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## DRAFT FEASIBILITY STUDY REPORT

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**Property:**

Troy Laundry Seattle Site  
300 Boren Avenue North and  
399 Fairview Avenue North  
Seattle, Washington  
Ecology Facility ID: 19135499

**Prepared for:**

Touchstone SLU LLC & TB TS/RELP LLC  
1425 Fourth Avenue, Suite 200  
Seattle, Washington

**Report Date:**

January 24, 2022

**DRAFT – ISSUED FOR REGULATORY REVIEW**

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Seattle, Washington 98101

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Ecology Facility ID: 19135499

Project No.: 0731-004-07

**Prepared by:**

***DRAFT***

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Clare Tochilin, LG  
Associate Geologist

***DRAFT***

---

Levi Fernandes, PE  
Senior Environmental Engineer

***DRAFT***

---

Tom Cammarata, LHG, LG  
Principal Geochemist

***DRAFT***

---

Terry Montoya, PE  
Principal Engineer

January 24, 2022





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## ACRONYMS AND ABBREVIATIONS

µg/L	micrograms per liter
AS	air sparge
AO	Agreed Order No. DE 8996
ARAR	applicable or relevant and appropriate requirement
bgs	below ground surface
cis-1,2-DCE	cis-1,2-dichloroethene
CLARC	Cleanup Levels and Risk Calculation
COC	contaminant of concern
CPOC	conditional point of compliance
CSM	conceptual site model
CVOC	chlorinated volatile organic compound
DHC	<i>Dehalococcoides</i> genus
Final RI Report	Final Remedial Investigation Report
Draft FS Report	Draft Feasibility Study Report
DRPH	diesel-range petroleum hydrocarbons
EC	Environmental Covenant
Ecology	Washington State Department of Ecology
EOS	edible oil substrate
EPA	US Environmental Protection Agency
EPI	Environmental Partners, Inc. aka TRC Companies, Inc.
ERD	enhanced reductive dechlorination
GAC	granular activated carbon
GRPH	gasoline-range petroleum hydrocarbons
IRA	interim remedial action
mcl	maximum contaminant level
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MTCA	Washington State Model Toxics Control Act
NAVD88	North American Vertical Datum 1988
O&M	operation and maintenance
ORPH	oil-range petroleum hydrocarbons

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PAC	powder activated carbon
PCE	Tetrachloroethene
Property	Troy Laundry property located at 300 Boren Avenue North and 399 Fairview Avenue North in Seattle, Washington
RAO	remedial action objective
RCW	Revised Code of Washington
RI	remedial investigation
ROW	right-of-way
SDOT	Seattle Department of Transportation
Former Seattle Times Property	the south-adjointing property located at 1120 John Street in Seattle, Washington located across the Thomas Street right-of-way (Washington State Department of Ecology Cleanup Site ID No. 14495, Facility Site ID 4377754, and King County Parcel Number 1986200525)
Site	the Property; portions of the rights-of-way to the north, south, and west of the Property; and the northern portion of the adjoining former Seattle Times property located to the south across the Thomas Street ROW where groundwater contaminated with tetrachloroethene; trichloroethene; cis-1,2-dichloroethene, and/or vinyl chloride originating from the Property have come to be located
SoundEarth	SoundEarth Strategies, Inc.
SVE	soil vapor extraction
TCE	Trichloroethene
TEE	Terrestrial Ecological Evaluation
UIC	underground injection control
USC	United States Code
UST	Underground storage tank
VC	vinyl chloride
VFA	volatile fatty acid
WAC	Washington Administrative Code



## **EXECUTIVE SUMMARY**

On behalf of Touchstone SLU LLC and TB/TS RELP LLC (collectively, Touchstone), SoundEarth Strategies, Inc. has prepared this Draft Feasibility Study Report (Draft FS Report) for the Troy Laundry Seattle Site (Site). The Site encompasses the following:

- The Troy Laundry property located at 300 Boren Avenue North and 399 Fairview Avenue North in Seattle, Washington (Property).
- Portions of the rights-of-way (ROWs) to the north, south, and west of the Property.
- The northern portion of the adjoining former Seattle Times property, located at 1120 John Street in Seattle, Washington (Former Seattle Times Property; Ecology Cleanup Site ID No. 14495, Facility Site ID 4377754, and King County Parcel Number 1986200525). The Former Seattle Times Property is located to the south across the Thomas Street ROW and is where groundwater contaminated with tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride (VC) originating from the Property has come to be located.

This Draft FS Report was prepared in accordance with Agreed Order No. DE 8996 between Touchstone and the Washington State Department of Ecology (Ecology) and the requirements of Chapters 173-340-350 and 173-340-360 of the Washington Administrative Code, following the completion of an Ecology-approved Remedial Investigation (RI) Report for the Site. The RI Report sufficiently defines the nature and extent of contamination and characterizes the Site for the purpose of developing and evaluating cleanup action alternatives in this Draft FS Report.

An interim remedial action (IRA) was conducted at the Site between 2014 and 2017 in conjunction with the redevelopment of the Property. The redevelopment required a lot line-to-lot line excavation that extended to approximately 70 feet below street grade. The IRA included the removal of underground storage tanks containing solvents and petroleum hydrocarbons and 97,000 tons of chlorinated solvent-contaminated soil as part of the Property development mass excavation. The IRA also included treating chlorinated volatile organic compound (CVOC)-contaminated groundwater using enhanced reductive dechlorination (ERD) technology. The ERD groundwater treatment included the injection of edible oil substrate in May and June 2015 and April and May 2016, followed by bioaugmentation in June 2017.

The IRA led to the mass removal of CVOC-contaminated soil at the Property. The RI Report defined the extent of CVOC-contaminated groundwater at the Site after implementation of ERD, and documented through two indoor air sampling events that: (1) the vapor intrusion pathway is considered incomplete and (2) soil vapor and indoor air are not media of concern for the Site. Based on the results of the RI and the findings from performance of the IRA and recent pilot study activities, the FS was prepared to develop and evaluate cleanup action alternatives to address low concentrations of CVOC-contaminated groundwater remaining at the Site.

The four cleanup action alternatives that were developed and evaluated include the following:

- Cleanup Action Alternative 1, Monitored Natural Attenuation (MNA) and Environmental Covenant
- Cleanup Action Alternative 2, In Situ Reductive Dechlorination and Environmental Covenant with MNA

## **EXECUTIVE SUMMARY (CONTINUED)**

- Cleanup Action Alternative 3, In Situ Powder Activated Carbon Adsorption and Environmental Covenant with MNA
- Cleanup Action Alternative 4, AS/SVE Remediation System and Environmental Covenant with MNA

Based on the results of the FS, Cleanup Action Alternative 1, MNA and Environmental Covenant, has been selected as the recommended remedial alternative because it is technically feasible, implementable, sustainable, protective of human health and environment, and cost-effective.

Selection of Cleanup Action Alternative 1 recognizes that the source of CVOCs was removed to the maximum extent practicable as part of the IRA during redevelopment of the Property. As a result of ERD groundwater treatment, the concentrations of PCE and TCE have dramatically declined compared to pretreatment concentrations. As anticipated, and as a result of the degradation of PCE and TCE, concentrations of cis-1,2-DCE and VC have been detected in groundwater beneath the Property at concentrations above laboratory reporting limits.

Statistical trend analysis shows that the concentrations of PCE and/or TCE are generally declining or stable in locations off of the Property; specifically, in areas beneath the Boren Avenue North, Harrison Street, and Thomas Street rights-of-ways and on the northern portion of the Former Seattle Times Property. In the Thomas Street ROW, the stability of the CVOC plume and aerobic groundwater conditions are inhibiting the downgradient migration and formation of VC, which is more volatile and soluble compared to PCE, TCE, and cis-1,2-DCE. Over time, concentrations of PCE and TCE in the Thomas Street ROW and on the Former Seattle Times property will decline due to natural attenuation processes, including advection and dispersion, diffusion, sorption, volatilization, and biodegradation.

Based on the disproportionate cost analysis, it was determined that the incremental benefit of implementing or maintaining an active treatment alternative compared to MNA is not warranted because (1) the CVOC impacts in groundwater do not pose a risk to human health or the environment given the depth to groundwater beneath the Site; (2) there is no direct or indirect exposure pathway or receptor; (3) the overall mass of the CVOC plume has demonstrably declined over time; and (4) the benefit from additional in situ groundwater treatment will likely be de minimis given the low concentration of CVOCs remaining in groundwater.

Cleanup Action Alternative 1 will include continued groundwater monitoring and sampling, data analysis to confirm that the footprint of the CVOC groundwater plume remains stable or continues to decline over time, and the recording of an Environmental Covenant as an institutional control to ensure there is no direct contact with the contaminated groundwater.

This executive summary is presented solely for introductory purposes, and the information contained in this section should be used only in conjunction with the full text of this report.

## **1.0 INTRODUCTION**

On behalf of Touchstone SLU LLC and TB TS/RELP LLC (collectively, Touchstone), SoundEarth Strategies, Inc. (SoundEarth) has prepared this Draft Feasibility Study Report (Draft FS Report) for the Troy Laundry Seattle Site (Site). The Site encompasses the following:

- The Troy Laundry property located at 300 Boren Avenue North and 399 Fairview Avenue North in Seattle, Washington (Property). The location of the Property is shown on Figure 1.
- Portions of the rights-of-way (ROWs) to the north, south, and west of the Property.
- The northern portion of the adjoining former Seattle Times property, located at 1120 John Street in Seattle, Washington (Former Seattle Times Property; Ecology Cleanup Site ID No. 14495, Facility Site ID 4377754, and King County Parcel Number 1986200525). The Former Seattle Times Property is located to the south across the Thomas Street ROW and is where groundwater contaminated with tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride (VC) originating from the Property has come to be located.

This Draft FS Report was prepared under the authority of Agreed Order No. DE 8996 (AO) between Touchstone and the Washington State Department of Ecology (Ecology) following the completion of an Ecology-approved Remedial Investigation (RI) for the Site (Final RI Report; SoundEarth 2020). The Final RI Report included data and information obtained through implementation of an interim remedial action (IRA) and information obtained pursuant to a Site investigation conducted under Prospective Purchaser Consent Decree No. 19-2-07344-6 SEA for the Property between Ecology and Ponte Gadea Seattle LLC. This Draft FS Report was developed in accordance with the AO and with the requirements of Chapters 173-340-350 and 173-340-360 of the Washington Administrative Code (WAC 173-340-350 and 173-340-360).

### **1.1 SITE BACKGROUND**

According to historical records, the Property operated as one of the Pacific Northwest’s largest laundry and dry cleaning facilities. At least 15 underground storage tanks (USTs) containing heating oil, fuel, and dry cleaning solvents and several aboveground storage tanks containing propane, wash water, water-softening agents, dry cleaning solvents, and heating oil were used on the Property throughout its operation (Figure 2).

An RI was initiated at the Property in 1985 and completed in 2019. The RI documented the release and the nature and extent of gasoline-, diesel, and oil-range petroleum hydrocarbons (GRPH, DRPH, and ORPH, respectively), PCE, TCE, cis-1,2-DCE, and VC released to soil and groundwater. The areas affected by releases of contaminants from the Property are presented on Figure 3. The RI activities included advancing 59 borings and installing 33 groundwater monitoring wells, performing a vapor intrusion assessment, and conducting groundwater monitoring and sampling events.

SoundEarth conducted an IRA at the Site between 2014 and 2017 in conjunction with the redevelopment of the Property. The redevelopment required a lot line-to-lot line excavation that extended to 70 feet below street grade. The IRA included the removal of USTs containing solvents and petroleum hydrocarbons and 97,000 tons of chlorinated volatile organic compound (CVOC)–contaminated soil as part of the Property development mass excavation. The IRA also included treating CVOC–contaminated groundwater using enhanced reductive dechlorination (ERD) technology. The ERD groundwater treatment

included the injection of edible oil substrate (EOS) in May and June 2015 and April and May 2016, followed by bioaugmentation in June 2017. As a result of groundwater treatment and natural attenuation processes, the concentrations of PCE and its degradation products have declined significantly or stabilized in groundwater throughout the Site.

Currently, the Troy Block development at the Property occupies a full city block bounded by Harrison Street to the north, Fairview Avenue North to the east, Thomas Street to the south, and Boren Avenue North to the west. The development includes two office towers and a five-level underground parking garage (levels P1 through P5) with 1,120 parking stalls. The North Tower consists of 13 stories with 418,999 square feet of rentable space, and the South Tower consists of 12 stories with 392,521 square feet of rentable space. Both towers are currently leased and occupied by Amazon. The development also includes approximately 1 acre of public open space between the two towers. The lowest level of the underground parking garage covers the entire subsurface area of the Property, and there are no areas where there could be any direct contact with residual groundwater contamination beneath the Property.

## **1.2 SUPPLEMENTAL SITE INVESTIGATION ACTIVITIES**

Previous investigations and the IRAs conducted at the Site by SoundEarth and others are summarized in Sections 3.0 through 6.0 of the Final RI Report (SoundEarth 2020). The locations of soil borings and monitoring wells are shown on Figure 4 and illustrated in cross-sections on Figures 5 through 8. Soil, groundwater, and indoor air analytical results are summarized in Tables 1 through 9.

Since Ecology's approval of the Final RI Report in 2020, SoundEarth has conducted supplemental site investigation activities at the Site that have included three groundwater monitoring and sampling events (second and fourth quarter 2020 and second quarter 2021) and a pilot study. The supplemental site investigation and pilot study activities and results are summarized in the following sections.

### **1.2.1 2020 Second and Fourth Quarter Groundwater Monitoring and Sampling Events**

Groundwater monitoring and sampling events were performed in June and December 2020 (second and fourth quarters, respectively). Groundwater sampling results from the second and fourth quarters of 2020 showed an absence of PCE and TCE and low concentrations of degradation products cis-1,2-DCE and VC in the groundwater beneath the Property as a result of the IRA. The presence of cis-1,2-DCE and VC was primarily attributed to the biological degradation (i.e., anaerobic reductive dechlorination) of residual PCE and/or TCE on the Property and additional TCE migrating onto or toward the property from unknown upgradient sources. As a result of groundwater treatment and natural attenuation processes, concentrations of PCE and TCE were declining or stable, and cis-1,2-DCE and VC were absent in the groundwater samples collected from beneath the Thomas Street, Boren Avenue North, and Harrison Street ROWs and on the Former Seattle Times Property.

Construction dewatering at Block 38 West, located to the northwest of the Property, has influenced the groundwater gradient at the Site, which has caused groundwater to flow to the west and northwest across the Boren Avenue North and Harrison Street ROWs. The construction dewatering system at Block 38 West was shut down in March 2021, although dewatering continued to occur beyond that date in connection with the development of the property located at 400 Westlake Avenue. South of the Property, the groundwater direction was not influenced by construction dewatering and has continued to flow to the south-southeast, which is the historical groundwater flow direction for the Site.

A comprehensive discussion of the 2020 groundwater monitoring and sampling events and results, including a statistical analysis to evaluate the stability of the contaminated groundwater plume, are presented in the 2020 Groundwater Monitoring Report (SoundEarth 2021).

### **1.2.2 2021 Second Quarter Groundwater Monitoring and Sampling Event**

The second quarter groundwater monitoring and sampling event was conducted in June 2021. The groundwater elevation contour map for June 2021 and the most recent groundwater analytical results are shown on Figures 9 and 10, respectively. Results from the second quarter groundwater monitoring and sampling event are presented below.

- Groundwater elevations measured during the second quarter of 2021 indicated that groundwater at the Property flowed generally to the northwest with a hydraulic gradient of 0.011 feet per foot (Figure 10), which is a departure from the flow to the southeast that has been historically observed on the Property. Construction dewatering efforts to the northwest of the property continued to influence groundwater flow at the Property. However, according to Ecology records, it appears that the construction dewatering system at Block 38 West was terminated in late March 2021, and dewatering wells were decommissioned in April 2021. Given that groundwater at the Site has not yet returned to its historical flow direction, dewatering at the 400 Westlake Avenue property or another property to the west of the Site with ongoing construction dewatering may be influencing groundwater flow at the Property.
- Concentrations of PCE exceeding the Washington State Model Toxics Control Act (MTCA) Method A cleanup level were detected in the groundwater samples collected from monitoring well MW28, located in the Thomas Street ROW, and monitoring well MW29, located on the northwestern portion of the Former Seattle Times Property. Concentrations of PCE in the groundwater samples collected from the other Site monitoring wells were below the laboratory reporting limit and/or MTCA Method A cleanup level.
- Concentrations of TCE at or exceeding the MTCA Method A cleanup level were detected in the groundwater samples collected from monitoring wells MW04, MW07, MW27, and MW31, located in the Boren Avenue North ROW; monitoring well MW26, located in the Harrison Street ROW; and Former Seattle Times Property monitoring well MW29. The concentrations of TCE in the remaining groundwater samples were below the laboratory reporting limit and/or MTCA Method A cleanup level.
- Concentrations of cis-1,2-DCE exceeding the MTCA Method B cleanup level were detected in the groundwater samples collected from on-Property monitoring wells MW22, MW23, MW24, and MW25, on-Property injection well IW61, and Former Seattle Times Property monitoring well MW29. Concentrations of cis-1,2-DCE in the remaining groundwater samples were below the laboratory reporting limit and/or MTCA Method B cleanup level.
- Concentrations of VC exceeding the MTCA Method A cleanup level were detected in groundwater samples collected from on-Property monitoring wells MW18, MW19, and MW21 through MW25 and injection wells IW04, IW06, IW50, and



IW61. Concentrations of VC in the remaining groundwater samples were below the laboratory reporting limit and/or MTCA Method A cleanup level.

- Concentrations of trans-1,2-DCE in the groundwater samples collected from the sampled wells at the Site were below the laboratory reporting limit.
- DRPH and/or ORPH concentrations exceeding the applicable MTCA Method A cleanup levels were detected in groundwater samples collected from on-Property monitoring wells MW21 and MW22. These groundwater samples, in addition to samples from monitoring wells MW13 and MW28, were flagged by the laboratory as having a chromatographic pattern that did not match the fuel standard used for quantification. This finding was likely due to the presence of EOS solution in the samples, which originated from the April and May 2016 injection event. The reported concentrations are not considered reflective of actual groundwater conditions at the Property. Concentrations of DPRH and ORPH in the remaining groundwater samples from the monitoring wells at the Site were below the laboratory reporting limit and/or MTCA Method A cleanup level.

GRPH concentrations were below the laboratory reporting limit and/or MTCA Method A cleanup level in groundwater samples collected from wells at the Site except for monitoring well MW21. The GRPH detection in the groundwater sample collected from monitoring well MW21 is attributable to the presence of EOS and its polar breakdown products in groundwater.

### **1.2.3 Powder Activated Carbon Pilot Study**

In support of developing remedial alternatives for the Draft FS Report, a pilot test was performed to evaluate the efficacy of using powder-activated carbon (PAC) to reduce concentrations of CVOCs in groundwater. In early April 2021, three injection wells (IW92, IW93, and IW94) were constructed upgradient of MW28 in the Thomas Street ROW. The injection wells were installed to an approximate depth of -5 feet North American Vertical Datum 1988 (NAVD88) with a screened interval of between -5 and 15 feet NAVD, which is consistent with the screened interval for monitoring well MW28. The injection well locations are shown on Figure 4. Soil boring and injection well construction logs for injection wells IW92, IW93, and IW94 are provided in Appendix A.

In late April 2021, an injection slurry was prepared that consisted of 55 pounds of PAC mixed with 150 gallons of potable water in an aboveground tank (one batch). The PAC injection slurry was delivered to the newly installed injection wells and two existing angled injection wells (AIW10 and AIW11) under moderate injection pressure. Two batches of slurry were delivered to injection wells IW92, IW93, and IW94 and two and a half batches were delivered to angled injection wells AIW10 and AIW11 for a total of 11 batches.

Pilot study performance groundwater monitoring was performed in May 2021 (approximately 1 month following injections), concurrently with the existing semiannual groundwater monitoring program (June 2021), and in August and September 2021 (approximately 4 and 5 months following the injections). Performance monitoring consisted of the collection of groundwater samples from monitoring well MW28 and submitted for chemical analysis of CVOCs.

After PAC was injected immediately upgradient of monitoring well MW28, there was a slight decrease in CVOC concentrations in groundwater collected from monitoring well MW28. However, reduction in the concentrations of CVOCs cannot be attributed to absorption by the PAC. The

slight decrease in the concentrations could also be attributed to sampling and laboratory analytical variability and/or natural attenuation processes.

## **2.0 CONCEPTUAL SITE MODEL**

This section discusses the components of the conceptual site model (CSM) developed for the Site based on the completion of multiple phases of investigation and remediation conducted by SoundEarth and others. Included in the following sections are a discussion of the confirmed and suspected source areas, affected environmental media, fate and transport mechanisms, contaminants of concern (COCs), exposure pathways and potential receptors, an updated Terrestrial Ecological Evaluation (TEE), and a CSM summary.

The CSM serves as the basis for developing technically feasible cleanup alternatives and selecting a final cleanup action. Based on results from the RI, the Property is a confirmed source of COCs in groundwater for the Site. Contamination beneath the Site is also present due to releases from other properties, including the downgradient Former Seattle Times Property and undefined crossgradient and upgradient sites to the north and west.

The following subsections provide a summary of the likely sources and extents of the COCs on the Property and off the Property that were identified during the RI. Figures 5 through 9 and Figures 11 to 17 provide visual representations of the information presented below.

### **2.1 ON-PROPERTY CONFIRMED AND SUSPECTED SOURCE AREAS**

#### **2.1.1 On-Property Chlorinated and Stoddard Solvents in Soil and Groundwater**

The results of the RIs and IRAs conducted at the Site indicate that the chlorinated solvent and Stoddard solvent impacts detected in soil and groundwater beneath the Property, in a portion of the south-adjacent Thomas Street ROW, and on the northern portion of the Former Seattle Times Property are primarily the result of releases from the laundry and dry cleaning facility that operated on the Property from 1927 through 1985. Historical building plans indicate that the bulk of the dry cleaning operations after the mid-1960s were conducted on the southwestern portion of the Property (Figure 2). Consistent with this information, the highest concentrations of chlorinated solvents in soil were historically located near the center of the Property in the vicinity of the former loading dock, and the highest concentrations of GRPH as Stoddard solvent were observed to the south of the three closed-in-place USTs under the former Troy Building on the southwestern portion of the Property. The distribution of solvents in soil and groundwater on the Property and in groundwater in the Thomas Street ROW and on the northern portion of the Former Seattle Times Property indicates that the primary sources of the releases were at the loading dock and UST cluster on the Property, although additional smaller releases from other source areas may have contributed to shallow solvent contamination elsewhere on the Property.

##### **2.1.1.1 PCE and TCE in Groundwater**

The results of groundwater monitoring events performed prior to implementation of the groundwater treatment program at the Property confirmed that PCE was formerly present at concentrations exceeding the MTCA Method A cleanup level in groundwater samples collected from on-Property monitoring wells MW21 through MW25 and injection well IW61. As shown in Figures 11, 13, and 15, the PCE and TCE plume footprint has decreased considerably following implementation of the groundwater treatment program conducted by SoundEarth, which

consisted of EOS and bioaugmentation injections completed from 2015 through 2017. PCE and TCE were not present at concentrations above MTCA Method A cleanup levels in groundwater samples collected from beneath the Property during the two most recent groundwater monitoring events (fourth quarter 2020 and second quarter 2021).

#### **2.1.1.2 Cis-1,2-DCE and VC in Groundwater**

The presence of cis-1,2-DCE and VC is primarily attributed to the biological degradation (i.e., anaerobic reductive dechlorination) of residual PCE and/or TCE on the Property and some influx of TCE from unknown upgradient contributions. As anticipated, and as shown in Figures 12, 14 and 16, the cis-1,2-DCE and VC plume footprint has expanded across the Property following implementation of the groundwater treatment program due to reductive dechlorination of PCE and TCE. During the two most recent groundwater monitoring events (fourth quarter 2020 and second quarter 2021), the results of groundwater monitoring sampling at the Property indicate that cis-1,2-DCE and/or VC are present at concentrations exceeding the applicable MTCA Method A and B cleanup levels, respectively, in samples collected from on-Property monitoring wells MW18, MW19, and MW21 through MW25 and injection wells IW04, IW06, IW50, and IW61. The presence of cis-1,2-DCE and VC at the Property can be attributed to ongoing anaerobic conditions in groundwater.

#### **2.1.1.3 Petroleum Hydrocarbons in Groundwater**

The results of groundwater monitoring events performed following treatment of groundwater on the Property indicate that concentrations of DRPH and/or ORPH exceeding the MTCA Method A cleanup levels were present in groundwater samples collected from on-Property monitoring wells MW18, MW19, and MW21 through MW25.

For DRPH and ORPH, each sample was flagged by the laboratory as having a chromatographic pattern that did not match the fuel standard used for quantification. Additionally, these concentrations were detected in samples collected following the 2015 and 2016 EOS injection events. Concentrations of GRPH in groundwater samples collected from monitoring well MW21 were not flagged by the laboratory; however, GRPH was not detected in groundwater until after the 2016 injection event (groundwater monitoring began in May of 2015; Table 4). It is SoundEarth's opinion that the concentrations of GRPH, DRPH, and/or ORPH are due to the presence of the EOS solution originating from the 2015 and 2016 injection events and are not considered reflective of actual petroleum constituents in groundwater on the Property.

## **2.2 OFF-PROPERTY CONFIRMED AND SUSPECTED SOURCE AREAS**

### **2.2.1 PCE in Groundwater**

PCE has not been detected in groundwater at concentrations exceeding the MTCA Method A cleanup level in areas upgradient to the north or west of the Property. PCE has been detected at concentrations exceeding the MTCA Method A cleanup level in monitoring well MW13, located in the Boren Avenue North ROW in an area upgradient and crossgradient to the Property. Concentrations of TCE above laboratory reporting limits have also been detected in monitoring well MW13, but degradation products, including cis-1,2-DCE and VC, have not been detected.

