwater, revised November 2007.
(3) MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Groundwater, Method B, Non cancer, CLARC Website <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>

-- = not analyzed/not applicable
bgs = below grade surface
UEP = Urban Environmental Partners llc
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Table 6
Proposed Boring and Monitoring Well Information
4208 Rainier Ave South, Seattle

Proposed Boring/MW ID	Aestus Boring ID	Data Gap/Area of Concern	Proposed Boring Depth	Proposed Soil Sampling Intervals (Depth in Feet bgs)	Proposed Groundwater Sampling Intervals (Depth in Feet bgs)	MW Installation	Screened Interval (Depth in Feet bgs)	Contaminants of Concern
UB12/MW12	CD-02A	Aestus Area 1 - Potential Deeper Flowpath Proximate to Former Southern Dry Cleaner	46	5, 14, 22, 36, 46	14(r), 22(r), 36(r), 46	Yes	36-46	cVOCs
UB13/MW13	CD-08		42	4, 9, 23, 42	9(r), 23(r), 42	Yes	32-42	cVOCs
UB14/MW14	CD-06	Aestus Area 2 - Potential Source at Former Northern Dry Cleaner	20	5, 20	20	Yes	10-20	cVOCs
UB15/MW15	CD-10A		20	6, 20	20	Yes	10-20	cVOCs
UB16/MW16	CD-02B	Aestus Area 3 - Potential N-S Subsurface Channel Across Central Portion of the Property	28	6, 14, 28	14(r), 28	Yes	18-28	cVOCs
UB17/MW17	CD-05B		24	4, 11, 24	11(r), 24	Yes	14-24	cVOCs
UB18/MW18	NA	Southern Plume Boundary	35	20, 25, 30, 35	20(r), 35	Yes	25-35	cVOCs
UB19	NA	Treated Wood Piles	15	2, 6, 10	15	No	NA	PAHs

Notes:

bgs = below ground surface
cVOCs = Chlorinated Volatile Organic Compounds
PAHs = Polycyclic Aromatic Hydrocarbons
(r) = Reconnaissance Sample