Due to the presence of PCE and TCE in monitoring well MW13 and the absence or low concentration of PCE in wells to the north of monitoring well MW13, the current CSM attributes the source of the contamination in monitoring well MW13 to the Property. The absence of cis-

1,2-DCE and VC in the groundwater at monitoring well MW13 suggest the groundwater geochemistry is not conducive to reductive dechlorination of PCE and TCE. CVOCs in the wells located north of monitoring well MW13 in Boren Avenue North are attributed to historical releases of TCE in areas upgradient of Boren Avenue North.

### **2.2.2 TCE in Groundwater**

Groundwater monitoring indicates that TCE is present in the groundwater water beneath the Site at concentrations exceeding the MTCA Method A cleanup level in groundwater samples collected from upgradient and crossgradient monitoring wells MW04, MW07, MW15, MW26, MW27, and MW31 located in the Boren Avenue North, Terry Avenue North, and Harrison Street ROWs. Neither PCE nor its degradation products are present in the groundwater at these upgradient and crossgradient wells.

TCE observed in groundwater crossgradient and downgradient of the Property in the Thomas Street ROW (monitoring well MW28 and former monitoring well MW16) and on the northwestern portion of the Former Seattle Times Property (monitoring wells MW29 and MW30) can be attributed to the degradation of PCE released on the Property following implementation of the groundwater treatment program.

During the second and fourth quarter 2020 groundwater monitoring events, a concentration of TCE exceeding the MTCA Method A cleanup level was detected in monitoring well MW31, located in the Boren Avenue North ROW. TCE concentrations did not exceed the cleanup level in this well during the previous two quarters of groundwater monitoring. TCE was detected at a concentration of 5 micrograms per liter ( $\mu\text{g/L}$ ), which matches the MTCA Method A cleanup level, during the most recent groundwater event (June 2021).

Given this monitoring well's location and the recent localized reversal in groundwater flow direction due to construction dewatering at Block 38 West and potentially other nearby sites, the increased TCE concentration observed during the second and fourth quarter 2020 is likely the result of migration of the TCE observed in monitoring wells MW04, MW07, and MW27, located farther south in the Boren Avenue North ROW, and MW26, located in the Harrison Street ROW. PCE and its degradation products have not been detected above laboratory reporting limits in monitoring well MW31, indicating that the presence of TCE is attributed to the same upgradient off-Property source as TCE concentrations in monitoring wells MW04, MW07, and MW27 and is not associated with a release originating on the Property.

### **2.2.3 Cis-1,2-DCE and VC in Groundwater**

Cis-1,2-DCE and VC are not present in groundwater upgradient of the Property in the Boren Avenue North or Harrison Street ROWs (i.e., monitoring wells MW04, MW07, MW15, MW26, MW27, and MW31) at concentrations above laboratory reporting limits and/or MTCA Method A cleanup levels. Cis-1,2-DCE and VC in groundwater on the Property and crossgradient and downgradient of the Property in the Thomas Street ROW and on the northern portion of the Former Seattle Times Property can be attributed to the degradation of PCE and TCE following implementation of the groundwater treatment program. Currently, in the Thomas Street ROW, concentrations of cis-1,2-DCE are declining, and VC is absent because the aerobic conditions in the groundwater are inhibiting the degradation of PCE and TCE.

VC was present at concentrations slightly exceeding the MTCA Method A cleanup level in one groundwater sample collected from monitoring well ONNI-MW-5 on the Former Seattle Times

Property during a fourth quarter 2019 sampling event conducted by SoundEarth. However, VC was not detected above laboratory reporting limits when monitoring well ONNI-MW-5 was initially sampled by Environmental Partners, Inc. aka TRC Companies, Inc. (EPI) in 2018 (EPI 2018) or when resampled by SoundEarth in February and June 2020.

#### **2.2.4 TCE in Shallow Soil and Perched Groundwater**

Prior to redevelopment, shallow CVOC impacts to soil and perched groundwater were present in the central portion of the Site at depths of approximately 20 to 30 feet below ground surface (bgs). Of the 59 borings drilled at the Property, three borings (B21, B22, and B27) were advanced approximately 20 to 40 feet north of the southern boundary of the Property (Figure 4). SoundEarth collected soil samples from the borings at sample depth intervals of 5 to 10 feet to depths ranging from 5 to 110 feet bgs. These soil samples did not contain PCE, TCE, 1,2-DCE, or VC at concentrations above laboratory reporting limits, with the exception of one sample collected at 5 feet bgs in boring B21, which contained a PCE concentration of 0.28 milligrams per kilogram (mg/kg). Borings B21, B22, and B27 are located approximately 80 to 90 feet from the Former Seattle Times Property; the Thomas Street ROW separates the Property and the Former Seattle Times Property.

Following redevelopment excavation activities at the Property, 28 confirmation soil samples were collected from the southern sidewall of the mass excavation, adjacent to the Thomas Street ROW, at depths of approximately 5 to 70 feet bgs (27 to 95 feet NAVD88). None of these samples contained concentrations of CVOCs above laboratory reporting limits.

##### **2.2.4.1 TCE in Shallow Soil Beneath the Former Seattle Times Property**

In May 2018, EPI performed a subsurface investigation at the Former Seattle Times Property. As part of that investigation, 16 soil borings (U1 through U16) were advanced proximate to the former Ink Room, Northern UST Complex and Fuel Dispenser, and Maintenance Garage, which were formerly located on the northern portion of the Former Seattle Times Property. The USTs were reported to contain waste oils and liquids, heating oil, diesel and gasoline fuel, and petroleum- and solvent-based inks.

Borings U1 through U16 were advanced to depths of 20 to 25 feet bgs. Reconnaissance groundwater samples collected from borings U10 through U13 contained TCE concentrations ranging from 1.9 to 7.9 µg/L. The reconnaissance groundwater sample collected from boring U11 at a depth of 25 feet bgs contained a PCE concentration of 1.2 µg/L. A soil sample collected from boring U11 at a depth of 15 feet bgs contained a TCE concentration of 0.021 mg/kg. Breakdown products of TCE were not detected in the soil and reconnaissance groundwater samples collected from the EPI borings.

The findings of EPI's 2013 investigation at the Former Seattle Times Property concluded that the TCE in shallow soil and groundwater originated from a source on the Former Seattle Times Property and not the Troy Property. In its Limited Subsurface Investigation Report dated August 16, 2013 (EPI 2013), EPI states that "TCE is a known contaminant from the Troy Laundry site adjacent to the north of the subject property; however, a water sample collected from a shallow ground water well installed on the northern property boundary did not contain detectable concentrations of TCE....This suggests that the TCE detected in shallow ground water may be from an on-site source."



During SoundEarth’s 2019 supplemental monitoring well installation activities, borings B54 and B55 were advanced on the northern portion of the Former Seattle Times Property and completed as groundwater monitoring wells MW29 and MW30 to depths of approximately 30 feet bgs (72 feet NAVD88) and 20 feet bgs (82 feet NAVD88), respectively. TCE was detected at concentrations exceeding the MTCA Method A cleanup level in two soil samples collected from borings B54 and B55: 0.093 mg/kg and 0.033 mg/kg, respectively. Analytical results for soil samples collected from borings B54 and B55 correspond to soil sample results from borings advanced by EPI in 2018.

The results of the investigations described above confirm that the release of chlorinated solvents on the Property have not impacted shallow soil or shallow groundwater at the Former Seattle Times Property, based on the following conclusions:

- Prior to redevelopment, shallow groundwater contaminated with PCE and its breakdown products was present at the Property at depths of 20 to 30 feet bgs. However, the shallow groundwater was encountered in only 4 of 59 soil borings near the center of the Property. Shallow groundwater at the Former Seattle Times Property primarily contains TCE with no breakdown products. If a release at the Property was impacting shallow soil and groundwater at the Former Seattle Times Property, PCE and its breakdown products would be present in the groundwater.
- TCE was detected at depths of 15 to 30 feet bgs in soil samples collected from borings advanced by EPI and SoundEarth at the Former Seattle Times Property. The borings were advanced proximate to the former Ink Room, Northern UST Complex and Fuel Dispenser, and Maintenance Garage. TCE and/or other solvents were not detected in (1) soil samples collected from depths of 5 to 110 feet bgs on the southern portion of the Property at borings B21, B22, and B27 or (2) soil samples collected from the southern sidewall of the redevelopment excavation at depths of 5 to 70 feet bgs, and there is no mechanism to transport solvents from the Property to shallow soils on the Former Seattle Times Property. Therefore, the TCE in the shallow soil at the Former Seattle Times Property is the result of a release on the Former Seattle Times Property, most likely from the former Ink Room, Northern UST Complex and Fuel Dispenser, and/or Maintenance Garage.
- The primary solvent of concern in the soil at the Former Seattle Times Property is TCE, while the primary solvents of concern in soil and groundwater at the Property are PCE and its breakdown products. Because PCE and its breakdown products are not present in the shallow soil at the Former Seattle Times Property, the source of TCE originated from the Former Seattle Times Property. This conclusion is supported by the fact that shallow reconnaissance groundwater samples collected by EPI proximate to the former Ink Room, Northern UST Complex and Fuel Dispenser, and Maintenance Garage contained only TCE, not PCE, except for in one reconnaissance groundwater sample collected from EPI boring U11 at a depth of 25 feet bgs.

The TCE impacts identified in the shallow soil on the Former Seattle Times Property are attributed to a release at the Former Seattle Times Property and not a release from the Property due to the following: the nature of and horizontal distance between shallow TCE impacts identified on the Former Seattle Times Property and the TCE originating from the Property; the discontinuous nature of the perched groundwater zone; the elevation change between the Property and the

Former Seattle Times Property; the inferred northwesterly flow of perched groundwater due to local topography; and the lack of a defined transport mechanism.

### **2.3 CONTAMINANTS AND MEDIA OF CONCERN**

Based on the findings of the RI conducted at the Site, the COCs at the Site include PCE, TCE, cis-1,2-DCE, and VC in groundwater located beneath the western half of the Property; portions of the north, west- and south-adjointing ROWs; and the northern portion of the Former Seattle Times Property. The CVOCs in groundwater beneath the Site are confirmed to be present at concentrations requiring cleanup in accordance with the AO.

Previous investigations at the Site identified GRPH (as Stoddard solvents), DRPH, and ORPH as COCs. Petroleum hydrocarbons previously present in soil at the Site were removed during the 2014 to 2015 construction excavation (SoundEarth 2016), with the exception of a small area of inaccessible petroleum-contaminated soil along the northern sidewall along Harrison Street (approximately 10 feet east to west at an approximate elevation of 32 feet NAVD88). Current concentrations of GRPH, DRPH, and ORPH in groundwater samples are attributable to the presence of EOS and its polar breakdown products in groundwater. This conclusion is supported by the concentrations of petroleum hydrocarbons in groundwater samples being flagged by the laboratory as having a chromatographic pattern that did not match the fuel standard used for quantification. In addition, residual petroleum contamination at or outside the property boundary is located in the vadose zone in areas that are fully capped and contained. Therefore, the petroleum hydrocarbon source has been removed or contained, and petroleum hydrocarbons are no longer considered COCs for the medium of concern for the Site, which is groundwater. Any residual GRPH present in the groundwater can be attributed to residual EOS given the fact that GRPH was not detected in the groundwater prior to implementation of the treatment. An example of this condition is the sporadic presence of GRPH in groundwater at monitoring well MW21 (Table 4).

Soil on the Property identified as containing CVOC concentrations exceeding cleanup levels was removed during the remedial excavation conducted as part of the IRA, except for a small area of inaccessible CVOC-contaminated soil along the western Property boundary along Boren Avenue North (approximately 100 feet north to south at approximate elevations between 80 and 20 feet NAVD88). Soil is not a medium of concern for the Site because of the mass removal of CVOC-contaminated soil during redevelopment and the capping of residual contaminated soil with the underground parking garage. Any residual CVOC soil contamination that may be present in the ROWs outside the boundaries of the Property are capped by hardscapes (e.g., buildings, concrete, asphalt pavement). Based on results for sidewall soil samples and soil samples collected from soil borings advanced during the IRA, if present, the soil contamination in the ROWs is at depths greater than 15 feet bgs. In accordance with MTCA, a depth of 15 feet bgs is a reasonable estimate of the depth of soil that could be excavated and distributed at the soil surface in the ROWs under a construction scenario. Therefore, it is unlikely any human exposure via direct contact or other exposure pathways related to the soil will occur.

The results of SoundEarth's 2018 and 2019 vapor intrusion assessment demonstrated compliance with applicable MTCA indoor air cleanup levels for indoor air in accordance with the AO (SoundEarth 2018 and 2019). Therefore, the vapor intrusion pathway is considered incomplete and soil vapor and indoor air are not media of concern for the Site.

## 2.4 CONTAMINANT FATE AND TRANSPORT OF CHLORINATED SOLVENTS

This section includes a discussion of the transport mechanisms and environmental fate of chlorinated solvents in the subsurface.

### 2.4.1 Transport Mechanisms Affecting Distribution of Chlorinated Solvents in the Subsurface

Chlorinated solvents released to the environment are transported in groundwater in a dissolved phase and in partially saturated and unsaturated soil in a vapor phase. In groundwater, chlorinated solvents are transported through advection and dispersion and in the vapor phase by advection and diffusion. The primary mechanism for transport of chlorinated solvents originating at the Property is advection and dispersion in groundwater. Transportation of chlorinated solvents in soil vapor at the Property has been eliminated as a result of the removal of source areas and confirmed by the vapor intrusion assessment performed at the Property (SoundEarth 2018 and 2019).

PCE and its degradation products in groundwater at the Site have migrated in the direction of groundwater flow by advection and dispersion transport. Given the relatively flat groundwater gradient at the Site and the heterogenous texture of the primary regional water-bearing zone, particularly in the southern half of the Property and beneath the Thomas Street ROW, the footprint of the chlorinated solvent plume has been primarily confined to the Property and portions of the Thomas Street and Boren Avenue North ROWs.

### 2.4.2 Environmental Fate of Chlorinated Solvents in the Subsurface

Once PCE enters the subsurface, chemical attenuation processes such as direct mineralization and reductive dechlorination may cause a natural reduction or breakdown into nontoxic components such as ethene, ethane, chloride, and carbon dioxide. Biological attenuation processes such as reductive dechlorination may also affect the reduction of PCE in soil and groundwater under conducive subsurface conditions. Apparent degradation of CVOCs also occurs in the groundwater as a result of advection and dispersion, sorption, volatilization, and dilution resulting from the exchange of uncontaminated groundwater for contaminated groundwater in the aquifer.

The transport of PCE and its degradation products is retarded in the groundwater by adsorption on organic matter in the aquifer and heterogenous soil texture within the regional aquifer. The heterogeneous soil texture beneath the Thomas Street and Harrison Street ROWs likely plays a role in inhibiting the migration of CVOCs in groundwater. Furthermore, the relatively flat groundwater gradient at the Thomas Street ROW likely reduces the downgradient migration of PCE and its degradation products.

An indication of ongoing reductive dechlorination of PCE is the presence of degradation compounds that include TCE, cis-1,2-DCE, trans-1,2-DCE, and VC. The soil and groundwater analytical data for the Site indicate that concentrations of TCE and cis-1,2-DCE have been detected in the vadose zone, the discontinuous perched interval, and the primary regional water-bearing zone beneath the Site, which means that biological and natural attenuation processes are occurring at the Site. These findings are consistent with data generated from the borings and wells completed throughout the Site. The implemented groundwater treatment program has enhanced the attenuation of PCE and its degradation products occurring in groundwater beneath the Property and degraded the source of off-Property groundwater contamination.

### **2.4.3 Enhanced Reductive Dechlorination**

The implementation of ERD at the Site enhanced the degradation of PCE and its degradation products by producing anaerobic conditions in the groundwater. These conditions, compared to baseline conditions, are represented by low concentrations of dissolved oxygen, negative oxidation-reduction potentials, an increase in the concentrations of fatty acids, a reduction of sulfate and ferric iron, and an increase in the concentrations of methane and ethene. As the EOS carbon substrate is depleted, the groundwater chemistry will revert to aerobic conditions that are more conducive to the intrinsic mineralization of low concentrations of VC in the groundwater to nontoxic end products like ethene, carbon dioxide, water, and chloride. The literature indicates the first order decay rate of VC under aerobic conditions is 1.5 to 2 orders of magnitude greater than that under anaerobic degradation (US Geological Survey 2012). Currently, on the Property, groundwater geochemistry indicates anaerobic conditions are present, as does the continued degradation of cis-1,2-DCE to VC. Off-Property concentrations of PCE and TCE in the ROWs remain relatively stable as a result of the aerobic condition of the groundwater, which has also prevented the degradation of PCE, TCE, and cis-1,2-DCE to VC in groundwater beneath the ROWs. Given the high solubility and greater volatility of VC compared PCE, TCE, and cis-1,2-DCE, the absence of VC is the preferred condition for the protection of human health and the environment.

### **2.4.4 Plume Stability over Time**

Statistical trend analysis of the CVOC plume using groundwater results from 2015 through 2021 shows that concentrations of cis-1,2-DCE and VC are stable or increasing over time on the Property. This trend is anticipated and expected to continue because (1) residual low concentrations of PCE and TCE below the laboratory reporting limit likely remain in groundwater at the Property, and (2) there is an ongoing source of TCE located off of the Property. VC will rapidly degrade once the groundwater geochemistry beneath the Property changes from anaerobic to aerobic and the overall mass of TCE transport from off of the Property is substantially reduced. PCE and TCE concentrations on the Property are below MTCA Method A cleanup levels. Appendix B presents well-by-well statistical trend analysis for monitoring and injection wells that contain concentrations of CVOCs that currently exceed MTCA Method A and B groundwater cleanup levels.

In off-Property groundwater, detected concentrations of CVOCs, which primarily consist of PCE and TCE, are declining or stable. In the Thomas Street ROW at monitoring wells MW28 and MW29, on the Former Seattle Times Property, PCE and TCE concentrations are stable. The stability of the plume beneath the Thomas Street ROW and on the Former Seattle Times Property is due to the fine grain soil texture of the aquifer, the flat groundwater gradient, aerobic geochemistry of groundwater, and natural attenuation processes. Collectively, groundwater hydraulics, the geochemistry of the groundwater, and natural attenuation processes are inhibiting the downgradient migration of PCE and TCE, as evidenced by the absence of CVOCs in groundwater at monitoring wells ONNI-MW-4 and ONNI-MW-5 since groundwater monitoring began at those monitoring wells in December 2019 (Figure 10; Table 3).

## **2.5 EXPOSURE PATHWAYS AND POTENTIAL RECEPTORS**

This section discusses the confirmed and potential human health and ecological exposure pathways at the Site with the goals of (1) identifying those pathways requiring remediation to reduce or eliminate unacceptable risks to human health or the environment and (2) applying the findings to the development

of potentially feasible remedial technologies. Pathways associated with each media of potential concern are described below.

### **2.5.1 Exposure Pathways: Soil**

The IRA and subsequent redevelopment of the Property eliminated soil as a medium of concern at the Property. At a few locations on the western and northern Property boundaries, the concentration of one or more COCs slightly exceeds applicable cleanup levels. However, the mechanisms for exposure to COCs in the soil have been eliminated at the Site:

- **Direct Contact Pathway:** The direct contact/ingestion pathway for soil is not complete because the mass excavation during the IRA removed contaminated soil. The remaining soil on the Property was capped with five levels of underground parking and adjacent ROWs are capped with hardscapes (e.g., concrete and asphalt pavement).
- **Inhalation Pathway:** The inhalation pathway is not complete because residual concentrations of COCs in soil were mitigated by engineering controls, including a vapor barrier beneath the P5 level of the underground parking garage and a continuously operating HVAC system in the parking garage. The vapor intrusion assessment conducted at the Property confirmed that the inhalation pathway is not complete.
- **Soil to Groundwater Leaching Pathway:** The soil to groundwater leaching pathway is not complete. The pathway was eliminated by mass removal of the soil during redevelopment and the capping of the soil with the underground parking garage. The paved hardscapes in the ROWs have minimized the potential for infiltration of surface water into the soil underlying the Site.

Soil samples collected from borings advanced in the ROWs adjacent to the Property either do not contain concentrations of COCs above applicable soil cleanup levels or contain contaminated soil at a depth greater than 15 feet bgs (mainly in the primary regional water-bearing zone). Per MTCA, a depth of 15 feet bgs is a reasonable estimate of the depth of soil that could be excavated and disturbed in the ROWs under a construction scenario.

### **2.5.2 Exposure Pathways: Groundwater**

The IRA and subsequent redevelopment of the Property eliminated exposure to potentially contaminated shallow perched groundwater and deep groundwater in the primary regional water-bearing zone. Perched groundwater on the Property was removed during the mass removal of soil during redevelopment. Perched groundwater containing COCs has not been identified in any areas off of the Property.

The primary regional water-bearing zone at the Site contains concentrations of one or more COCs at concentrations exceeding the cleanup levels presented in the AO. However, the mechanisms for exposure to COCs in groundwater at the Site have been eliminated:

- **Direct Contact Pathway:** The direct contact pathway for groundwater is not complete because groundwater in the primary regional water-bearing zone containing concentrations of COCs is at depths of at least 60 to 80 feet bgs. Any direct contact with groundwater during groundwater sampling events will be



mitigated using personal protective equipment. Future institutional controls will prohibit beneficial use of groundwater at the Site.

- **Inhalation Pathway:** The inhalation pathway at the Property is not complete because of five levels of underground parking, the presence of a vapor barrier beneath the P5 parking level, and a continuously operating HVAC system in the parking garage. There is no inhalation pathway in the ROWs adjacent to the Property or the Former Seattle Times Property because the primary regional water-bearing zone is at depths of at least 60 to 80 feet bgs. Any potential exposure during groundwater sampling events will be mitigated using personal protective equipment.
- **Ingestion Pathway:** The ingestion pathway for groundwater is not complete for the Site because groundwater at the Site is not a source of drinking water. Further, groundwater will never be used for drinking water supply, as outlined in Section 2.8, Regional Aquifer Determination.

### **2.5.3 Exposure Pathway: Soil Vapor**

The IRA and subsequent redevelopment of the Property eliminated contaminated soil and groundwater vapor as media of concern at the Property. In March 2018 and February 2019, SoundEarth conducted a soil vapor intrusion assessment and supplemental vapor intrusion assessment in the on-Property building and for ambient outdoor air (SoundEarth 2018 and 2019). The results of the indoor and outdoor air sampling demonstrate compliance with indoor air cleanup levels. In a letter dated July 8, 2019, Ecology confirmed that no further assessment of indoor air quality at the Site is required based on the results of the vapor intrusion assessments (Ecology 2019).

## **2.6 TERRESTRIAL ECOLOGICAL EVALUATION**

A TEE is required by WAC 173-340-7940 at locations where a release of a hazardous substance to soil has occurred. The TEE is intended to assess potential risk to plants and animals that live entirely or primarily on affected land. The TEE takes into account the Site area, Site land use, Site habitat quality, likelihood that the Site will attract wildlife, and COCs occurring in Site soil.

The Site qualifies for a TEE exclusion per WAC 173-340-7491(1)(a)(b) on the basis that soil contamination is at a depth of at least 15 feet bgs and is covered by physical barriers that prevent exposure to plants and wildlife (Appendix D of the Final RI Report [SoundEarth 2020]). No further consideration of ecological impacts is required under MTCA.

## **2.7 CSM SUMMARY**

Groundwater monitoring results indicate that the extent of the CVOC plume originating from the Property has been fully delineated. Analysis of CVOC concentrations in groundwater identified beneath the Boren Avenue North and Harrison Street ROWs, located upgradient of the Property, and in shallow perched soil and groundwater on the south-adjacent Former Seattle Times Property indicate that these impacts are not related to a source originating from the Property. However, as shown on Figure 17, the portion of the Boren Avenue North and Harrison Street ROWs in the vicinity of monitoring wells MW04, MW07, MW26, MW27, and MW31 has been identified as an area where potential commingling of CVOC impacts originating from the Property and TCE impacts originating upgradient or crossgradient of the Property has occurred.

Solvents originating from the Property have migrated south-southeast beneath the Thomas Street ROW and the northwestern portion of the Former Seattle Times Property. On the Property, the downgradient eastern extent of the CVOC plume lies to the west of monitoring well MW20 and injection well IW91. On the northwestern portion of the Former Seattle Times Property, the downgradient southeastern extent of the CVOC plume lies approximately between the location of monitoring wells MW29 and MW30 and the location of Former Seattle Times Property monitoring wells ONNI-MW-4 and ONNI-MW-5, which are south of monitoring wells MW29 and MW30.

As shown on Figure 17, the southern extent of the CVOC plume originating from the Property has been interpreted as migrating toward monitoring wells ONNI-MW-4 and ONNI-MW-5. The southern limit of the plume is delineated by the absence of CVOCs in monitoring wells ONNI-MW-4 and ONNI-MW-5, which were first sampled in 2018.

The concentrations of PCE and TCE are stable in groundwater beneath Boren Avenue North, Harrison Street, and Thomas Street ROWs and on the Former Seattle Times Property. This conclusion is based on statistical trend analysis performed for concentrations of PCE and TCE in samples collected from monitoring wells MW04, MW07, MW13, and MW26 through MW30. The conditions show that the CVOC plume in the ROWs and at the Former Seattle Times Property are unlikely to migrate beyond their current extent.

In the Boren Avenue North and Harrison Street ROWs, concentrations of cis-1,2-DCE in samples collected from monitoring wells MW04, MW07, MW26, and MW27 are less than cleanup levels or at concentrations below laboratory reporting limits. In samples collected from the Thomas Street ROW and the Former Seattle Times Property, the concentrations of cis-1,2-DCE are stable or decreasing and the concentrations of VC have been below laboratory reporting limits since the second quarter of 2020. These findings suggest a state of equilibrium has been reached between the degradation of PCE and mineralization of cis-1,2-DCE and VC via anaerobic or aerobic biological degradation pathways. Aerobic conditions are present in groundwater off of the Property in the vicinity of monitoring wells MW28, MW29, and MW30 and are more conducive to the biological degradation (direct oxidation) of cis-1,2-DCE and VC than of PCE and TCE.

The concentrations of PCE and TCE are stable off of the Property in the Boren Avenue North, Harrison Street, and Thomas Street ROWs and on the Former Seattle Times Property in samples collected from monitoring wells MW04, MW07, MW13, and MW26 through MW30. These conditions suggest the CVOC plume in the ROWs and at the Former Seattle Times Property will not migrate beyond its current extent as a result of groundwater treatment and natural attenuation processes. Concentrations of PCE and TCE in the groundwater beneath the Thomas Street ROW indicate the groundwater plume at this location is stable. The stability of the plume is a result of natural attenuation processes (apparent degradation and intrinsic biodegradation) and groundwater treatment.

In the Boren Avenue North and Harrison Street ROWs, the results of the trend analysis of cis-1,2-DCE in samples collected from monitoring wells MW04, MW07, MW26, and MW27 indicate concentrations of cis-1,2-DCE in groundwater are stable. South of on-Property monitoring well MW22 and off-Property monitoring wells (MW23 and MW28 through MW30) located in the Thomas Street ROW and on the Former Seattle Times Property, the extent of cis-1,2-DCE and VC in groundwater samples collected is generally stable or decreasing. These findings suggest a state of equilibrium has been reached between the degradation of PCE and mineralization of cis-1,2-DCE and VC via anaerobic or aerobic biological degradation pathways. Aerobic conditions are present in groundwater off of the Property in the vicinity

of monitoring wells MW28, MW29, and MW30 and are conducive to the biological degradation (direct oxidation) of cis-1,2-DCE and VC.

## **2.8 REGIONAL AQUIFER DETERMINATION**

The regional aquifer beneath the Site is not considered a current or future source of drinking water under King County Board of Health Title 12, Section 12.32.10 (A); the King County Coordinated Water Supply Plan; and Chapter 70.116 of the Revised Code of Washington (RCW 70.116). Further, the regional aquifer is not considered a drinking water source by the City of Seattle. The lines of evidence to support these conclusions are summarized below, followed by a discussion of applicable or relevant and appropriate requirements (ARARs) in Section 3.0 that restrict the domestic use of groundwater in the South Lake Union neighborhood where the Site is located.

### **2.8.1 Area-Wide Considerations**

In the South Lake Union neighborhood, hazardous substances have been released to groundwater from multiple sources that have resulted in commingled plumes of contaminated groundwater in both the shallow perched groundwater and the deep regional aquifer. Multiple sources for CVOC and petroleum hydrocarbon releases are located within 1 mile of the Troy Site. These sources include the Former Seattle Times Property, located at the southeastern corner of Boren Avenue North and Thomas Street, and Block 43, located at the southwestern corner of Broad Street and Westlake Avenue North. Historically, these sites have released and/or continue to release CVOCs and/or petroleum hydrocarbons to the perched groundwater zones and to the regional aquifer in the vicinity of the Property.

### **2.8.2 Site-Specific Considerations**

The main conditions considered for the determination that groundwater beneath the Site is not and will not be used for domestic consumption are presented below:

- **Site Groundwater as a Drinking Water Source.** The groundwater at the Site does not serve as a current source of drinking water. A total of 70 percent of the drinking water for the City of Seattle is sourced from the municipal Cedar River and South Fork Tolt River watersheds located in King County. Chester Morse Lake, located in the upper region of the Cedar River, supplies the remaining 30 percent of drinking water to the City of Seattle. The City of Seattle municipal water supplies serve more than 1.4 million people in the Puget Sound area and will do so for the foreseeable future. Regulations exist that prohibit the installation of domestic drinking water wells in the City of Seattle (see below).
- **Location of Drinking Water Supplies for the City of Seattle.** Ecology’s website currently indicates that there are no drinking water supply wells within 1 mile of the Site (Ecology 2021). The nearest public water supply wells are located approximately 20 miles south of the Site and are operated by the City of Seattle during the summer only. These wells are too distant to have influence on groundwater beneath the Site or in the South Lake Union neighborhood. Furthermore, the public water supply wells are screened in a different geological formation as the Highline Intermediate and Deep Aquifers. The uppermost aquifer in the well field is Vashon Stade Advanced Outwash (Qva) and occurs approximately 250 to 400 feet above mean sea level (approximately NAVD88 246 to 396 feet).

The following additional rules and regulations are in place that prohibit the use of groundwater for domestic consumption at the Site and in the South Lake Union neighborhood:

- **King County Board of Health Title 12, Section 12.32.10 (A):** Users of water at the Site and throughout the City of Seattle are required to connect to an existing public water supply system under Section 12.32 (1a, b, and c) (2)(3).
- **WAC 246-290 and 246-291, Public Water Systems:** Domestic water is supplied to the Site and the South Lake Union neighborhood by an Ecology-approved Group A Water Supply System managed by the City of Seattle.
- **King County Coordinated Water Supply Plan (RCW 70.116):** Regional groundwater beneath the Site and the South Lake Union neighborhood is not part of an approved Coordinated Water Supply System Plan in King County. Therefore, the groundwater is not considered a critical water supply by the county.
- **WAC 173-160, Well Construction Standards:** Domestic drinking water wells cannot be located within a certain minimum distance of known potential sources of contamination; for example: hazardous waste sites like those present in the South Lake Union neighborhood (WAC 173-360-171[3][a][iv]).

### **2.8.3 Criteria for Not Designating Site Groundwater as a Source of Drinking Water**

The regional aquifer does not serve as a current or future source of drinking water. Specifically:

- The regional aquifer beneath the Site and the South Lake Union neighborhood contains area background concentrations of CVOCs and/or petroleum hydrocarbons; therefore, groundwater is not a practical or necessary source of drinking water for the City of Seattle.
- There are no known uses of groundwater from the regional aquifer beneath the Site and the South Lake Union neighborhood for drinking water purposes.
- The City of Seattle’s municipal watershed system is located well outside the city limits and will continue to be so for the foreseeable future. The nearest domestic water supply wells are located 20 miles south of the Site.
- The regional aquifer beneath the Site is hydraulically connected to Elliott Bay, which is a saline surface water body that is not suitable as a source of domestic water.
- There are no drinking water wells located in the vicinity of the Site or that are hydraulically connected to the Site; therefore, hazardous substances will not migrate to a current or potential source of drinking water at the Site.

## **3.0 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS**

Under WAC 173-340-350 and 173-340-710, other applicable laws (ARARs) include regulatory cleanup standards, standards of control, and other environmental requirements, criteria, or limitations established under state or federal law that specifically address a contaminant, remedial action, location, or other circumstances at a site. Remedial actions conducted under MTCA must comply with the substantive requirements of the ARARs but are exempt from their procedural requirements (WAC 173-340-710[9]).

Specifically, this exemption applies to state and local permitting requirements under the Washington State Water Pollution Control Act, Solid Waste Management Act, Hazardous Waste Management Act, Clean Air Act, State Fisheries Code, and Shoreline Management Act.

ARARs were screened to assess their applicability to the Site. The following table summarizes the preliminary ARARs for the Site.

**Table 3-1: Preliminary ARARs for the Site**

Preliminary ARAR	Citation or Source
MTCA	RCW 70.105
MTCA Cleanup Regulation	WAC 173-340
State Group A Public Water Supplies	WAC 246-290
Ecology, Toxics Cleanup Program (Guidance to Be Considered)	<i>Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action</i> , Review DRAFT, October 2009, Publication No. 09-09-047
State Environmental Policy Act	RCW 43.21C
Washington State Shoreline Management Act	RCW 90.58; WAC 173-18, 173-22, and 173-27
King County Board of Health	Title 12, Section 12.32.10 (A)
The Clean Water Act	33 United States Code (USC) 1251 et seq.
Comprehensive Environmental Response, Compensation, and Liability Act of 1980	42 USC 9601 et seq. and Part 300 of Title 40 of the Code of Federal Regulations (40 CFR 300)
The Fish and Wildlife Coordination Act	16 USC 661-667e; the Act of March 10, 1934; Ch. 55; 48 Stat. 401
Endangered Species Act	16 USC 1531 et seq.; 50 CFR 17, 225, and 402
Native American Graves Protection and Repatriation Act	25 USC 3001 through 3013; 43 CFR 10 and Washington's Indian Graves and Records Law (RCW 27.44)
Archaeological Resources Protection Act	16 USC 470aa et seq.; 43 CFR 7
Washington Dangerous Waste Regulations	WAC 173-303
Solid Waste Management Act	WAC 173-304 and 173-351
Occupational Safety and Health Administration Regulations	29 CFR 1910 and 1926
Washington Department of Labor and Industries Regulations	WAC 296
Water Quality Standards for Ground Water	WAC 173-200
Department of Transportation Hazardous Materials Regulations	40 CFR 100 through 185
Washington State Water Well Construction Act	WAC 173-160
WAC for Landfilling Standards	WAC 173-304-460
City of Seattle regulations, codes, and standards	All applicable or relevant and appropriate regulations, codes, and standards
King County regulations, codes, and standards	All applicable or relevant and appropriate regulations, codes, and standards

### 3.1 MEDIA AND CHEMICALS OF CONCERN

The medium of concern at the Site is groundwater. The COCs at the Site include PCE, TCE, cis-1,2-DCE, and VC in groundwater located beneath the western half of the Property; portions of the north-, west-, and south-adjointing ROWs; and the northwestern portion of the Former Seattle Times Property. CVOCs in groundwater beneath the Site are confirmed to be present at concentrations requiring cleanup in accordance with the AO.

### 3.2 CLEANUP LEVELS FOR THE SITE

The selected cleanup levels for the Site must comply with the MTCA cleanup regulations specified in WAC 173-340, applicable state and federal laws, and the remedial action objectives (RAOs) as presented in Section 4.1, Remedial Action Objectives. Cleanup levels are based on protection of human health and the environment from the applicable exposure pathways and receptors, considering the most beneficial use of groundwater in the regional aquifer beneath the Site. The following pathways were considered for the establishment of groundwater cleanup levels at the Site:

- **Protection of drinking water.** The default assumption under MTCA is that the most beneficial use of groundwater is for human consumption. Groundwater in the regional aquifer beneath the Site is not currently and is unlikely to become a source of drinking water for the City of Seattle based on previous discussion in Section 2.8. Since there is no ingestion pathway for groundwater beneath the Site, groundwater cleanup levels under WAC 173-340-720(3) and (4) for this exposure pathway are not applicable.
- **Protection of indoor air.** A vapor intrusion assessment was conducted at the Property in 2018 and 2019. Results from that assessment indicated that indoor air concentrations of CVOCs and petroleum hydrocarbons were less than MTCA indoor air cleanup levels (SoundEarth 2018 and 2019). Based on a review of the indoor air results, Ecology has confirmed that the results demonstrate compliance with MTCA. Ecology did not require any further assessments (Ecology 2019).
- **Protection of surface water resources.** Although the regional aquifer flows toward Elliott Bay and may be hydrologically connected to Elliott Bay, the southern boundary of the CVOC groundwater plume does not extend past the location of monitoring wells ONNI-MW-4 and ONNI-MW-5 (Figures 17 and 18). Therefore, surface water resources are protected for human health (via the consumption of aquatic organisms) and ecological receptors.
- **Protection of sediment quality.** Given the stability of the CVOC plume at the Site and the Site's distance from Elliott Bay, CVOC-contaminated groundwater originating at the Site would not impact sediment quality. Also, CVOCs are not regulated under the Sediment Management Standards (WAC 173-204) due to chemical properties that prevent CVOCs from partitioning into sediments.

#### 3.2.1 Potential Promulgated Standard for the Site

Because groundwater beneath the Site will not be used for domestic consumption and the overall footprint of the CVOC groundwater plume is stable, the following promulgated standards were used to identify concentrations that may serve as groundwater cleanup levels for the Site:

- Surface Water Cleanup Standards, MTCA: WAC 173-730(3)
- Washington State Surface Water Quality Standards: WAC 173-201A
- Washington State Group A Public Water Supplies: WAC 246-290



- MTCA Regulation: WAC 173-440-720 (3)(4)
- National Toxics Rule: 40 CFR 13
- Federal Clean Water Act Regulation 304

It has been established in Section 2.8 that the groundwater beneath the Site does not and will not serve as a drinking water source. Given the stability of the footprint of the CVOC plume and its known extent, contaminated groundwater originating at the Site will not reach Elliott Bay. Therefore, cleanup levels based on a risk of  $1 \times 10^{-6}$  and a Hazard Index of 1, established in the AO, are overly conservative for the protection of human health and the environment at the Site. For the Site, the US Environmental Protection Agency (EPA) maximum contaminant levels (MCLs) are proposed as the cleanup levels for the COCs. The proposed MCLs for PCE and TCE are the same as MTCA Method A cleanup levels and are protective of human health and the environment. The proposed MCLs for cis-1,2-DCE and VC are less stringent than the MTCA Method A and B cleanup levels but are protective of human health under the Federal Safe Drinking Water Act.

The recommended cleanup levels for the Site are presented below.

**Table 3-2: Recommended Cleanup Levels for Groundwater**

Contaminant of Concern	Cleanup Level (µg/L)	Regulations
PCE	5	MTCA Method A, WAC 173-340-720, MCL, WAC 246-290, and table values in Cleanup Levels and Risk Calculation (CLARC)
TCE	5	
cis-1,2-DCE	70	MCL, WAC 246-290, and table values in CLARC
VC	2	

### 3.3 POINT OF COMPLIANCE

The point of compliance is the location where the cleanup levels that are set in accordance with WAC 173-340 and WAC 246-290 will be measured and cannot be exceeded. Once the cleanup levels have been attained at the defined points of compliance, the impacts present beneath the Site will no longer be considered a threat to human health or the environment.

In situations where achieving the standard point of compliance is not practicable, conditional points of compliance can be implemented under the expectation that the persons responsible for undertaking the cleanup action shall demonstrate that all practical methods of treatment will be used in the Site cleanup and will not result in a greater overall threat to human health and the environment (WAC 134-340-720).

Based on evidence gathered during the site investigations, the IRA, and a subsequent vapor intrusion assessment, soil and indoor air have been eliminated as media of concern. The remaining impacted media at the Site is groundwater. The proposed point of compliance for groundwater is discussed below.

#### 3.3.1 Groundwater Conditional Point of Compliance

The standard point of compliance for groundwater under MTCA is “throughout the site from the uppermost level of the saturated zone extending vertically to the lowest depth which could potentially be affected by the site” (WAC 173-340-720 [8]). However, per MTCA (WAC 173-340-720[8]), where it can be demonstrated that it is not practicable to meet the cleanup levels



throughout the Site in a reasonable restoration time frame, and/or it is not technically possible to design, construct, and implement a reliable and cost-effective remedy to clean up the entire Site, a conditional point of compliance (CPOC) may be approved by Ecology.

For the Site, a CPOC is warranted because it is not practicable to meet the cleanup levels throughout the Site based on the following:

- Concentrations of CVOCs in the Boren Avenue North and Harrison Street ROWs continue to exceed the recommended groundwater cleanup levels. Treating CVOCs in these ROWs is not practical because there is an ongoing upgradient source of TCE commingling with the Property CVOC plume. This source of TCE will continue to impact groundwater quality beneath Boren Avenue North and Harrison Street ROWs and the Property for the foreseeable future, as discussed immediately below.
- Currently, concentrations of cis-1,2-DCE and VC in the groundwater on the Property are less than recommended groundwater cleanup levels for the Site. However, cis-1,2-DCE and VC concentrations in groundwater beneath the Property are anticipated to remain because of ongoing anaerobic degradation of TCE migrating toward the Property from upgradient sources. Therefore, a restoration time frame for cis-1,2-DCE and VC at the Property cannot be determined. Further, the concentrations of these compounds in groundwater will remain in flux while the groundwater geochemistry is anaerobic. As discussed in Sections 5.5, Comparison of Cleanup Action Alternatives, and 5.6, Disproportionate Cost Analysis and Ranking Criteria, it is not technically possible to design, construct, and implement an efficient and cost-effective remedy to treat low-level residual concentrations of VC on the Property.
- Currently, concentrations of PCE and TCE in the Thomas Street ROW exceed the recommended groundwater cleanup levels for the Site. Treating the CVOCs in the Thomas Street ROW and beneath the Former Seattle Times Property using in situ treatment (as discussed in Section 5.5, Comparison of Cleanup Action Alternatives) will likely increase the concentrations of CVOCs in monitoring wells ONNI-MW4 and ONNI-MW5. CVOCs have not been detected in these monitoring wells across four groundwater sampling events performed between December 2019 and June 2021. As discussed in Section 5.6, Disproportionate Cost Analysis and Ranking Criteria, it is not technically possible to design, construct, and implement an efficient and cost-effective remedy to degrade or extract CVOCs in the Thomas Street ROW and on the Former Seattle Times Property.
- As discussed in Section 5.5, the injection of PAC into groundwater beneath the Thomas Street ROW has not yet been shown to be effective at reducing the concentrations of CVOCs in groundwater at monitoring wells MW-28 and MW-29. The concentrations of CVOCs in groundwater at monitoring wells MW-28 and MW-29 have remained stable over time.

For the reasons stated above, the recommend cleanup levels for groundwater at the Site cannot be met across the entire Site. Therefore, a CPOC for the Site is warranted. Specifically, a CPOC for the Site will be established at monitoring well MW28 in the Thomas Street ROW and at monitoring well MW29 on the Former Seattle Times property. Currently, a restoration time frame cannot be established with specificity for the CPOC because statistical trend analysis shows the concentrations

of PCE and TCE in the groundwater at monitoring wells MW28 and MW29 are stable. The stable concentrations are the results of aerobic groundwater conditions that are not conducive to the degradation of PCE and TCE. However, it is anticipated that concentrations of PCE and TCE will decline over time to less than the recommended cleanup levels via natural attenuation processes.

#### **4.0 TECHNICAL ELEMENTS**

RAOs are used to define the technical elements of the technology screening and to select remedial alternatives for detailed evaluation.

##### **4.1 REMEDIAL ACTION OBJECTIVES**

RAOs are statements of the goals that a remedial alternative should achieve in order to be retained for further consideration as part of the FS. The purpose of establishing RAOs for a site is to provide remedial alternatives that protect human health and the environment (WAC 173-340-350). In addition, RAOs are designed to:

- Implement administrative principles for cleanup (WAC 173-340-130).
- Meet the requirements, procedures, and expectations for conducting an FS and developing cleanup action alternatives, as discussed in WAC 173-340-350 through 173-340-370.
- Develop cleanup levels (WAC 173-340-700 through 173-340-760) and remedial alternatives that are protective of human health and the environment.

In particular, RAOs must address the following threshold requirements from WAC 173-340:

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

The overall RAO for this FS is to identify a remedial alternative(s) that will reduce residual COC concentrations in groundwater at the CPOC as proposed in Sections 3.2, Media and Chemicals of Concern, and 3.3, Point of Compliance. Specific objectives for the preferred remedy include the following:

- Use of MNA or in situ treatment methods to reduce CVOC concentrations in groundwater.
- Prevent and resolve off-Property migration of CVOCs in groundwater at concentrations exceeding the recommended cleanup levels.
- Provide engineering controls to prevent threats to human health and the environment posed by CVOCs in groundwater until the recommended cleanup levels are achieved.

#### **5.0 FEASIBILITY STUDY**

The purpose of this FS is to develop and evaluate cleanup action alternatives to facilitate selection of the final cleanup action at the Site in accordance with WAC 173-340-350(8). This FS includes screening of potentially feasible remedial technologies and development of cleanup action alternatives intended to achieve the objectives described in Section 4.1, Remedial Action Objectives. The cleanup action alternatives are evaluated with respect to threshold and other requirements for cleanup actions set forth under MTCA.

This FS evaluates the cleanup action alternatives and identifies those that are not effective, not technically possible, or whose costs are disproportionate under the provisions of WAC 173-340-360(3). The FS also provides the basis for identifying a preferred cleanup action alternative. Details regarding the implementation of the selected cleanup action alternative for the Site will be documented in a Cleanup Action Plan.

## **5.1 EXPECTATIONS FOR CHLORINATED SOLVENT CLEANUP SITES**

The cleanup of the Site involves remediation of residual CVOCs in groundwater. As of second quarter 2021, concentrations of CVOCs in groundwater beneath the Property are currently in compliance with the recommended cleanup levels for the Site, such that no further remedial action is warranted for groundwater beneath the Property.

Downgradient of the Property in the Thomas Street ROW and on the northern portion of the Former Seattle Times property, concentrations of CVOCs exceed the recommended cleanup levels. Trend analysis indicates the CVOC plume in this area of the Site is stable because of natural attenuation processes. Several decades of SoundEarth’s experience at hundreds of sites nationally has demonstrated that full restoration is often not possible at CVOc-contaminated sites due to many factors, including depth of the contamination, varying hydraulic conditions, persistence in low permeability layers, and limitations of remedial technologies (Kavanaugh, Michael C. and Rao P. Suresh C. 2003; Interstate Technology & Regulatory Council 2002). As early as 1993, EPA recognized the difficulty of degrading residual low concentrations of cis-1,2-DCE and VC resulting from implementation of enhanced reductive dechlorination technologies (e.g., establishment of conducive geochemical conditions and presence of *Dehalococcoides* genus [DHC] bacteria to promote complete reductive dechlorination). In these circumstances, further degradation of the low residual concentrations of cis-1,2-DCE and VC becomes technically impracticable, and existing technologies are unable to achieve full compliance with applicable cleanup standards within a reasonable restoration time frame (EPA 1993).

The heterogeneity of the regional aquifer beneath the Thomas Street ROW (see Figure 5) also presents challenges to treat CVOCs adsorbed to fine-grained soil in the saturated zone. For example, the ability to deliver remediation amendments to the saturated zone using standard injection techniques and achieve contact with adsorbed CVOCs would be limited, as observed during the PAC pilot study completed in May 2021. During the pilot test, the delivery of the PAC slurry to the subsurface via injection wells IW92 through IW94 and angled injection wells AIW10 through AIW12 became increasingly more difficult (i.e., diminishing injection rate with added injection volume) during the injection process likely due to clogging of the soil pores. The inability to achieve contact with remediation amendments will result in continued diffusion of CVOCs into groundwater from the low permeability soils.

In addition, the relatively flat groundwater gradient and presence of fine-grained soil limits the groundwater seepage velocity in the vicinity of monitoring wells MW28 and MW29 in the Thomas Street ROW. Given this groundwater condition, treatment using advective transport (i.e., groundwater flow through injected treatment media) cannot be relied upon because of the extended time to attain regulatory compliance.

## **5.2 IDENTIFICATION AND EVALUATION OF TECHNOLOGIES**

Remedial components (technologies) were evaluated with respect to the degree to which they comply with the cleanup requirements set forth in MTCA. According to MTCA, a cleanup action alternative must

satisfy all the minimum threshold requirements for RAOs, as outlined in Section 4.1 above. WAC 173 340-360 (2)(b) also requires the cleanup action alternative to:

- Use permanent solutions to the maximum extent practicable.
- Provide for a reasonable restoration time frame.
- Consider public concerns on the proposed cleanup action alternative.

Using the above criteria, remedial technologies were evaluated and screened for effectiveness, ability to implement, and relative cost. SoundEarth produced a short list of these remedial technologies for further inclusion in the development of cleanup action alternatives. Table 10 summarizes the remedial component screening process. The remedial technologies that passed the screening process include the following:

- **Reductive Dechlorination (Anaerobic Bioremediation).** Reductive dechlorination is a proven remedial technology for CVOCs. The fermentation of edible oil by indigenous microorganisms injected into the groundwater produces a rapid and significant reduction in dissolved oxygen concentrations in the saturated zone. This remedy provides the strongly negative oxidation-reduction potential necessary to treat the CVOCs by reductive dechlorination. The anaerobic zone extends far beyond the radius of influence of the edible oil itself, enhances attenuation of contaminants both upgradient and crossgradient of the active treatment zone, and serves as a barrier around the periphery of the treatment system and groundwater plume, which mitigates the migration of contaminated groundwater beyond Site boundaries. Reductive dechlorination is a biotic process completed by anaerobic bacteria. Complete dechlorination of PCE produces nontoxic chloride, ethene, and ethane gas.
- **Powder Activated Carbon.** Due to its high ratio of surface area to volume, PAC adsorbs to and immobilizes CVOC molecules that come into contact with it. This adsorption reduces contaminant concentrations in groundwater, and contaminants are eventually destroyed through biodegradation.
- **Monitored Natural Attenuation.** MNA refers to the methods used to evaluate whether natural attenuation processes are effectively remediating a contaminant plume, and if so, at what rate. Contaminants released to the environment in concentrations that pose risks to human health or the environment are subject to natural attenuation processes such as volatilization, diffusion, biotic and abiotic reactions, and dilution. These naturally occurring attenuation processes are distinguished from an engineered remedy employed to increase the rate of remediation above the rate observed through the “natural” processes. Natural attenuation is the most cost-effective means for achieving cleanup levels as long as there is no threat to human health or the environment presented by the contamination while it attenuates.

To be consistent with the expectations for natural attenuation as provided under MTCA, MNA is generally retained as a complimentary remedial component to other engineered remedial components rather than as a stand-alone or sole remedial component. However, MNA can be considered a stand-alone remedial measure if site conditions conform to the expectations listed in WAC 173-340-370(7), as follows:

- Source control (including removal and/or treatment of hazardous substances) has been conducted to the maximum extent practicable.

- Leaving contaminants in place during the restoration time frame does not pose an unacceptable threat to human health or the environment.
  - There is evidence that natural biodegradation or chemical degradation is occurring and will continue to occur at a reasonable rate at the site.
  - Appropriate monitoring requirements are conducted to ensure that the natural attenuation process is taking place and that human health and the environment are protected.
- **Air Sparge with Soil Vapor Extraction.** Air sparge (AS) combined with soil vapor extraction (SVE; collectively, AS/SVE) is a proven technology for the remediation of the CVOCs in groundwater. AS delivers compressed air to the saturated zone to enhance aerobic bioremediation with increased oxygen levels and strip volatile compounds from the water. SVE induces a pressure and concentration gradient in the subsurface that causes volatile compounds to desorb from the soil and flow with the vapor stream to a common collection point for discharge or treatment. SVE also collects the stripped compounds from the AS process.
  - **Environmental Covenant.** In the event that residual groundwater contamination remains on the Site after the cleanup action is implemented, an environmental covenant (EC) would be recorded to ensure there is no direct contact with the contaminated groundwater under alternative land use scenarios.

### 5.3 DEVELOPMENT OF CLEANUP ACTION ALTERNATIVES AND DESCRIPTIONS

The focused evaluation of cleanup action alternatives considered the practicable remedial components confirmed to be effective at treating CVOCs in groundwater. SoundEarth also considered whether Site-specific constraints would preclude application of a remediation technology due to the creation of a greater risk to human health and/or the environment or that such constraints could result in the remedial technology being technically or administratively infeasible to implement.

The four cleanup action alternatives that were retained for additional consideration, which are described in more detail in the following subsections, are as follows:

- Cleanup Action Alternative 1, MNA and Environmental Covenant
- Cleanup Action Alternative 2, In Situ Reductive Dechlorination and Environmental Covenant with MNA
- Cleanup Action Alternative 3, In Situ PAC Adsorption and Environmental Covenant with MNA
- Cleanup Action Alternative 4, AS/SVE and Environmental Covenant with MNA

#### 5.3.1 Common Components and Basic Assumptions

The following assumptions are common to all of the cleanup action alternatives:

- As of second quarter 2021, concentrations of PCE, TCE, and cis-1,2-DCE are below the recommended cleanup levels in on-Property monitoring wells. During the two most recent groundwater monitoring events (fourth quarter 2020 and second quarter 2021), the results of groundwater monitoring events at the Property indicate that VC is present at concentrations exceeding the recommended

cleanup level for VC in samples collected from on-Property monitoring wells MW18 and MW19 and injection well IW61.

The geochemical condition of groundwater beneath the Property is currently anaerobic due to the EOS injections and supports biodegradation of PCE, TCE, cis-1,2-DCE, and VC via the anaerobic reductive dechlorination process. The evidence for anaerobic conditions in groundwater beneath the Property are the concentrations of dissolved oxygen below 1 milligram per liter (mg/L), low oxidation-reduction potential (i.e., negative values), detection of methane, dissolved organic concentrations greater than 5 mg/L (i.e., indicative of the presence of an organic substrate acting as an electron donor), and the presence of fatty acids (i.e., indicative of the fermentation of EOS).

As EOS is depleted, groundwater will gradually restore to pre-injection aerobic conditions. Under slightly aerobic conditions, cis-1,2-DCE and VC will degrade more rapidly compared to anaerobic conditions. The literature indicates the first order decay rate of cis-1,2-DCE and VC under aerobic conditions is 1.5 to 2 orders of magnitude greater than that under anaerobic degradation (US Geological Survey 2012). Natural attenuation, including both abiotic and biotic degradation, will continue to be relied upon for degradation of cis-1,2-DCE and VC on the Property.

- Impacted soil and groundwater removed from the Site (i.e., generated during well installation and groundwater monitoring) would be properly characterized for proper off-site disposal at a permitted facility.
- Monitoring and injection wells installed at the Site would be decommissioned when cleanup standards are met.
- An EC would be recorded against the Property in accordance with WAC 173-340-440. Periodic reviews would be performed to confirm that the terms of the EC are satisfied.

### **5.3.2 Cleanup Action Alternative 1: MNA and Environmental Covenant**

Cleanup Action Alternative 1 relies on MNA processes for continued degradation of CVOCs at the Site to attain compliance with the recommended cleanup levels. Source control has been performed to the maximum extent practicable because the bulk of the CVOC-contaminated soils have been removed through mass soil excavation completed as part of the IRA and Property redevelopment. In addition, the implementation of ERD at the Site has enhanced the degradation of PCE and its degradation products. As of second quarter 2021, the concentrations of PCE, TCE, and cis-1,2-DCE in samples collected from on-Property monitoring wells are below the recommended cleanup levels.

Currently, the concentrations of PCE and TCE exceed the recommended cleanup levels in monitoring wells MW28 and MW29, located in the Thomas Street ROW and on the Former Seattle Times Property, respectively. The transport of PCE and its degradation products in groundwater from the Property to the Thomas Street ROW and Former Seattle Times property has been inhibited as a result of groundwater treatment, intrinsic bioremediation, and other natural attenuation processes such as advection and dispersion, adsorption and absorption, and volatilization. This degradation process is evidenced by the stability over time of the CVOC groundwater plume in the Thomas Street ROW and on the Former Seattle Times Property. The

footprint of the CVOC plume in the Thomas Street ROW will continue to decrease as the PCE flux in groundwater located upgradient of monitoring wells MW28 and MW29 is reduced by natural attenuation processes. This anticipated reduction is based on the observed decrease in the PCE concentration to below cleanup levels in the groundwater sample collected from monitoring well MW13 in June 2021 (Tables 3 and 3A).

Cleanup Action Alternative 1 would consist of the following:

- Groundwater monitoring would be performed to ensure that natural attenuation processes are occurring, to confirm that the CVOC plume is decreasing over time, and to confirm compliance with the recommended groundwater cleanup levels. Groundwater monitoring would be performed every 2 years for up to 9 years and include the collection and submittal of groundwater samples for CVOC, TOC, volatile fatty acid (VFA), and MNA parameter chemical analysis. Compliance groundwater monitoring would be performed quarterly during the final year of monitoring (i.e., chemical analysis only in Year 10). The compliance groundwater monitoring well network is shown on Figure 19.
- An EC would be recorded for the Property to ensure there is no direct contact with the contaminated groundwater under alternative land use scenarios.

The FS-level cost estimate for this cleanup action alternative is presented in Table 11. The estimated present worth cost is approximately **\$385,000**.

### **5.3.3 Cleanup Action Alternative 2: In Situ Reductive Dechlorination and Environmental Covenant with MNA**

Cleanup Action Alternative 2 includes the injection of EOS to provide a substrate for the native microbial population (i.e., biostimulation) and to promote the bioremediation of CVOCs present in saturated zone soil and groundwater via the anaerobic reductive dechlorination pathway. The EOS solution would be delivered to existing or newly installed vertical injection wells in the Thomas Street ROW and existing vertical and angled injection wells located at the southwestern portion of the Property and the Boren Avenue North and Thomas Street intersection. This cleanup action alternative would also include the injection of microbial consortium (i.e., bioaugmentation) into the subsurface consisting of DHC bacteria to promote complete reductive dechlorination to ethene/ethane (i.e., prevent cis-1,2-DCE and VC stall or accumulation). Natural attenuation processes would be relied upon for continued degradation of CVOCs (predominately biological degradation of cis-1,2-DCE and vinyl chloride under anaerobic or aerobic conditions) in the groundwater beneath the Property and following active treatment in the Boren Avenue North and Thomas Street ROWs.

Figure 20 provides an illustration of the conceptual implementation of this cleanup action alternative, including the layout of the injection program. Cleanup Action Alternative 2 would consist of the following:

- A request to update to the existing underground injection control (UIC) registration.
- A Seattle Department of Transportation (SDOT) Street Use permit would be secured to install the new injection wells and perform injections in Thomas Street.
- Four new vertical injection wells would be installed in Thomas Street ROW (IW95 through IW98).



- The EOS injection solution would be prepared by mixing the EOS stock material with potable water in an aboveground mixing tank(s).
- The EOS solution would be delivered to the subsurface under gravity or moderate injection pressure via the following: newly installed injection wells (IW95 through IW98), existing vertical injection wells (IW55, IW56, IW70 through IW73, and IW92 through IW94), and/or angled injection wells (AIW08 through AIW11).
- Following biostimulation and a period of acclimation, the DHC bioaugmentation solution would be delivered to the subsurface using select injection wells.
- Groundwater monitoring would be performed on a semiannual basis for up to 7 years and include the collection and submittal of groundwater samples for CVOC, TOC, VFA, and/or MNA parameter chemical analysis. Compliance groundwater monitoring would be completed quarterly during the final 2 years of monitoring (CVOC chemical analysis only in Years 8 and 9).
- An EC would be recorded for the Property to ensure there is no direct contact with the contaminated groundwater under alternative land use scenarios.

The FS-level cost estimate for this cleanup action alternative is presented in Table 12. The estimated present worth cost is approximately **\$1,073,000**.

#### **5.3.4 Cleanup Action Alternative 3: In Situ PAC Adsorption and Environmental Covenant with MNA**

Cleanup Action Alternative 3 includes the injection of PAC to adsorb and immobilize CVOCs present in saturated zone soil and groundwater. This adsorption processes reduces COC concentrations in groundwater and PAC is eventually destroyed through biodegradation. The PAC would be delivered to existing and newly installed vertical injection wells in the Thomas Street ROW and existing vertical and angled-injection wells located on the southwestern portion of the Property and in the Boren Avenue North and Thomas Street intersection. Natural attenuation processes would be relied upon for continued degradation of CVOCs (predominately biological degradation of cis-1,2-DCE and VC under anaerobic or aerobic conditions) in the groundwater beneath the Property and following active treatment in the Boren Avenue North and Thomas Street ROWs.

Figure 21 provides an illustration of the conceptual implementation of this cleanup action alternative, including the layout of the injection program. Cleanup Action Alternative 3 would consist of the following:

- A request to update to the existing UIC registration.
- An SDOT Street Use permit would be secured to install the new injection wells and perform injections in the Thomas Street ROW.
- Four new vertical injection wells would be installed in the Thomas Street ROW (IW95 through IW98).
- The PAC slurry would be prepared at a mix ratio of 55 pounds of PAC for every 150 gallons of potable water in an aboveground mixing tank (equal to one batch).
- The PAC slurry would be delivered to the subsurface under gravity or moderate pressure via the following: newly installed injection wells (IW95 through IW98),

existing vertical injection wells (IW55, IW56, IW70 through IW73, and IW92 through IW94), and/or angled injection wells (AIW08 through AIW11).

- Groundwater monitoring would be performed on a semiannual basis for up to 7 years and include the collection and submittal of groundwater samples for CVOC, TOC, VFA, and/or MNA parameter chemical analysis. Compliance groundwater monitoring would be completed quarterly during the final 2 years of monitoring (CVOC chemical analysis only in Years 8 and 9).
- An EC would be recorded for the Property to ensure there is no direct contact with the contaminated groundwater under alternative land use scenarios.

The FS-level cost estimate for this cleanup action alternative is presented in Table 13. The estimated present worth cost is approximately **\$943,000**.

### **5.3.5 Cleanup Action Alternative 4: AS/SVE Remediation System and Environmental Covenant with MNA**

Cleanup Action Alternative 4 includes the installation of an AS and SVE remediation system in the Thomas Street ROW and on the southwestern portion of the Property. AS would inject air to volatilize (i.e., strip) COCs from groundwater into the unsaturated zone for collection by the SVE system. The SVE system would apply a vacuum to induce a pressure and concentration gradient to volatilize COCs from the unsaturated zone (i.e., desorb from soil) and recover the vapor stream for treatment and atmospheric discharge. The AS/SVE system would also promote biodegradation of cis-1,2-DCE and VC in groundwater by increasing concentrations of dissolved oxygen. Natural attenuation processes would be relied upon for continued degradation of CVOCs (predominately biological degradation of cis-1,2-DCE and VC under anaerobic or aerobic conditions) in groundwater beneath the Property and following active treatment in the Boren Avenue North and Thomas Street ROWs. Figure 22 provides an illustration of the conceptual implementation of this cleanup action alternative, including the AS and SVE well locations and the anticipated area treatment.

Key assumptions for this cleanup action alternative include the following:

- An SDOT Street Use permit would be secured to install the new AS and SVE wells in the Thomas Street ROW.
- Applicable City of Seattle and SDOT permits would be secured to install AS/SVE remedial system components in the Thomas Street ROW.
- The system would include installation of four vertical AS wells (AS1 through AS4) and three vertical SVE wells (SVE1 through SVE3) to depths of approximately 100 and 80 feet bgs, respectively. Existing injection wells IW92 through IW94 would be utilized as wells and existing angled injection wells AIW08 through AIW10 would be utilized as dual-purpose AS/SVE wells (i.e., for application of pressure or vacuum).
- The AS and SVE radii of influence are assumed to be 15 and 20 feet, respectively. A pilot test would be performed to evaluate system pressures and vacuums, air flow rate, and area of influence.
- Subsurface piping would extend from the AS and SVE wells to remediation equipment enclosures. System components would be contained in two

equipment enclosures located (1) in level P5 of the underground parking garage for operation of dual-purpose AS/SVE wells AIW08 through AIW10, and (2) in a subterranean vault installed in the Thomas Street ROW for operation of AS wells AS1 through AS4 and IW92 through IW94 and of SVE wells SVE1 through SVE3.

- Each system would consist of a moisture separator, centrifugal blower, air compressor, vapor-phase granular activated carbon (GAC) vessels, and associated controls contained within a remediation equipment enclosure. A system manifold would control the pressure and air flow rate to each AS well, and a separate manifold would control the vacuum and air flow rate from each SVE well.
- The trenching and disturbed areas would be surfaced with asphalt or concrete to match existing conditions.
- The remediation system is anticipated to be installed in approximately 3 months. The system would operate for 6 years: monthly operation and maintenance (O&M) would take place during Years 1 and 2 and quarterly O&M would take place during Years 3 through 6.
- The vapor stream would be treated with vapor-phase GAC prior to discharge. Influent and effluent vapor samples would be collected monthly and analyzed to assess the effectiveness of the system and monitor compliance with regulatory thresholds set by the Puget Sound Clean Air Agency. It is assumed that after 1 year, concentrations of COCs in the vapor stream would have decreased significantly and compliance treatment of the vapor discharge would no longer be necessary.
- Groundwater monitoring would be performed semiannually for 6 years and include the collection and submittal of groundwater samples for CVOC chemical analysis. Compliance groundwater monitoring would be completed quarterly during the final 2 years of monitoring (CVOC chemical analysis only in Years 7 and 8).
- An EC would be recorded for the Property to ensure there is no direct contact with the contaminated groundwater under alternative land use scenarios.

The FS-level cost estimate for this cleanup action alternative is presented in Table 14. The estimated present worth cost is approximately **\$1,979,000**.

#### 5.4 EVALUATION OF CLEANUP ACTION ALTERNATIVES

This section presents the criteria used to evaluate the potentially feasible remedial alternatives with respect to the RAOs established for the Site. Remedial components were identified in accordance with the requirements set forth in MTCA under WAC 340-350(8)(b), and the focused screening of potential remedial components was conducted using the requirements and procedures for selecting cleanup actions as set forth in MTCA under WAC 173-340-360(2)(a)(b). The criteria used to evaluate and compare applicable remedial alternatives were derived from WAC 173-340-360(3)(f) and include the following:

- **Protectiveness.** The overall protectiveness of human health and the environment, including the degree to which existing risks are reduced, the time required to reduce risk at the facility and attain cleanup standards, the risks resulting from implementing the cleanup action alternative, and improvement of overall environmental quality.

- **Permanence.** The degree to which the cleanup action alternative permanently reduces the toxicity, mobility, or volume of hazardous substances, including the adequacy of the cleanup action alternative in destroying the hazardous substances, the reduction or elimination of hazardous substance releases and the sources of releases, the degree of irreversibility of the waste treatment process, and the characteristics and quantity of treatment residuals generated during the treatment process.
- **Effectiveness over the Long Term.** The degree of certainty that the cleanup action alternative will be successful, the reliability of the cleanup action alternative during the period over which hazardous substances are expected to remain on the Site, and the magnitude of residual risk associated with the contaminated soil and/or groundwater components. The following types of cleanup action components, presented in descending order, may be used as a guide when assessing the relative degree of long-term effectiveness of the chosen cleanup action alternative:
  - Reuse or recycling
  - Destruction or detoxification
  - Immobilization or solidification
  - On-site or off-site disposal in an engineered, lined, and monitored facility
  - On-site isolation or containment with attendant engineering controls
  - Institutional controls and monitoring
- **Management of Short-Term Risks.** The risk to human health and the environment associated with the cleanup action alternative during its construction and implementation, and the effectiveness of measures that will be taken to manage such risks.
- **Technical and Administrative Implementability.** The ability to implement the cleanup action alternative, including consideration of the technical feasibility of the cleanup action alternative, administrative and regulatory requirements, permitting, scheduling, size, complexity, monitoring requirements, access for construction operations and monitoring, and integration with the future development plans for the Property.
- **Consideration of Public Concerns.** The protection of the public interest, including considerations of perception, protection of the community, trust in the cleanup and involved parties, and impact on the surrounding areas.

## 5.5 COMPARISON OF CLEANUP ACTION ALTERNATIVES

A summary of the evaluation of the cleanup action alternatives described above using the MTCA evaluation criteria (WAC 173-340-360[3][f]) is presented below:

- **Protectiveness.** Each of the cleanup action alternatives provides a high degree of protectiveness given that the source of CVOCs has been removed through mass excavation and CVOC concentrations in groundwater have decreased significantly following implementation of groundwater treatment. In addition, the concrete floor slab and foundation walls of the on-Property underground parking garage and surrounding concrete and asphalt hardscapes in the ROWs throughout the Site serve as a barrier against direct contact with subsurface contamination. Each of the cleanup action alternatives ranked equally for protectiveness because groundwater beneath the Site will not be used or accessed for drinking water purposes.

- **Permanence.** Each of the cleanup action alternatives provides a high degree of permanence because source removal and groundwater treatment has significantly reduced the toxicity, mobility, and mass of CVOCs at the Site. Also, the majority of the CVOC mass has been removed from the Site under the IRA. Therefore, whether implemented under a passive approach (MNA) or an active approach (ERD application, PAC injections, or AS/SVE remedial system), additional groundwater treatment would only remove a small percentage of the mass of CVOCs in the groundwater because a large percentage (by some estimates, greater than 90 percent) of the residual low mass of CVOCs is in the sorbed phase, not in the dissolved phase where treatment occurs. Over time, contaminants will slowly desorb from soil into the dissolved phase, leading to rebound of low-level concentrations of CVOCs. Therefore, given the very low concentrations of CVOCs in groundwater, the additional mass that would be removed using in situ treatment methods is likely to be de minimis. Each of the cleanup action alternatives ranked equally for permanence because the CVOC mass at the Site has been removed to the maximum extent practicable.
- **Effectiveness over the Long Term.** Cleanup Action Alternative 2 scored the lowest for long-term effectiveness because there is the potential for incomplete reductive 32dechlorination to occur following an ERD application, resulting in the generation of cis-1,2-DCE and VC and possible subsequent migration of those COCs to the Former Seattle Times Property.

Based on the current PCE concentrations at monitoring wells MW28 and MW29, and applying stoichiometric calculations, it is estimated that VC would be generated in excess of 3 µg/L. Over several recent groundwater sampling events, the concentrations of VC in groundwater samples collected from monitoring wells MW28, located in the Thomas Street ROW, and MW29, on the northern side of the Former Seattle Times Property, are below the laboratory reporting limit.

The injection of carbon substrate to injection wells located in the Thomas Street ROW will result in successful remediation of PCE and TCE, as demonstrated and observed on the Property. However, given the high solubility of VC in groundwater, there is the potential for VC generated in the Thomas Street ROW to migrate to the Former Seattle Times Property. This downgradient advancement of the VC plume would pose a risk to human health via the vapor intrusion pathway at the Former Seattle Times Property.

For Cleanup Action Alternative 3, results of the PAC pilot study indicated a slight decrease in concentrations of PCE and TCE, which cannot yet be attributed directly to the introduction of PAC in the aquifer. However, the treatment effectiveness may have been diminished given the difficulty associated with injecting and distributing the PAC slurry in the saturated zone. During the pilot test, the delivery of the PAC slurry to the subsurface via injection wells IW92 through IW94 and angled injection wells AIW10 through AIW12 became increasingly more difficult likely due to clogging of the soil pores. Given the presence of low-permeability soils, it anticipated that further injections beneath the Thomas Street ROW would result in limited aerial distribution and contact with CVOC-contaminated groundwater.

Operation of an AS/SVE system would be marginally effective in the volatilization of CVOCs in the saturated zone given the presence of low-permeability silt and sand layers that would restrict flow. However, over the long term, air sparging could potentially mobilize the CVOC plume due to continued pressurized injection of air to the subsurface. In addition, there is uncertainty associated with the ability to capture vapors generated during air sparging, potentially posing a risk to human health via the vapor intrusion pathway at the Property and the Former Seattle Times Property.

Overall, Cleanup Action Alternatives 1 and 3 ranked highest and equally because they do not have the potential to exacerbate the CVOC groundwater plume that would result in compounding an environmental issue in the Thomas Street ROW and on the Former Seattle Times Property.

- **Management of Short-Term Risks.** Cleanup Action Alternative 1 scored the highest for this criterion because there is minimal risk associated with contacting contaminated groundwater during low-flow groundwater sampling. Cleanup Action Alternatives 2 and 3 ranked equally given the safety hazards associated with performing work in the Thomas Street ROW (i.e., traffic, encountering subsurface utilities). Cleanup Action Alternative 4 ranked the lowest given the significant amount of safety hazards associated with the installation of AS and SVE remedial components (i.e., wells, conveyance piping, subterranean vault) in the Thomas Street ROW and continued long-term O&M.
- **Technical and Administrative Implementability.** Cleanup Action Alternative 1 scored the highest for this criterion because groundwater monitoring is straightforward to implement and has been routinely performed at the Site. Cleanup Action Alternatives 2 and 3 ranked lower because both cleanup actions require obtaining street use permits, installing injection wells, and performing injections in the Thomas Street ROW with protection provided by traffic control measures and a uniformed police officer. In addition, installation of injection wells in the Thomas Street ROW poses a safety concern specifically related to the potential for encountering dense clusters of subsurface utilities recently installed by the City of Seattle in the Thomas Street ROW (e.g., an east-to-west-aligned power and communication utility corridor beneath Thomas Street ROW). Cleanup Action Alternative 4 ranked the lowest because it is uncertain that permits would be granted to install AS and SVE infrastructure (e.g., large subterranean vault to contain remediation components) in the Thomas Street ROW.
- **Consideration of Public Concerns.** There are no known active public concerns regarding the specific impacts at the Site. The public concerns evaluated in this FS are conceptual and reflect possible public perceptions. For all of the Cleanup Action Alternatives, human and ecological receptors are protected given that groundwater at the Site will not be used for domestic consumption and the CVOC groundwater plume is stable. In addition, exposure pathways to soil and groundwater (i.e., direct contact, inhalation, and soil leaching to groundwater) are incomplete.

The installation of AS and SVE remedial components under Cleanup Action Alternative 4 would require extended closure of portions of the Thomas Street, significantly affecting access to residences and businesses. Cleanup Action Alternatives 2 and 3 would temporarily affect traffic flow in Thomas Street during the installation of injection wells and the injection process.

As indicated in Table 15, after weighting factors are used for each of the evaluation criteria, Cleanup Action Alternative 1 achieved the highest-ranking score (9.0) compared to Cleanup Action Alternatives 2, 3, and 4, which achieved scores of 7.0, 7.8, and 7.0.

## 5.6 DISPROPORTIONATE COST ANALYSIS AND RANKING CRITERIA

The purpose of a disproportionate cost analysis is to facilitate selection of the cleanup action alternative that would provide the highest degree of permanence to the maximum extent practicable. Costs are considered disproportionate if the incremental costs of one cleanup action alternative exceed the incremental benefit achieved by a more expensive cleanup action alternative.



### 5.6.1 Cleanup Action Alternative Cost Estimating

- **Capital Costs.** These costs include expenditures for equipment, labor, and materials necessary to install a remedial action. Indirect costs may be incurred for engineering, financial, or other services not directly involved with installation of remedial cleanup action alternatives but necessary for completion of this activity.
- **O&M Costs.** O&M costs are post-construction costs necessary to provide effective implementation of the cleanup action alternative. Such costs may include but are not limited to operating labor, maintenance materials and labor, disposal of residues, and administrative, insurance, and licensing costs.
- **Monitoring Costs.** These costs are incurred from monitoring activities associated with remedial activities. Cost items may include sampling labor, laboratory, analyses, and report preparation.
- **Present Worth Analysis.** Present worth analysis provides a method of evaluating and comparing costs that occur over different time periods by discounting all future expenditures to the present year. The present worth cost or value represents the amount of money which, if invested in Year 0 and disbursed as needed, would be sufficient to cover all costs associated with a remedial alternative. The assumptions necessary to derive a present worth cost are inflation rate, discount rate, and period of performance. A discount rate, which is similar to an interest rate, is used to account for the time value of money.

Because it is assumed that all capital costs are incurred in Year 0, the present worth analysis is performed only on annual O&M and monitoring costs. The total present worth for a given cleanup action alternative is equal to the sum of the capital costs and the present worth of annual O&M and monitoring costs over the anticipated life cycle of the cleanup action alternative.

Using these criteria, the present worth costs for Cleanup Action Alternatives 1 through 4 are approximately as follows and detailed in Tables 11 through 14, respectively:

- Cleanup Action Alternative 1: \$385,000
- Cleanup Action Alternative 2: \$1,073,000
- Cleanup Action Alternative 3: \$944,000
- Cleanup Action Alternative 4: \$1,979,000

As indicated above, the costs to implement Cleanup Action Alternatives 2 or 3 and Cleanup Action Alternative 4 are approximately 2.5 and 5 times higher than the cost of Cleanup Action Alternative 1, respectively. The ranking score for Cleanup Action Alternative 1 is higher than Cleanup Action Alternatives 2 through 4. Chart 1 plots the relative cost and ranking scores, and Chart 2 plots the cost-to-benefit ratios for the four cleanup action alternatives to illustrate the relative costs and benefits afforded by each cleanup action alternative. The charts demonstrate that Cleanup Action Alternative 1 exhibits the lowest (best) cost-to-benefit ratio compared to those of Cleanup Action Alternatives 2 through 4.

Each of the cleanup action alternatives recognize that the CVOC source was removed to the maximum extent practicable as part of the IRA and Property redevelopment. Ongoing ERD will continue to degrade any residual cis-1,2-DCE and VC in the groundwater on Property. In addition, as the EOS is depleted over time, it is anticipated that the groundwater geochemistry will revert



to aerobic conditions, which are also conducive to direct oxidation of cis-1,2-DCE and VC in groundwater.

Concentrations of PCE and TCE are stable in areas off of the Property: in the ROWs and beneath the Former Seattle Times Property. In the Thomas Street ROW, the stability of the CVOC plume and aerobic groundwater conditions are acting to inhibit the downgradient migration and formation of VC, which is more volatile and soluble compared to PCE, TCE, and cis-1,2-DCE. Over time, concentrations of PCE and TCE in the Thomas Street ROW and on the Former Seattle Times Property will decline due to natural attenuation processes, including advection and dispersion, diffusion, sorption, volatilization, and biodegradation.

Overall, the incremental benefit associated with the added cost to implement an active treatment cleanup action alternative (ERD application, PAC injections, or AS/SVE remedial system) compared to that of MNA is not warranted. The CVOC impacts in groundwater do not pose a risk to human health or the environment given the depth of the groundwater beneath the Site, that the groundwater will not be used as a source for drinking water, and that the footprint of the CVOC groundwater plume is stable.

## **6.0 PREFERRED CLEANUP ACTION ALTERNATIVE**

After performing the analysis and ranking of cleanup action alternatives in accordance with MTCA, Cleanup Action Alternative 1 is the most feasible and cost-effective remedy. Cleanup Action Alternative 1 is the recommended alternative for the Property because it achieves the RAOs, meets the requirements set forth in WAC 173-340-360(3) and WAC 173-340-370, and is favorable with respect to the established evaluation and ranking criteria. Finally, Cleanup Action Alternative 1 exhibits the lowest cost-to-benefit ratio compared to the other cleanup action alternatives.

## **7.0 LIMITATIONS**

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with SoundEarth's agreement with the client. This report is solely for the use and information of the client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report are derived, in part, from data gathered by others, and from conditions evaluated when services were performed, and are intended only for the client, purposes, locations, time frames, and project parameters indicated. SoundEarth does not warrant and is not responsible for the accuracy or validity of work performed by others, nor from the impacts of changes in environmental standards, practices, or regulations subsequent to performance of services. SoundEarth does not warrant the use of segregated portions of this report.

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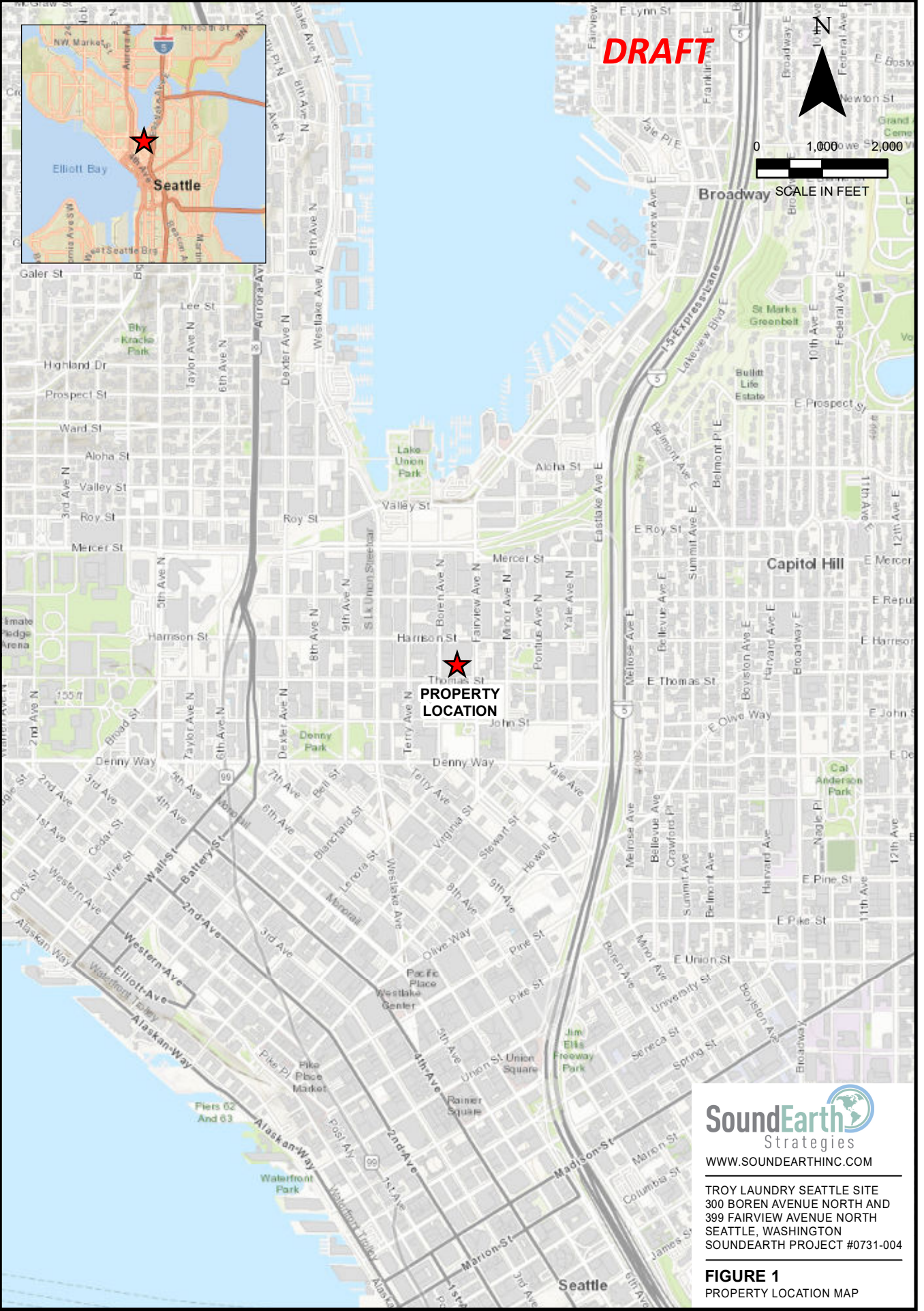
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## **FIGURES**

P:\0731 TOUCHSTONE\0731-004 TROY LAUNDRY\TECHNICAL\CAD\2021\0731-004 TROY LAUNDRY\REPORT\SEPTEMBER UPDATE\0731-004\_2021\FIS\_FIG1\_PL.MXD

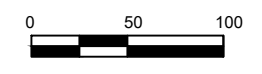
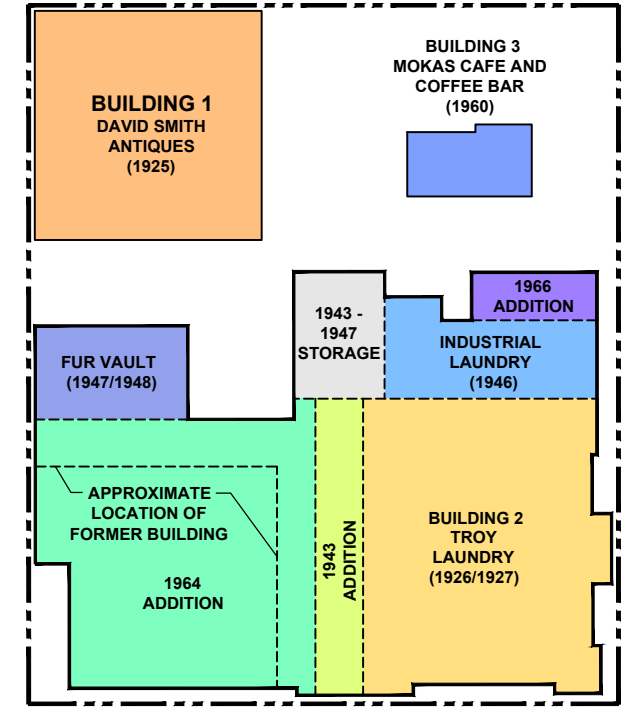
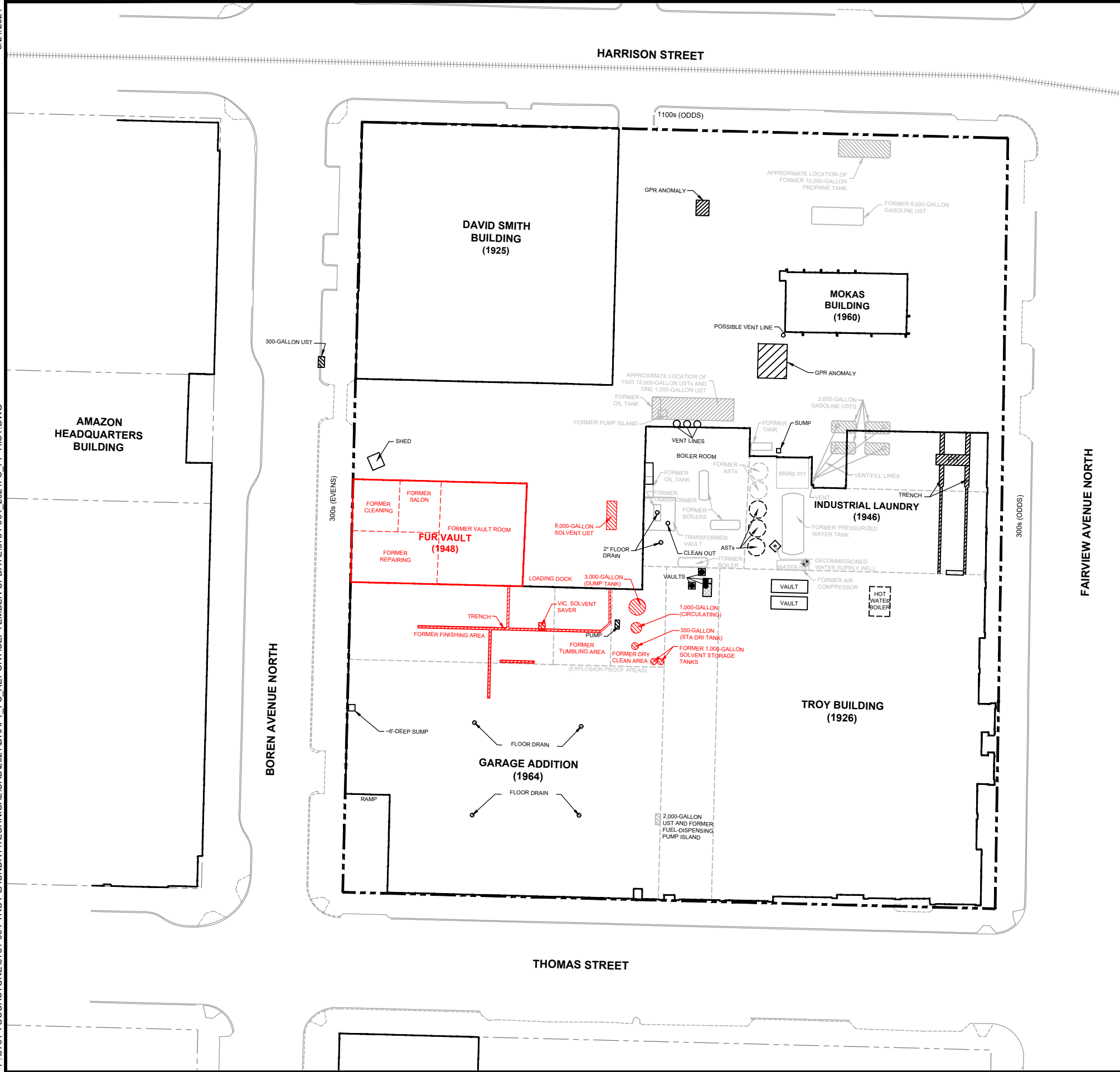


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SOUNDEARTH PROJECT #0731-004

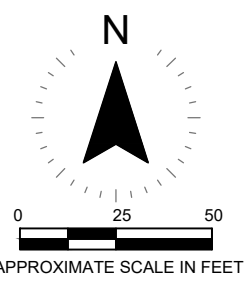
**FIGURE 1**  
PROPERTY LOCATION MAP





**DRAFT**

LEGEND	
---	PROPERTY BOUNDARY
- - - -	PARCEL BOUNDARY
•	VAULT ACCESS
- - - -	PROPERTY FEATURES
- - - -	FORMER PROPERTY FEATURES
	SOUTH LAKE UNION STREETCAR LINE
UST	UNDERGROUND STORAGE TANK
AST	ABOVEGROUND STORAGE TANK
GPR	GROUND-PENETRATING RADAR
RED	SOLVENT SOURCE AREAS

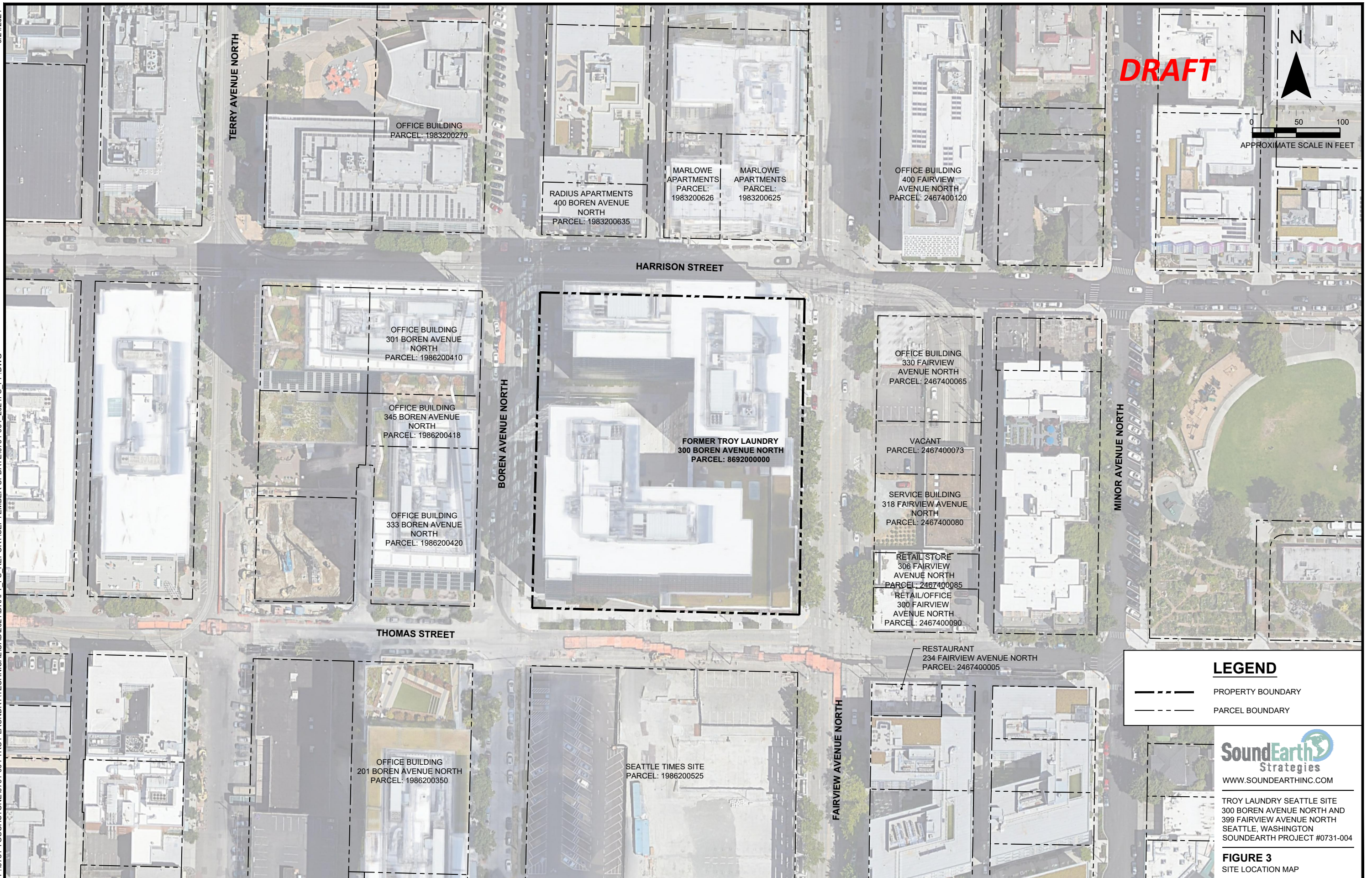


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**FIGURE 2**  
HISTORICAL PROPERTY PLAN





**DRAFT**



0 50 100  
APPROXIMATE SCALE IN FEET

OFFICE BUILDING  
PARCEL: 1983200270

RADIUS APARTMENTS  
400 BOREN AVENUE  
NORTH  
PARCEL: 1983200635

MARLOWE  
APARTMENTS  
PARCEL:  
1983200626

MARLOWE  
APARTMENTS  
PARCEL:  
1983200625

OFFICE BUILDING  
400 FAIRVIEW  
AVENUE NORTH  
PARCEL: 2467400120

OFFICE BUILDING  
301 BOREN AVENUE  
NORTH  
PARCEL: 1986200410

OFFICE BUILDING  
345 BOREN AVENUE  
NORTH  
PARCEL: 1986200418

OFFICE BUILDING  
333 BOREN AVENUE  
NORTH  
PARCEL: 1986200420

**FORMER TROY LAUNDRY  
300 BOREN AVENUE NORTH  
PARCEL: 8692000000**

OFFICE BUILDING  
330 FAIRVIEW  
AVENUE NORTH  
PARCEL: 2467400065

VACANT  
PARCEL: 2467400073

SERVICE BUILDING  
318 FAIRVIEW AVENUE  
NORTH  
PARCEL: 2467400080

RETAIL STORE  
306 FAIRVIEW  
AVENUE NORTH  
PARCEL: 2467400085

RETAIL/OFFICE  
300 FAIRVIEW  
AVENUE NORTH  
PARCEL: 2467400090

RESTAURANT  
234 FAIRVIEW AVENUE NORTH  
PARCEL: 2467400005

OFFICE BUILDING  
201 BOREN AVENUE NORTH  
PARCEL: 1986200350

SEATTLE TIMES SITE  
PARCEL: 1986200525

**LEGEND**

- PROPERTY BOUNDARY
- PARCEL BOUNDARY

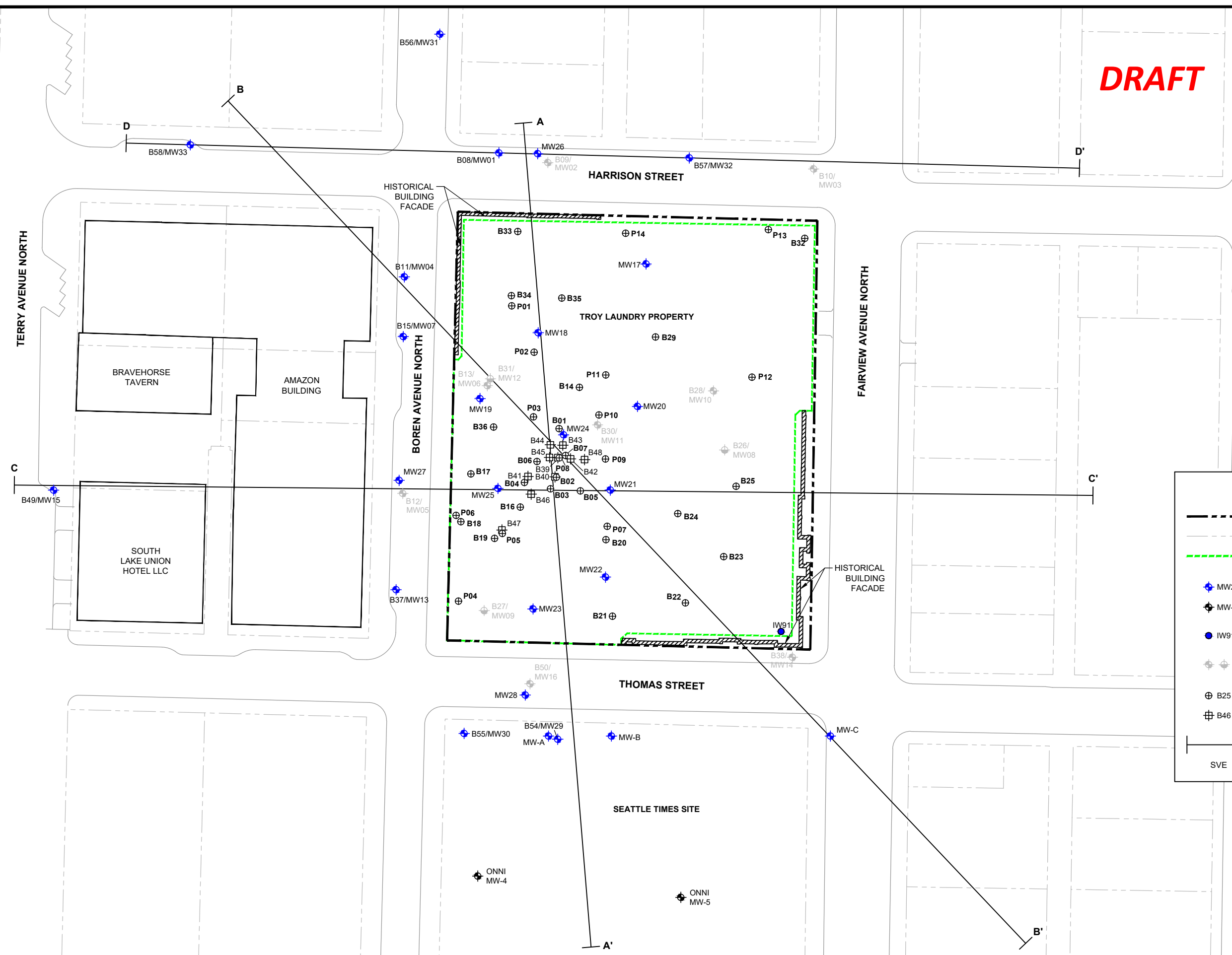
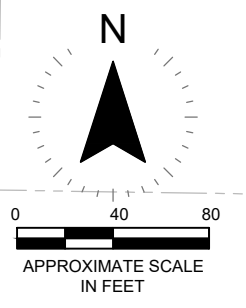


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**FIGURE 3**  
SITE LOCATION MAP



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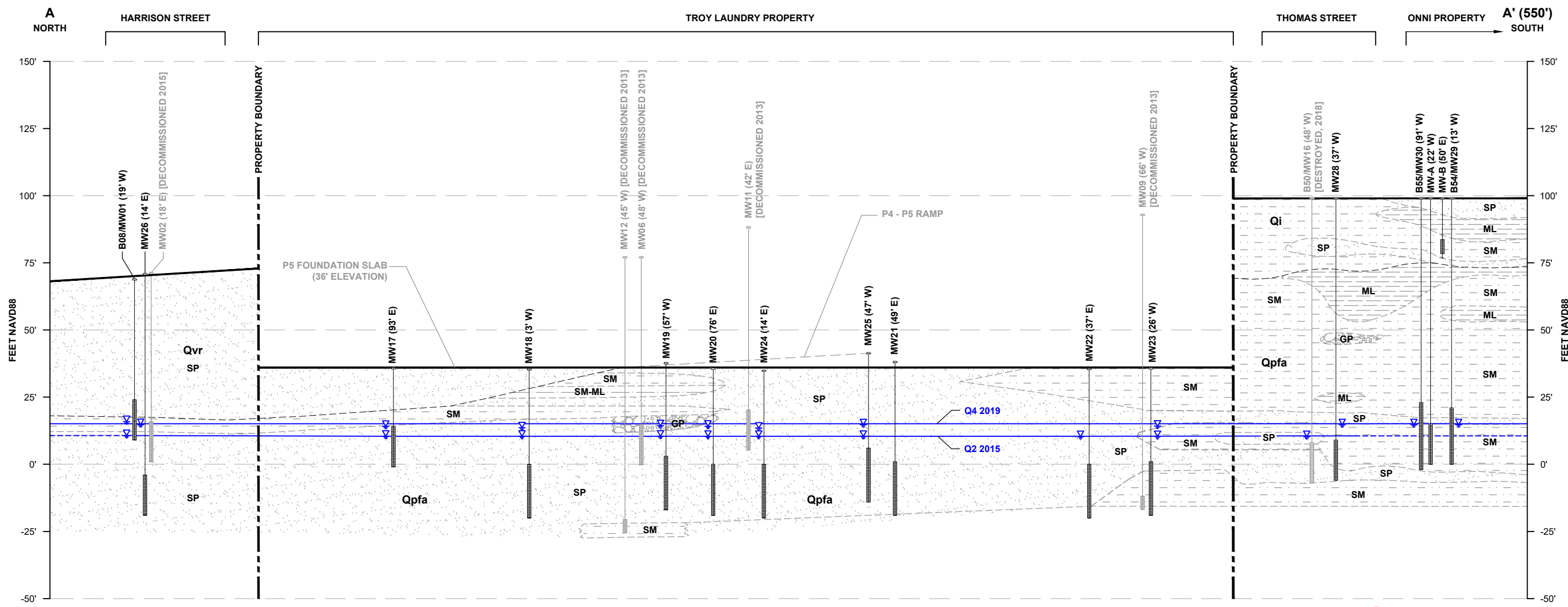
LEGEND	
	PROPERTY BOUNDARY
	PARCEL BOUNDARY
	REDEVELOPMENT EXCAVATION AREA
	MONITORING WELL
	MONITORING WELL (ENVIRONMENTAL PARTNERS INC)
	INJECTION WELL CONVERTED TO MONITORING WELL
	DECOMMISSIONED/DESTROYED MONITORING WELL
	SOIL BORING
	POST-SVE CONFIRMATIONAL SOIL BORING
	CROSS SECTION LOCATION
	SVE
	SOIL VAPOR EXTRACTION



TROY LAUNDRY SEATTLE SITE  
 300 BOREN AVENUE NORTH AND  
 399 FAIRVIEW AVENUE NORTH  
 SEATTLE, WASHINGTON  
 SOUNDEARTH PROJECT #0731-004

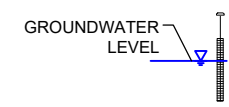
**FIGURE 4**  
 REMEDIAL INVESTIGATION  
 EXPLORATION LOCATION MAP





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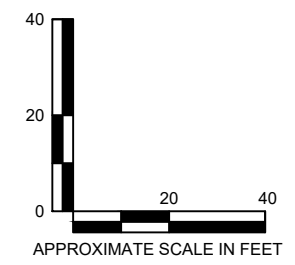
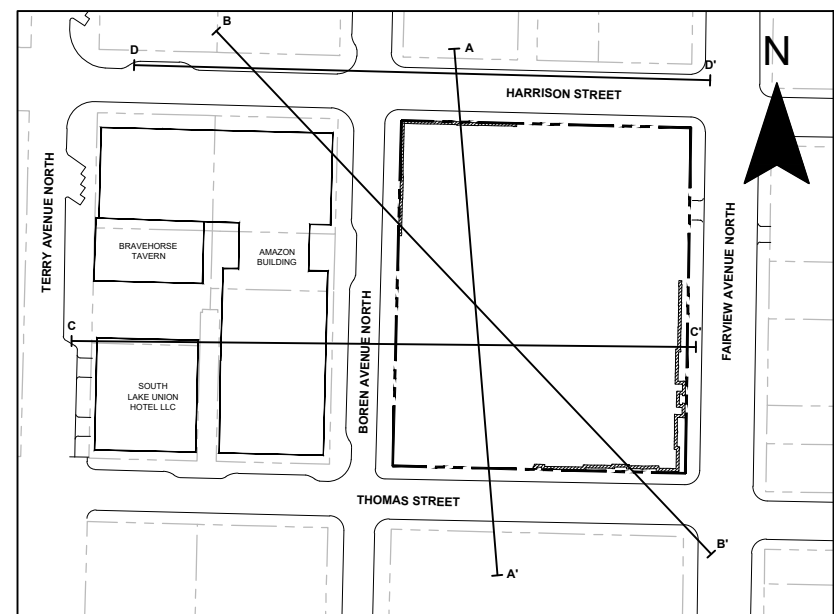
**LEGEND**



- SP** POORLY GRADED SAND
- SM** SILTY SAND
- ML** SILT
- SM-ML** SILTY SAND AND SILT
- GP** POORLY GRADED GRAVEL

- Qvr** VASHON RECESSONAL OUTWASH DEPOSITS
- Qi** ICE-CONTACT DEPOSITS
- Qpfa** PRE-FRASER NONGLACIAL DEPOSITS
- NAVD88** NORTH AMERICAN VERTICAL DATUM OF 1988

**NOTE:**  
SOIL TYPES BASED ON UNIFIED SOIL CLASSIFICATION SYSTEM VISUAL ASSESSMENT

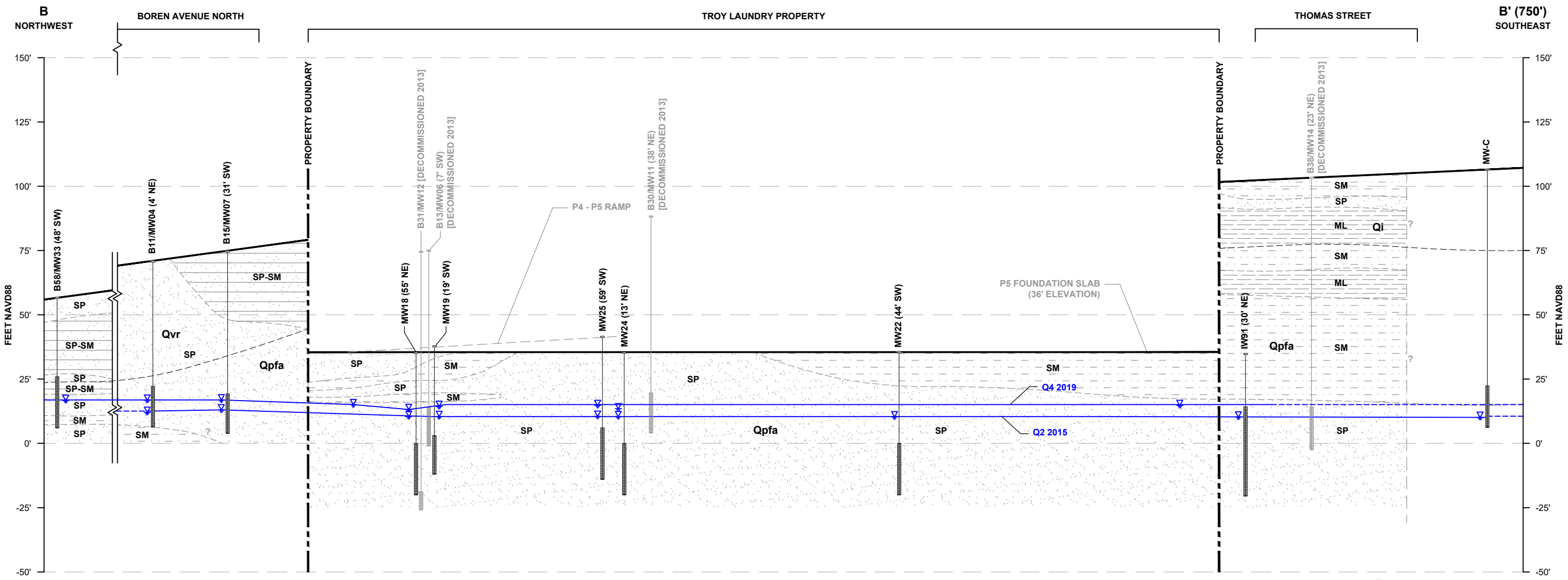


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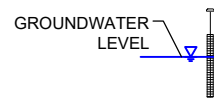
**FIGURE 5**  
CROSS SECTION A - A'

P:\0731 TOUCHSTONE\0731-004 TROY LAUNDRY\TECHNICAL\CAD\2021\1DRAFT\_FS\_REPORT\SEPTEMBER UPDATE\0731-004\_2021FS\_SCTN-AA-BB.DWG 9/24/2021



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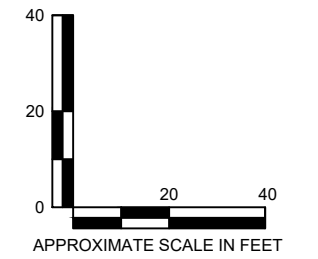
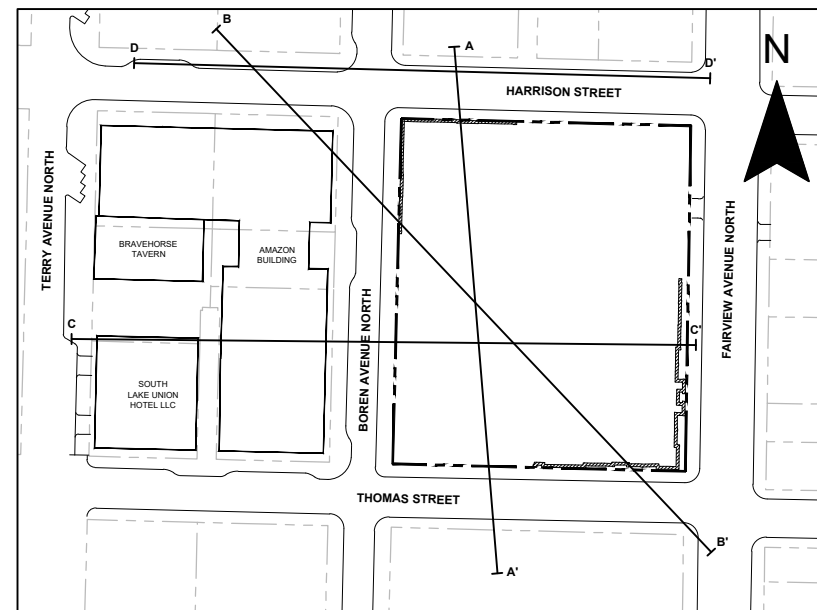
**LEGEND**



- SP** POORLY GRADED SAND
- SM** SILTY SAND
- ML** SILT
- SP-SM** POORLY GRADED SAND AND SILTY SAND

**NOTE:**  
SOIL TYPES BASED ON UNIFIED SOIL CLASSIFICATION SYSTEM VISUAL ASSESSMENT

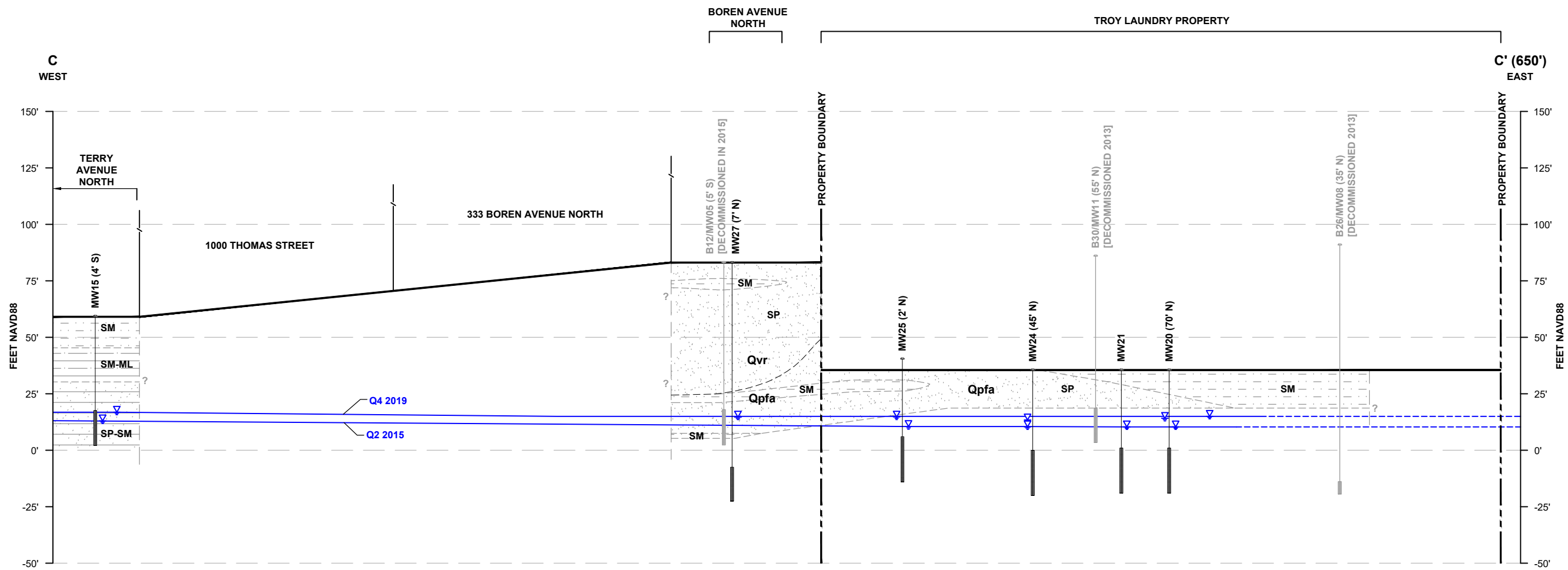
- Qvr** VASHON RECESSONAL OUTWASH DEPOSITS
- Qi** ICE-CONTACT DEPOSITS
- Qpfa** PRE-FRASER NONGLACIAL DEPOSITS
- NAVD88** NORTH AMERICAN VERTICAL DATUM OF 1988



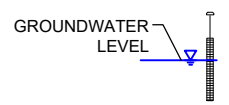
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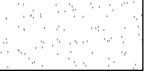

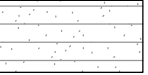

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**FIGURE 6**  
CROSS SECTION B - B'



**LEGEND**

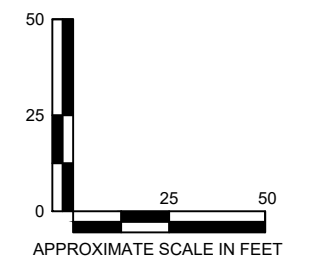
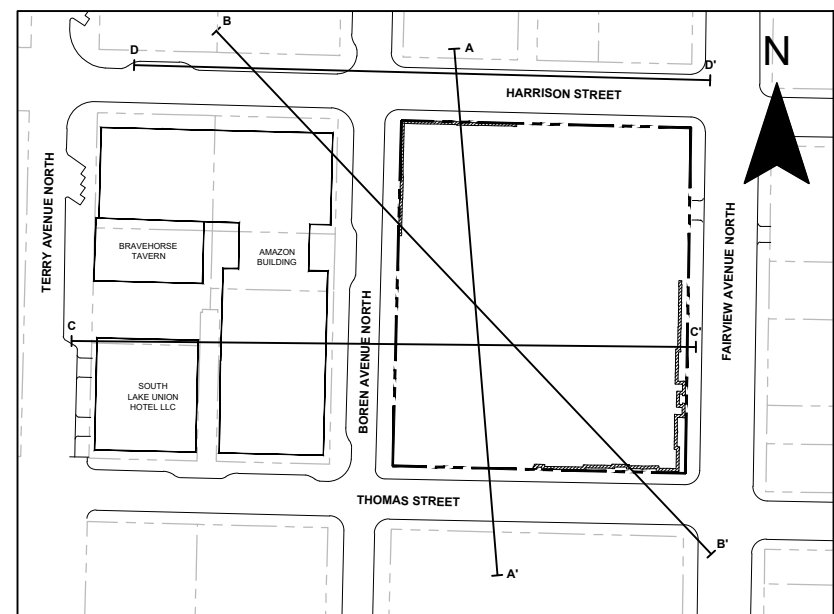


-  **SP**  
POORLY GRADED SAND
-  **SM**  
SILTY SAND
-  **SP-SM**  
POORLY GRADED SAND AND SILTY SAND
-  **SM-ML**  
SILTY SAND AND SILT

- Qvr** VASHON RECESSONAL OUTWASH DEPOSITS
- Qpfa** PRE-FRASER NONGLACIAL DEPOSITS
- NAVD88** NORTH AMERICAN VERTICAL DATUM OF 1988

**NOTE:**  
SOIL TYPES BASED ON UNIFIED SOIL CLASSIFICATION SYSTEM VISUAL ASSESSMENT

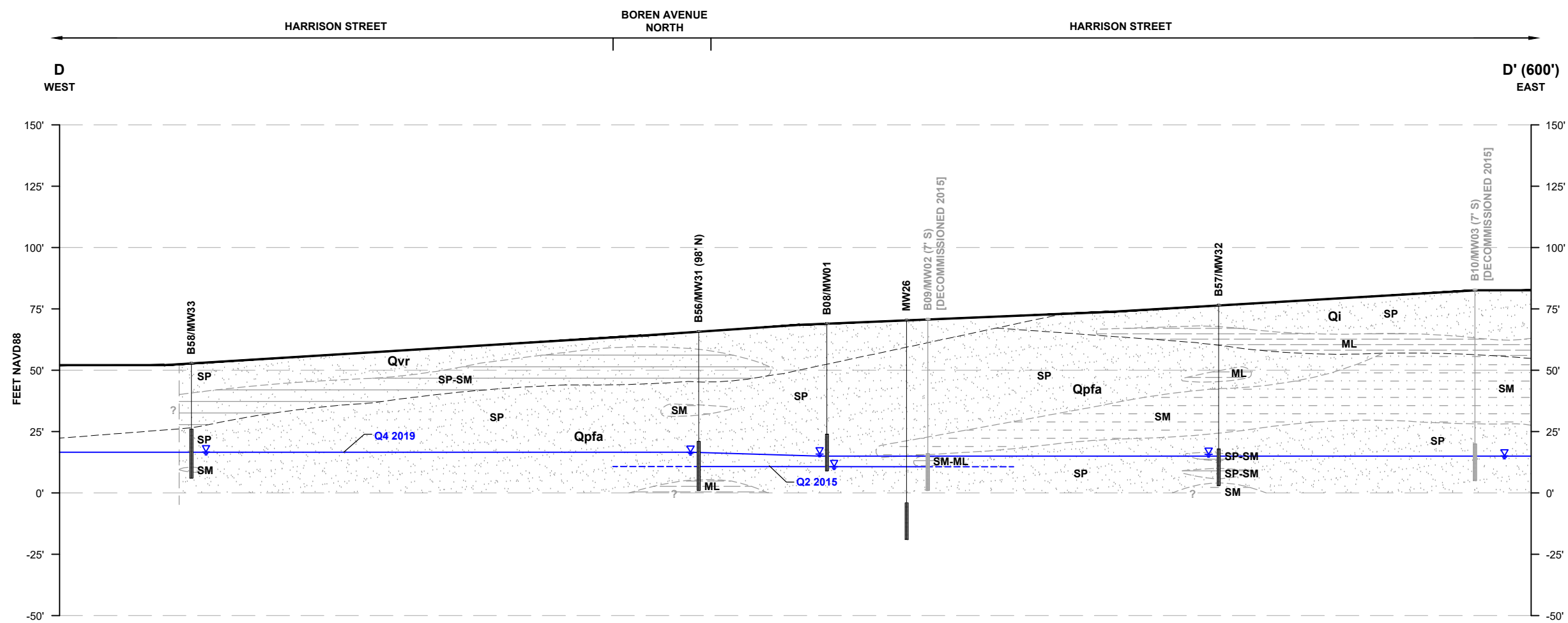
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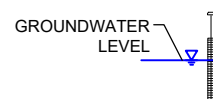
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**FIGURE 7**  
CROSS SECTION C - C'



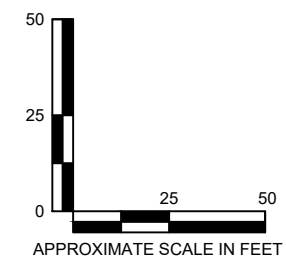
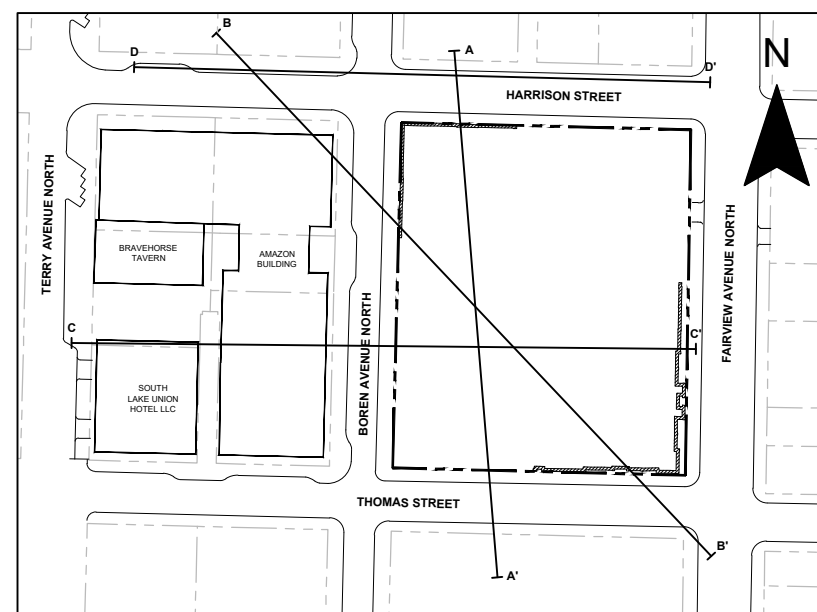
**LEGEND**



- |  |   |  |
|--|---|--|
|  | <b>SP</b><br>POORLY GRADED SAND                   | <b>Qvr</b><br>VASHON RECESSONAL OUTWASH DEPOSITS |
|  | <b>SM</b><br>SILTY SAND                           | <b>Qi</b><br>ICE-CONTACT DEPOSITS                |
|  | <b>ML</b><br>SILT                                 | <b>Qpfa</b><br>PRE-FRASER NONGLACIAL DEPOSITS    |
|  | <b>SP-SM</b><br>POORLY GRADED SAND AND SILTY SAND | NAVD88<br>NORTH AMERICAN VERTICAL DATUM OF 1988  |
|  | <b>SM-ML</b><br>SILTY SAND AND SILT               |  |

**NOTE:**  
SOIL TYPES BASED ON UNIFIED SOIL CLASSIFICATION SYSTEM VISUAL ASSESSMENT

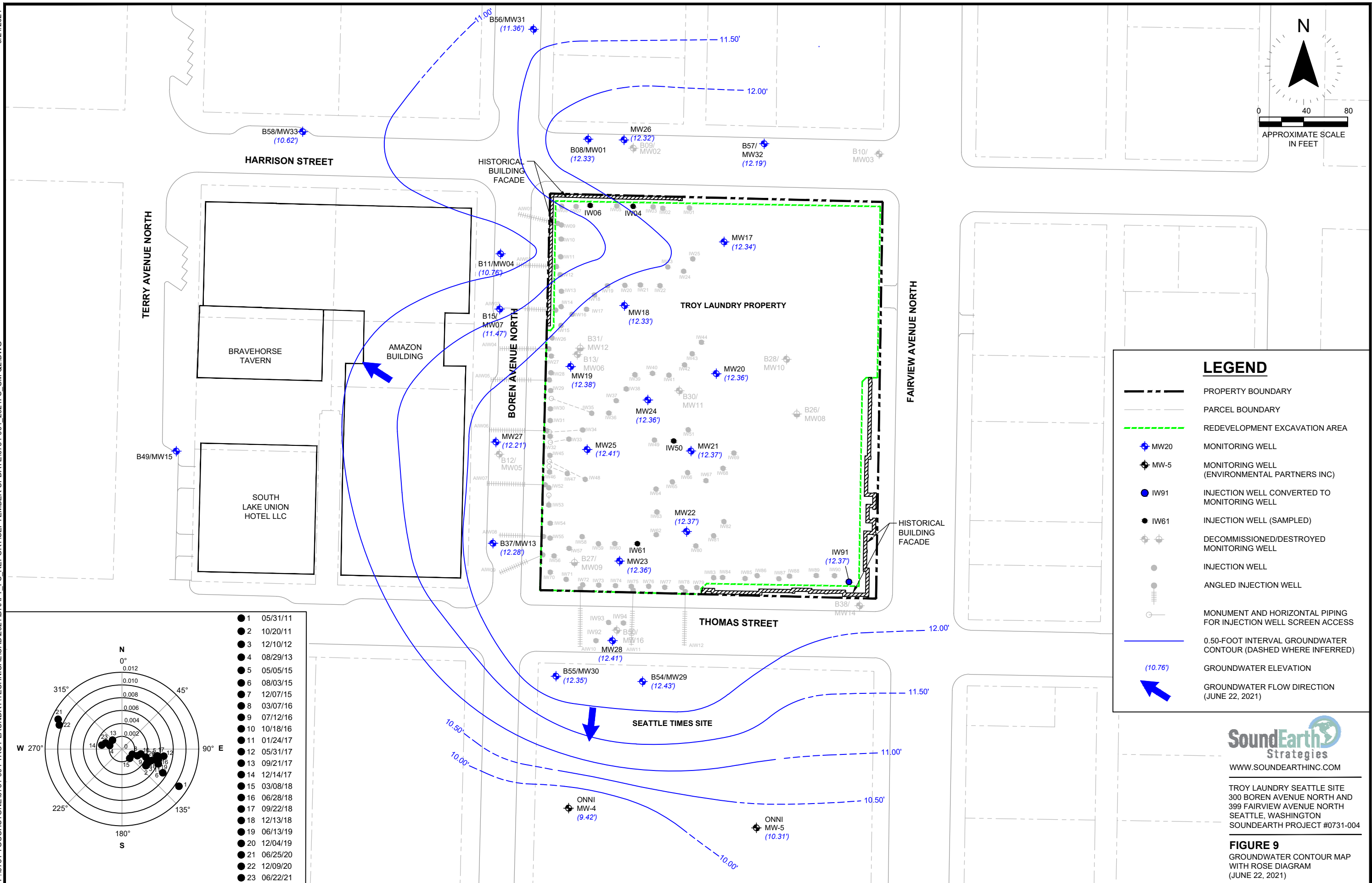
**DRAFT**



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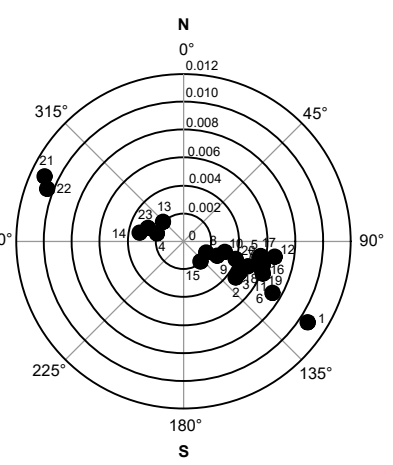
**FIGURE 8**  
CROSS SECTION D - D'



**LEGEND**

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20 MONITORING WELL
- MW-5 MONITORING WELL (ENVIRONMENTAL PARTNERS INC)
- IW91 INJECTION WELL CONVERTED TO MONITORING WELL
- IW61 INJECTION WELL (SAMPLED)
- DECOMMISSIONED/DESTROYED MONITORING WELL
- INJECTION WELL
- ANGLED INJECTION WELL
- MONUMENT AND HORIZONTAL PIPING FOR INJECTION WELL SCREEN ACCESS
- 0.50-FOOT INTERVAL GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- (10.76) GROUNDWATER ELEVATION
- (10.76) GROUNDWATER FLOW DIRECTION (JUNE 22, 2021)

- 1 05/31/11
- 2 10/20/11
- 3 12/10/12
- 4 08/29/13
- 5 05/05/15
- 6 08/03/15
- 7 12/07/15
- 8 03/07/16
- 9 07/12/16
- 10 10/18/16
- 11 01/24/17
- 12 05/31/17
- 13 09/21/17
- 14 12/14/17
- 15 03/08/18
- 16 06/28/18
- 17 09/22/18
- 18 12/13/18
- 19 06/13/19
- 20 12/04/19
- 21 06/25/20
- 22 12/09/20
- 23 06/22/21

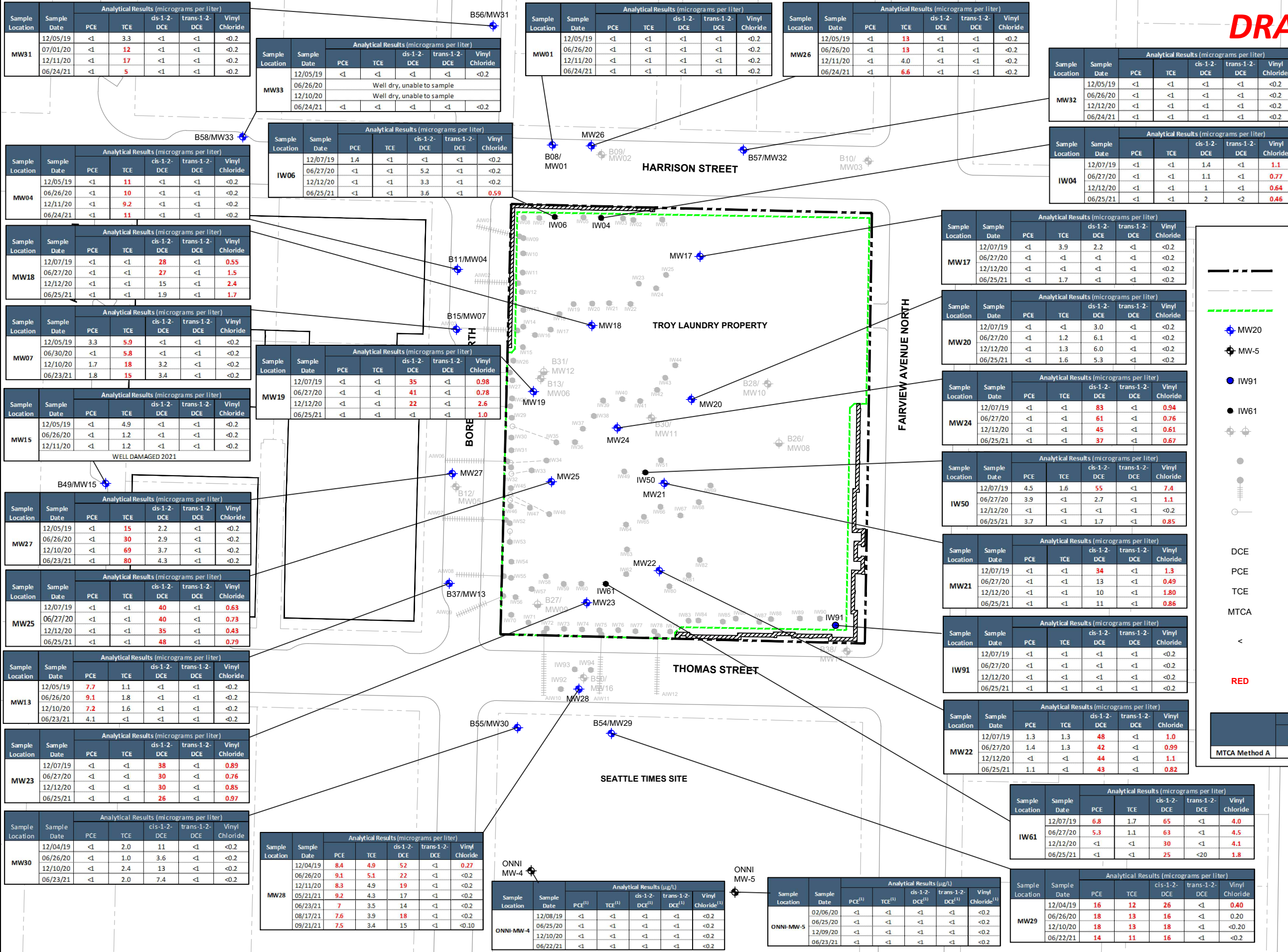


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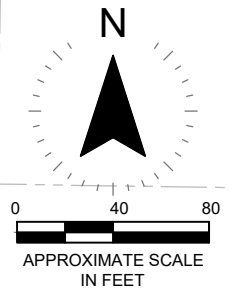
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**FIGURE 9**  
GROUNDWATER CONTOUR MAP  
WITH ROSE DIAGRAM  
(JUNE 22, 2021)





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**LEGEND**

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20 MONITORING WELL
- MW-5 MONITORING WELL (ENVIRONMENTAL PARTNERS INC)
- IW91 INJECTION WELL CONVERTED TO MONITORING WELL
- IW61 INJECTION WELL (SAMPLED)
- DECOMMISSIONED/ DESTROYED MONITORING WELL
- INJECTION WELL
- ANGLED INJECTION WELL
- MONUMENT AND HORIZONTAL PIPING FOR INJECTION WELL SCREEN ACCESS
- DCE DICHLOROETHENE
- PCE TETRACHLOROETHENE
- TCE TRICHLOROETHENE
- MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT
- < NOT DETECTED AT A CONCENTRATION EXCEEDING LABORATORY REPORTING LIMIT
- RED DENOTES CONCENTRATIONS EXCEEDING THE MTCA METHOD CLEANUP LEVEL FOR GROUNDWATER

MTCA Method A	Analytical Results (micrograms per liter)				
	PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
	5	5	16	160	0.2



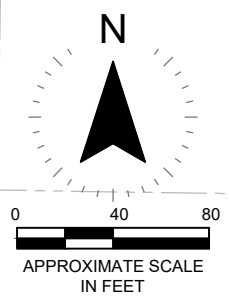
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**FIGURE 10**  
 GROUNDWATER ANALYTICAL RESULTS FOR CHLORINATED VOLATILE ORGANIC COMPOUNDS



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**LEGEND**

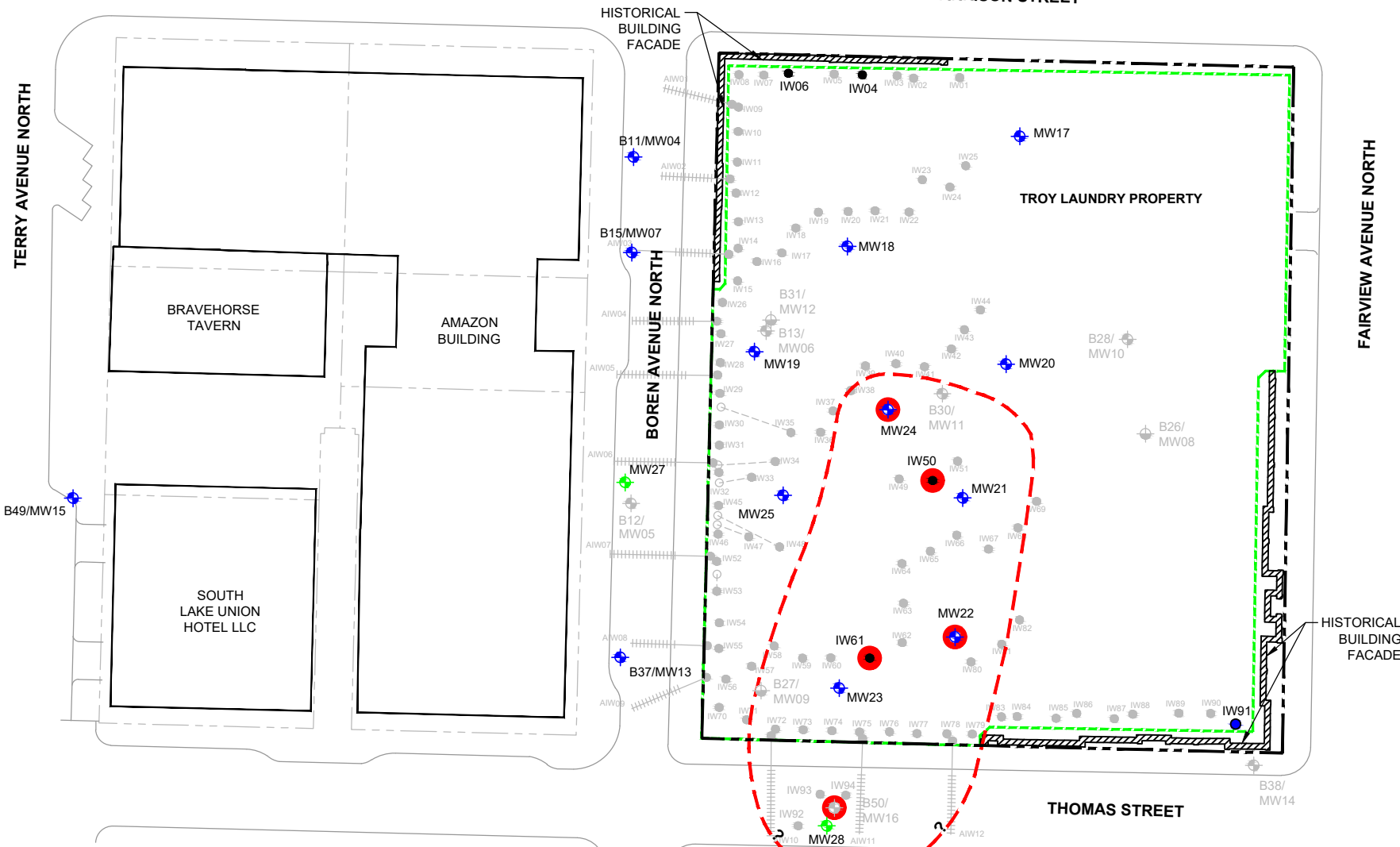
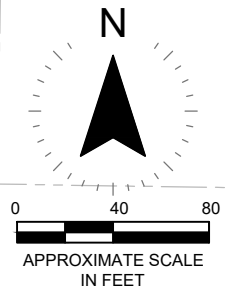
- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20 MONITORING WELL
- MW26 FUTURE GROUNDWATER MONITORING WELL NOT PRESENT DURING 2015 BASELINE GROUNDWATER MONITORING EVENT
- MW-5 MONITORING WELL (NOT SAMPLED) (ENVIRONMENTAL PARTNERS INC)
- IW91 INJECTION WELL CONVERTED TO MONITORING WELL
- IW61 INJECTION WELL (SAMPLED)
- DECOMMISSIONED/DESTROYED MONITORING WELL
- APPROXIMATE EXTENTS OF PRE-TREATMENT PCE AND TCE PLUME ABOVE MTCA CLEANUP LEVEL ORIGINATING FROM THE TROY PROPERTY
- DENOTES PCE CONCENTRATION EXCEEDS APPLICABLE MTCA CLEANUP LEVEL
- DENOTES TCE CONCENTRATION EXCEEDS APPLICABLE MTCA CLEANUP LEVEL
- CVOC CHLORINATED VOLATILE ORGANIC COMPOUND
- PCE TETRACHLOROETHENE
- TCE TRICHLOROETHENE
- MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT



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**FIGURE 11**  
 EXTENT OF TROY PROPERTY PCE AND TCE  
 GROUNDWATER PLUME - PRE-INTERIM  
 REMEDIAL ACTION (Q2 2015)

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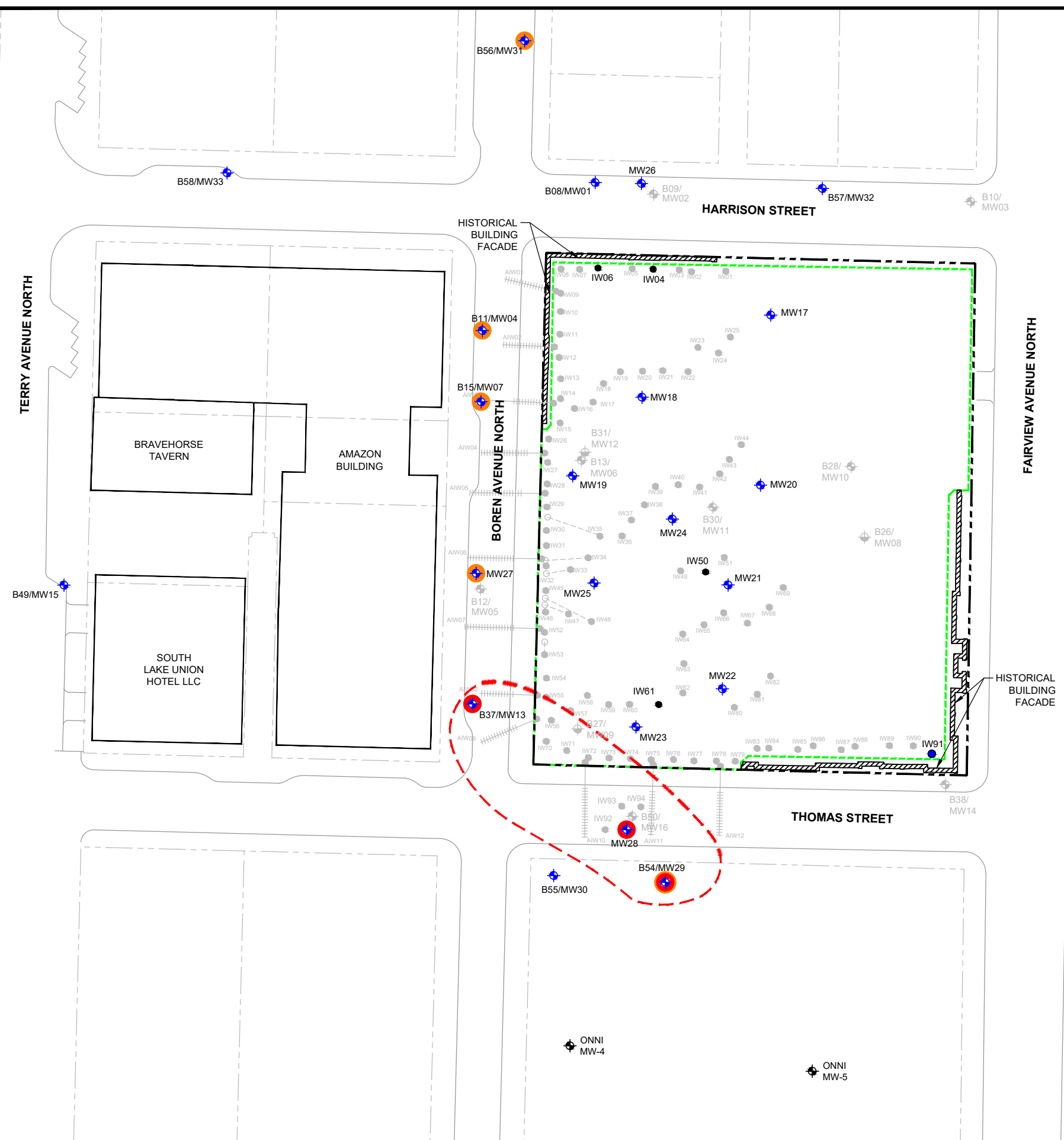
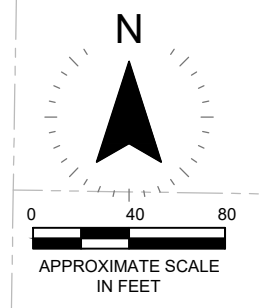
LEGEND	
	PROPERTY BOUNDARY
	PARCEL BOUNDARY
	REDEVELOPMENT EXCAVATION AREA
	MONITORING WELL
	FUTURE GROUNDWATER MONITORING WELL NOT PRESENT DURING 2015 BASELINE GROUNDWATER MONITORING EVENT
	MONITORING WELL (NOT SAMPLED) (ENVIRONMENTAL PARTNERS INC)
	INJECTION WELL CONVERTED TO MONITORING WELL
	INJECTION WELL (SAMPLED)
	DECOMMISSIONED/DESTROYED MONITORING WELL
	APPROXIMATE EXTENTS OF PRE-TREATMENT VC/cis-1,2-DCE PLUME ABOVE MTCA CLEANUP LEVEL ORIGINATING FROM THE TROY PROPERTY
	DENOTES VC/cis-1,2-DCE CONCENTRATIONS EXCEED APPLICABLE MTCA CLEANUP LEVEL
	CVOC CHLORINATED VOLATILE ORGANIC COMPOUND
	DCE DICHLOROETHENE
	VC VINYL CHLORIDE
	MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT



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**FIGURE 12**  
EXTENT OF TROY PROPERTY  
VC/cis-1,2-DCE GROUNDWATER PLUME -  
PRE-INTERIM REMEDIAL ACTION (Q2 2015)

**DRAFT**



### LEGEND

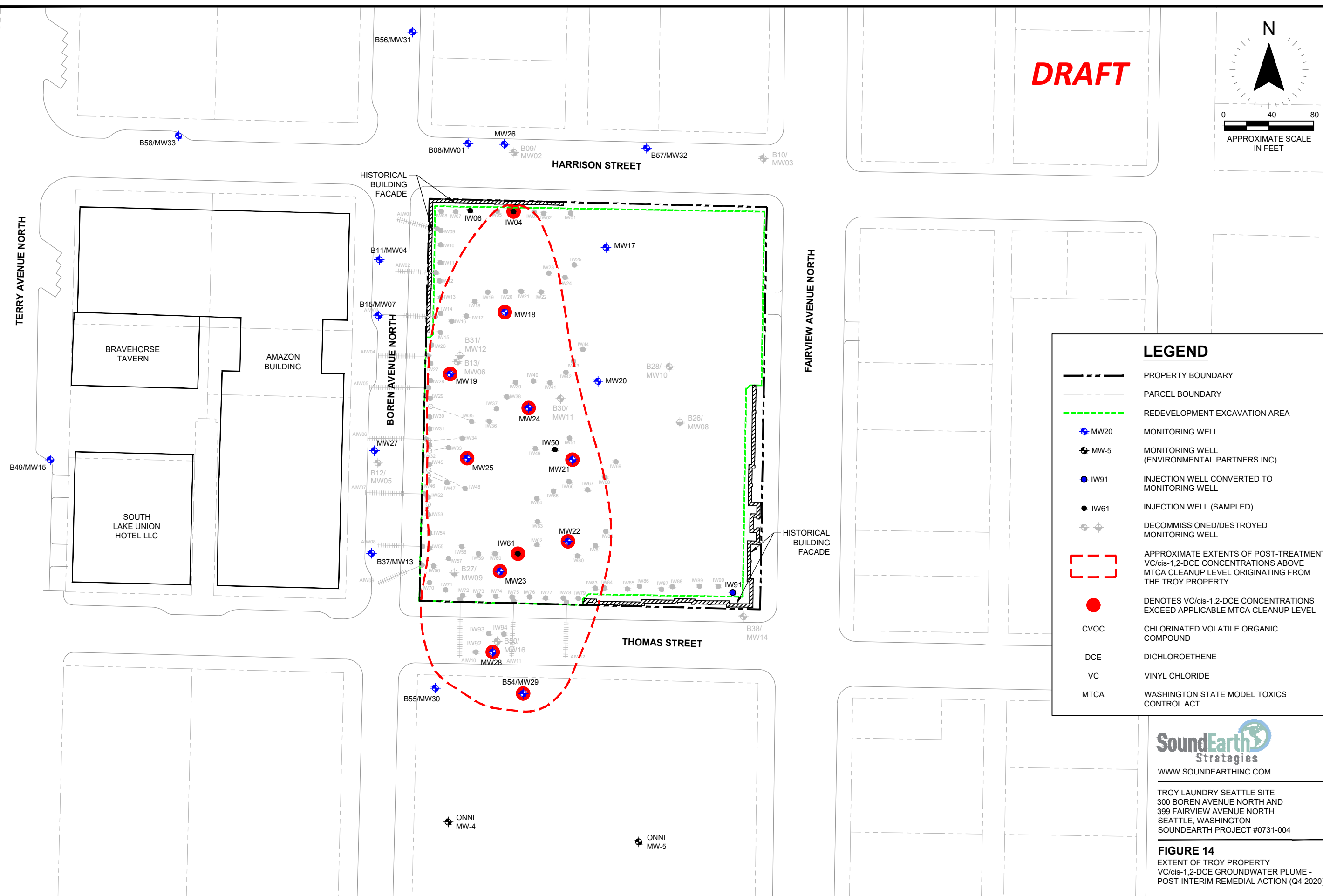
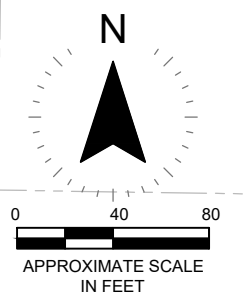
- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20 MONITORING WELL
- MW-5 MONITORING WELL (ENVIRONMENTAL PARTNERS INC)
- IW91 INJECTION WELL CONVERTED TO MONITORING WELL
- IW61 INJECTION WELL (SAMPLED)
- DECOMMISSIONED/DESTROYED MONITORING WELL
- APPROXIMATE EXTENTS OF POST-TREATMENT PCE AND TCE CONCENTRATIONS ABOVE MTCA CLEANUP LEVEL ORIGINATING FROM THE TROY PROPERTY
- DENOTES PCE CONCENTRATION EXCEEDS APPLICABLE MTCA CLEANUP LEVEL
- DENOTES TCE CONCENTRATION EXCEEDS APPLICABLE MTCA CLEANUP LEVEL
- CVOC CHLORINATED VOLATILE ORGANIC COMPOUND
- PCE TETRACHLOROETHENE
- TCE TRICHLOROETHENE
- MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT



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**FIGURE 13**  
 EXTENT OF TROY PROPERTY PCE AND TCE  
 GROUNDWATER PLUME - POST-INTERIM  
 REMEDIAL ACTION (Q4 2020)

**DRAFT**



**LEGEND**

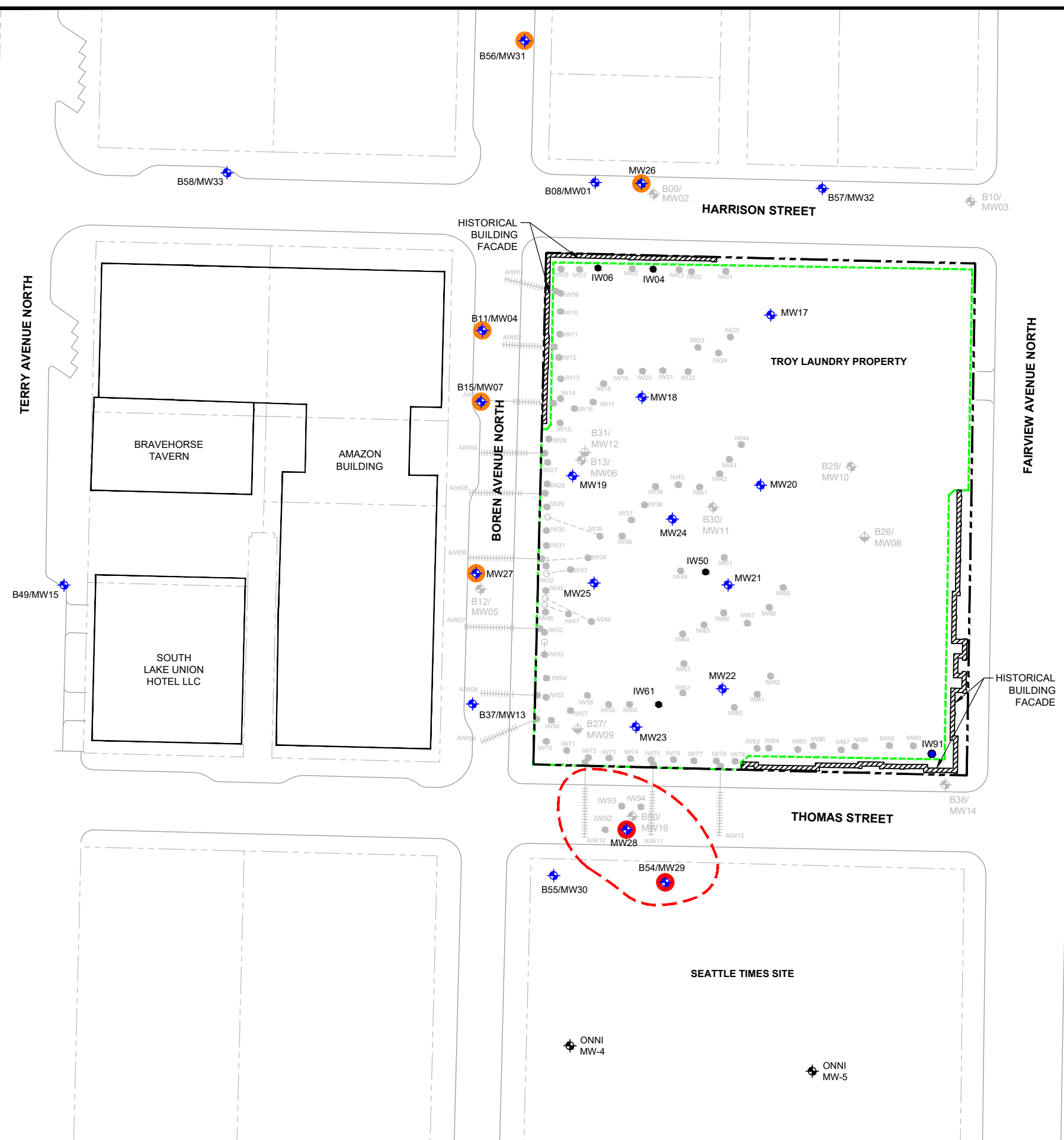
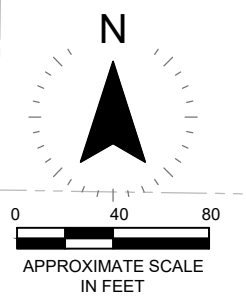
- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20
- MW-5
- IW91
- IW61
- DECOMMISSIONED/DESTROYED MONITORING WELL
- APPROXIMATE EXTENTS OF POST-TREATMENT VC/cis-1,2-DCE CONCENTRATIONS ABOVE MTCA CLEANUP LEVEL ORIGINATING FROM THE TROY PROPERTY
- DENOTES VC/cis-1,2-DCE CONCENTRATIONS EXCEED APPLICABLE MTCA CLEANUP LEVEL
- CVOC** CHLORINATED VOLATILE ORGANIC COMPOUND
- DCE** DICHLOROETHENE
- VC** VINYL CHLORIDE
- MTCA** WASHINGTON STATE MODEL TOXICS CONTROL ACT



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**FIGURE 14**  
EXTENT OF TROY PROPERTY  
VC/cis-1,2-DCE GROUNDWATER PLUME -  
POST-INTERIM REMEDIAL ACTION (Q4 2020)

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### LEGEND

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20 MONITORING WELL
- MW-5 MONITORING WELL (NOT SAMPLED) (ENVIRONMENTAL PARTNERS INC)
- IW91 INJECTION WELL CONVERTED TO MONITORING WELL
- IW61 INJECTION WELL (SAMPLED)
- DECOMMISSIONED/DESTROYED MONITORING WELL
- APPROXIMATE EXTENTS OF POST-TREATMENT PCE AND TCE PLUME ABOVE MTCA CLEANUP LEVEL ORIGINATING FROM THE TROY PROPERTY
- DENOTES PCE CONCENTRATION EXCEEDS APPLICABLE MTCA CLEANUP LEVEL
- DENOTES TCE CONCENTRATION EXCEEDS APPLICABLE MTCA CLEANUP LEVEL
- CVOC CHLORINATED VOLATILE ORGANIC COMPOUND
- PCE TETRACHLOROETHENE
- TCE TRICHLOROETHENE
- MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT

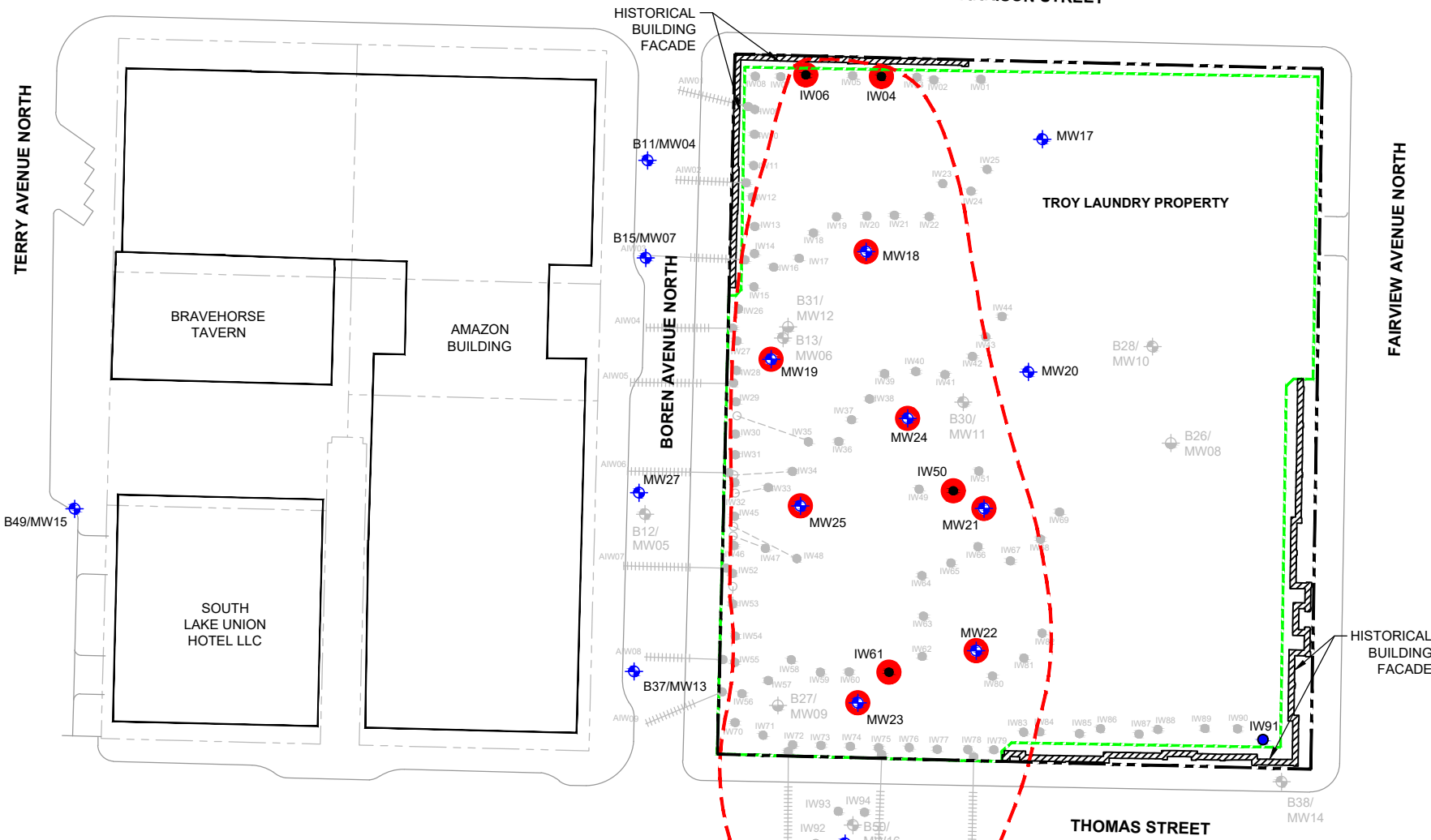
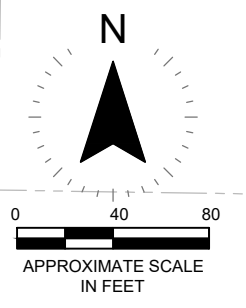
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**FIGURE 15**  
 EXTENT OF TROY PROPERTY PCE AND TCE  
 GROUNDWATER PLUME - POST-INTERIM  
 REMEDIAL ACTION (Q2 2021)



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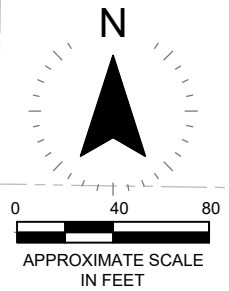
LEGEND	
	PROPERTY BOUNDARY
	PARCEL BOUNDARY
	REDEVELOPMENT EXCAVATION AREA
	MW20 MONITORING WELL
	MW-5 MONITORING WELL (NOT SAMPLED) (ENVIRONMENTAL PARTNERS INC)
	IW91 INJECTION WELL CONVERTED TO MONITORING WELL
	IW61 INJECTION WELL (SAMPLED)
	DECOMMISSIONED/DESTROYED MONITORING WELL
	APPROXIMATE EXTENTS OF POST-TREATMENT VC/cis-1,2-DCE PLUME ABOVE MTCA CLEANUP LEVEL ORIGINATING FROM THE TROY PROPERTY
	DENOTES VC/cis-1,2-DCE CONCENTRATIONS EXCEED APPLICABLE MTCA CLEANUP LEVEL
	CVOC CHLORINATED VOLATILE ORGANIC COMPOUND
	DCE DICHLOROETHENE
	VC VINYL CHLORIDE
	MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT



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**FIGURE 16**  
EXTENT OF TROY PROPERTY VC/cis-1,2-DCE  
GROUNDWATER PLUME - POST-INTERIM  
REMEDIAL ACTION (Q2 2021)





**LEGEND**

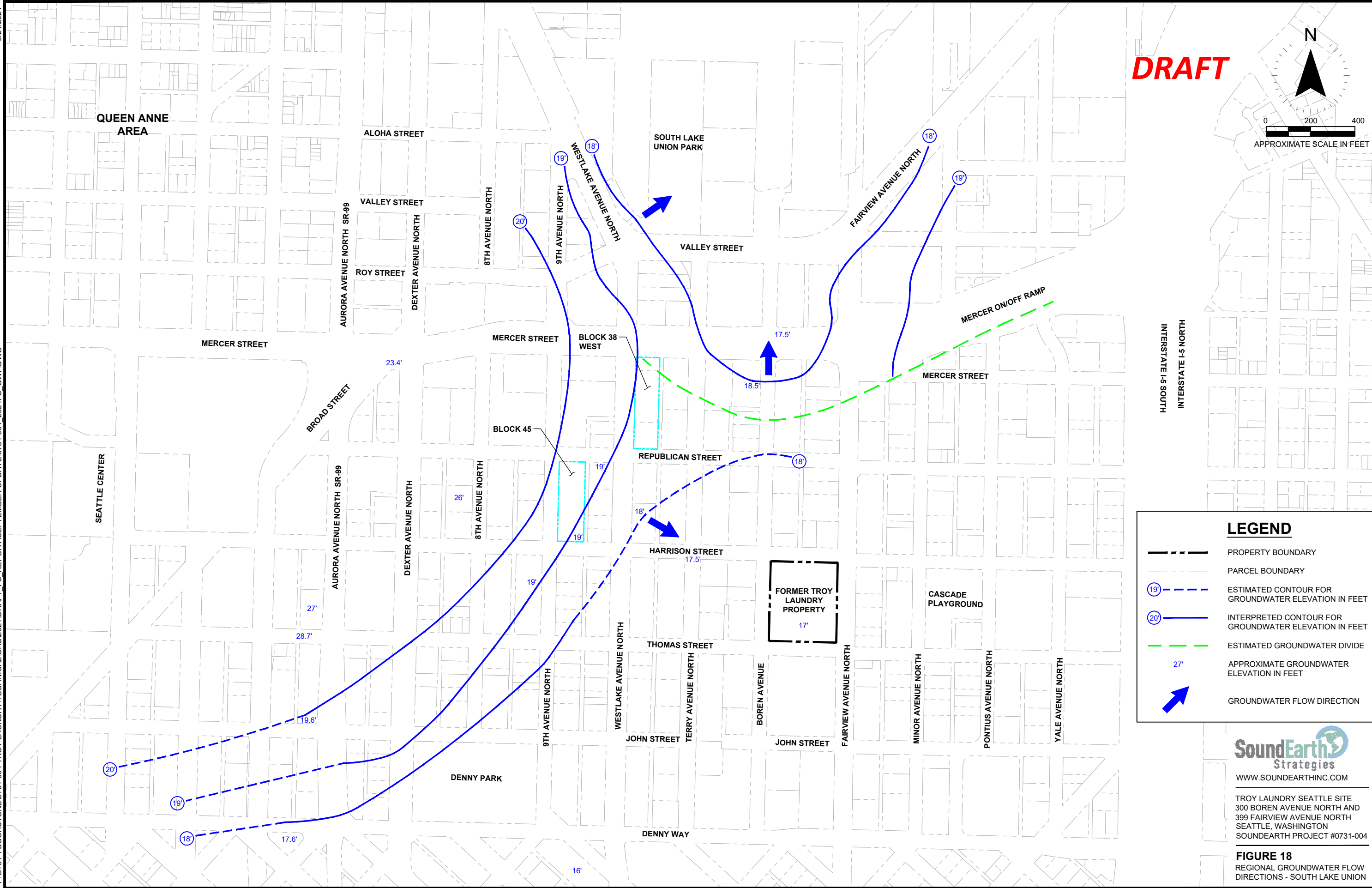
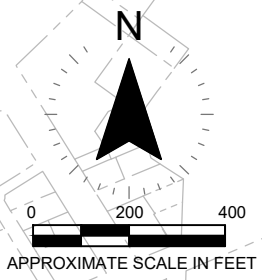
- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20 MONITORING WELL
- MW-5 MONITORING WELL (NOT SAMPLED) (ENVIRONMENTAL PARTNERS INC)
- IW91 INJECTION WELL CONVERTED TO MONITORING WELL
- IW61 INJECTION WELL (SAMPLED)
- DECOMMISSIONED/DESTROYED MONITORING WELL
- TROY SITE BOUNDARY BASED ON THE EXTENT OF CVOC GROUNDWATER PLUME ABOVE MTCA CLEANUP LEVEL (Q4 2020 AND Q2 2021)
- APPROXIMATE EXTENT OF POTENTIAL COMINGLING OF CVOC IMPACTS ORIGINATING FROM THE TROY PROPERTY AND TCE IMPACTS ORIGINATING OFF-PROPERTY
- DENOTES PCE/VC/cis-1,2-DCE CONCENTRATION EXCEEDS APPLICABLE MTCA CLEANUP LEVEL
- DENOTES TCE CONCENTRATION EXCEEDS APPLICABLE MTCA CLEANUP LEVEL
- DENOTES VC CONCENTRATION EXCEEDS PROPOSED CLEANUP LEVEL
- CVOC CHLORINATED VOLATILE ORGANIC COMPOUND
- DCE DICHOROETHENE
- PCE TETRACHOROETHENE
- TCE TRICHLOROETHENE
- VC VINYL CHLORIDE
- MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT



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**FIGURE 17**  
 TROY SITE BOUNDARY MAP

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**LEGEND**

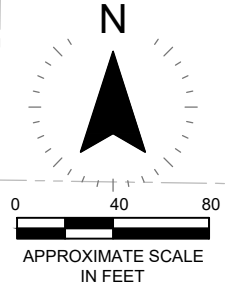
- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- ESTIMATED CONTOUR FOR GROUNDWATER ELEVATION IN FEET (19')
- INTERPRETED CONTOUR FOR GROUNDWATER ELEVATION IN FEET (20')
- ESTIMATED GROUNDWATER DIVIDE
- APPROXIMATE GROUNDWATER ELEVATION IN FEET (27')
- GROUNDWATER FLOW DIRECTION

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TROY LAUNDRY SEATTLE SITE  
 300 BOREN AVENUE NORTH AND  
 399 FAIRVIEW AVENUE NORTH  
 SEATTLE, WASHINGTON  
 SOUNDEARTH PROJECT #0731-004

**FIGURE 18**  
 REGIONAL GROUNDWATER FLOW  
 DIRECTIONS - SOUTH LAKE UNION

**DRAFT**



Proposed Cleanup Level	Analytical Results (micrograms per liter)			
	PCE	TCE	dis-1-2-DCE	Vinyl Chloride
	5	5	70	2

**LEGEND**

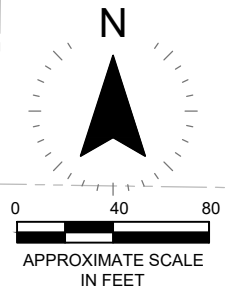
- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20
- MW-5
- IW91
- IW61
- DECOMMISSIONED/DESTROYED MONITORING WELL
- IW-96
- APPROXIMATE EXTENTS OF POST-TREATMENT PCE AND TCE PLUME ABOVE PROPOSED CLEANUP LEVELS ORIGINATING FROM THE TROY PROPERTY (Q4 2020 AND Q2 2021)
- DENOTES PCE CONCENTRATION EXCEEDS PROPOSED CLEANUP LEVEL
- DENOTES TCE CONCENTRATION EXCEEDS PROPOSED CLEANUP LEVEL
- DENOTES VC CONCENTRATION EXCEEDS PROPOSED CLEANUP LEVEL
- CVOC
- DCE
- PCE
- TCE
- VC



TROY LAUNDRY SEATTLE SITE  
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**FIGURE 19**  
 CLEANUP ACTION ALTERNATIVE 1,  
 MNA AND ENVIRONMENTAL COVENANT

**DRAFT**



TERRY AVENUE NORTH

B49/MW15

BRAVEHORSE TAVERN

AMAZON BUILDING

SOUTH LAKE UNION HOTEL LLC

HISTORICAL BUILDING FACADE

B11/MW04

B15/MW07

B13/MW06

B31/MW12

B13/MW06

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

B30/MW11

HARRISON STREET

B56/MW31

B08/MW01

MW26

B09/MW02

B57/MW32

B10/MW03

TROY LAUNDRY PROPERTY

MW17

MW18

MW19

MW20

MW21

MW22

MW23

MW24

MW25

MW26

MW27

MW28

MW29

MW30

MW31

MW32

MW33

MW34

MW35

MW36

MW37

MW38

MW39

MW40

FAIRVIEW AVENUE NORTH

HISTORICAL BUILDING FACADE

THOMAS STREET

B55/MW30

ONNI MW-4

ONNI MW-5

SEATTLE TIMES SITE

Proposed Cleanup Level	Analytical Results (micrograms per liter)			
	PCE	TCE	dis-1-2-DCE	Vinyl Chloride
	5	5	70	2

**LEGEND**

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20 MONITORING WELL
- MW-5 MONITORING WELL (NOT SAMPLED) (ENVIRONMENTAL PARTNERS INC)
- IW91 INJECTION WELL CONVERTED TO MONITORING WELL
- IW61 INJECTION WELL (SAMPLED)
- DECOMMISSIONED/DESTROYED MONITORING WELL
- IW-95 PROPOSED INJECTION WELL
- APPROXIMATE EXTENTS OF POST-TREATMENT PCE AND TCE PLUME ABOVE PROPOSED CLEANUP LEVELS ORIGINATING FROM THE TROY PROPERTY (Q4 2020 AND Q2 2021)
- PROPOSED EOS INJECTION
- DENOTES PCE CONCENTRATION EXCEEDS PROPOSED CLEANUP LEVEL
- DENOTES TCE CONCENTRATION EXCEEDS PROPOSED CLEANUP LEVEL
- DENOTES VC CONCENTRATION EXCEEDS PROPOSED CLEANUP LEVEL
- CVOC CHLORINATED VOLATILE ORGANIC COMPOUND
- DCE DICHLOROETHENE
- PCE TETRACHLOROETHENE
- TCE TRICHLOROETHENE
- VC VINYL CHLORIDE

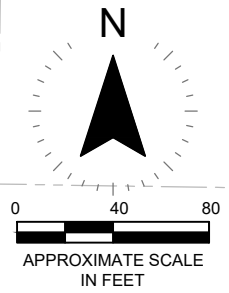


TROY LAUNDRY SEATTLE SITE  
300 BOREN AVENUE NORTH AND  
399 FAIRVIEW AVENUE NORTH  
SEATTLE, WASHINGTON  
SOUNDEARTH PROJECT #0731-004

**FIGURE 20**  
CLEANUP ACTION ALTERNATIVE 2,  
IN SITU REDUCTIVE DECHLORINATION AND  
ENVIRONMENTAL COVENANT WITH MNA



**DRAFT**



Proposed Cleanup Level	Analytical Results (micrograms per liter)			
	PCE	TCE	ds-1-2-DCE	Vinyl Chloride
	5	5	70	2

**LEGEND**

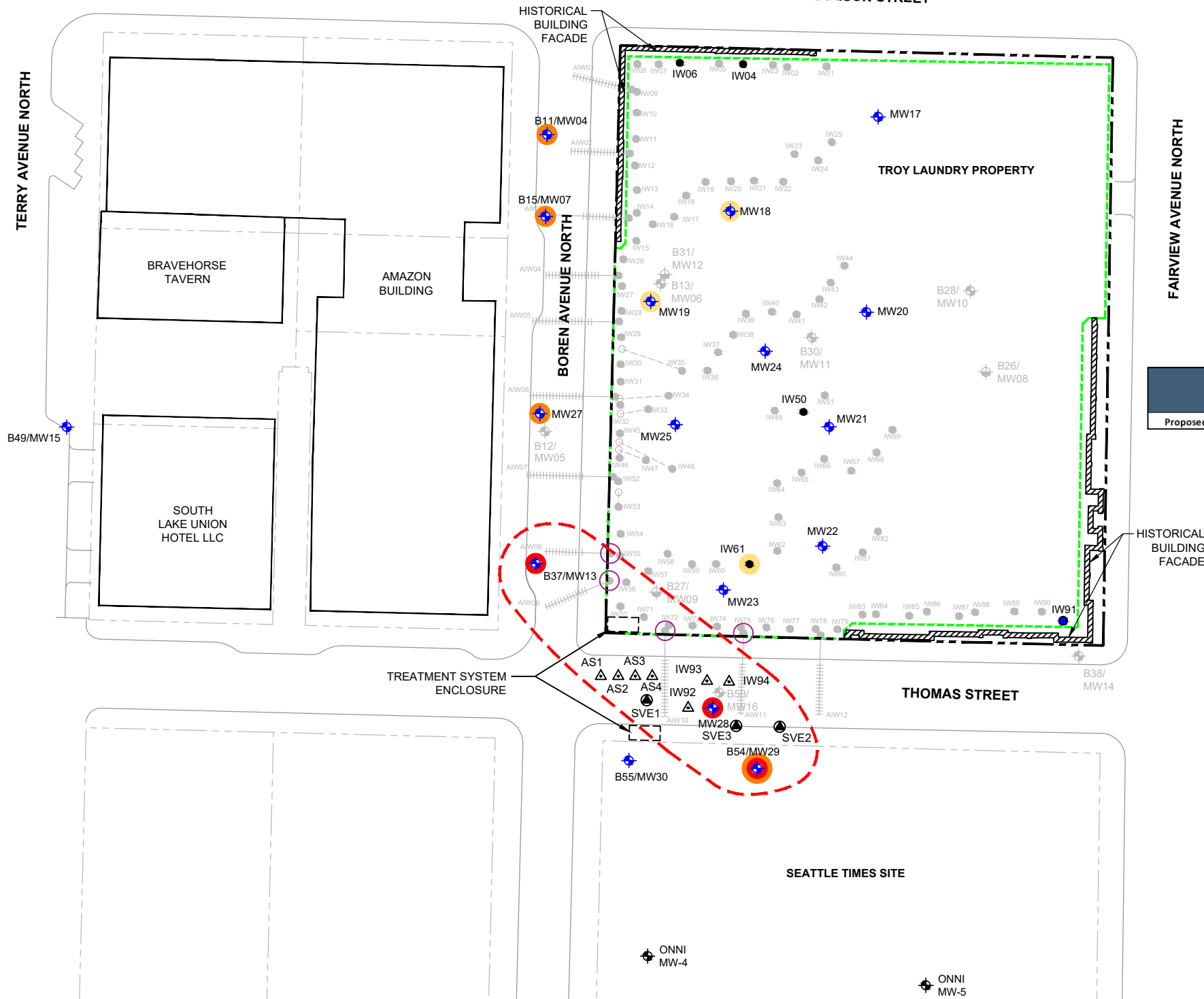
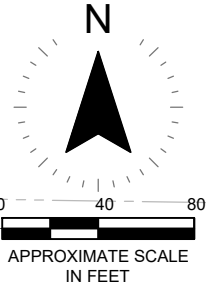
- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20 MONITORING WELL
- MW-5 MONITORING WELL (NOT SAMPLED) (ENVIRONMENTAL PARTNERS INC)
- IW91 INJECTION WELL CONVERTED TO MONITORING WELL
- IW61 INJECTION WELL (SAMPLED)
- DECOMMISSIONED/DESTROYED MONITORING WELL
- IW-95 PROPOSED INJECTION WELL
- APPROXIMATE EXTENTS OF POST-TREATMENT PCE AND TCE PLUME ABOVE PROPOSED CLEANUP LEVELS ORIGINATING FROM THE TROY PROPERTY (Q4 2020 AND Q2 2021)
- PROPOSED PAC INJECTION
- DENOTES PCE CONCENTRATION EXCEEDS PROPOSED CLEANUP LEVEL
- DENOTES TCE CONCENTRATION EXCEEDS PROPOSED CLEANUP LEVEL
- DENOTES VC CONCENTRATION EXCEEDS PROPOSED CLEANUP LEVEL
- CVOC CHLORINATED VOLATILE ORGANIC COMPOUND
- DCE DICHLOROETHENE
- PAC POWDER ACTIVATED CARBON
- PCE TETRACHLOROETHENE
- TCE TRICHLOROETHENE
- VC VINYL CHLORIDE

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 300 BOREN AVENUE NORTH  
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**FIGURE 21**  
 CLEANUP ACTION ALTERNATIVE 3, IN SITU PAC ADSORPTION AND ENVIRONMENTAL COVENANT WITH MNA

**DRAFT**



Proposed Cleanup Level	Analytical Results (micrograms per liter)			
	PCE	TCE	dis-1-2-DCE	Vinyl Chloride
	5	5	70	2

**LEGEND**

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20 MONITORING WELL
- MW-5 MONITORING WELL (NOT SAMPLED) (ENVIRONMENTAL PARTNERS INC)
- IW91 INJECTION WELL CONVERTED TO MONITORING WELL
- IW61 INJECTION WELL (SAMPLED)
- DECOMMISSIONED/DESTROYED MONITORING WELL
- IW93 AIR SPARGE WELL
- SVE1 SOIL VAPOR EXTRACTION WELL
- APPROXIMATE EXTENTS OF POST-TREATMENT PCE AND TCE PLUME ABOVE PROPOSED CLEANUP LEVELS ORIGINATING FROM THE TROY PROPERTY (Q4 2020 AND Q2 2021)
- PROPOSED DUAL-PURPOSE AS/SVE WELL
- DENOTES PCE CONCENTRATION EXCEEDS PROPOSED CLEANUP LEVEL
- DENOTES TCE CONCENTRATION EXCEEDS PROPOSED CLEANUP LEVEL
- DENOTES VC CONCENTRATION EXCEEDS PROPOSED CLEANUP LEVEL
- AS AIR SPARGE
- CVOC CHLORINATED VOLATILE ORGANIC COMPOUND
- DCE DICHOROETHENE
- PCE TETRACHOROETHENE
- SVE SOIL VAPOR EXTRACTION
- TCE TRICHLOROETHENE
- VC VINYL CHLORIDE

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399 FAIRVIEW AVENUE NORTH  
SEATTLE, WASHINGTON  
SOUNDEARTH PROJECT #0731-004

**FIGURE 22**  
CLEANUP ACTION ALTERNATIVE 4,  
AS/SVE REMEDIATION SYSTEM AND  
ENVIRONMENTAL COVENANT WITH MNA



## **TABLES**



**Table 1**  
**Soil Analytical Results for Petroleum Hydrocarbons and VOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Surface Elevation (NAVD88)	Sample ID	Depth (feet)	Elevation (NAVD88)	Date Sampled	Sampled By	Analytical Results (mg/kg)																
							GRPH <sup>(1)</sup>	DRPH <sup>(2)</sup>	ORPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	Vinyl Chloride <sup>(3)</sup>	cis-1,2-DCE <sup>(3)</sup>	trans-1,2-DCE <sup>(3)</sup>	EDC <sup>(3)</sup>	TCE <sup>(3)</sup>	PCE <sup>(3)</sup>	PCE TCLP <sup>(4)</sup> (mg/L)	SVOCs <sup>(5)(6)</sup>		
<b>On-Property</b>																							
P01	73.93	P01-05	5	68.93	10/06/10	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		P01-07.5	7.5	66.43			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		P01-10	10	63.93			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		P01-14	14	59.93			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		P01-18.5	18.5	55.43			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.026	--	--
		P01-20	20	53.93			--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.028	--	--			
P02	73.93	P02-02	2	71.93	10/06/10	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.039	--	--		
		P02-05	5	68.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.042	--	--	
		P02-07.5	7.5	66.43			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.025	--	--
		P02-10	10	63.93			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.035	--	--
P03	73.93	P03-05	5	68.93	10/06/10	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.13</b>	--	--		
		P03-09	9	64.93			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.099</b>	--	--
		P03-12.5	12.5	61.43			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.076</b>	--	--
		P03-16	16	57.93			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.057</b>	--	--
		P03-19	19	54.93			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.080</b>	--	--
P04	93.05	P04-02.5	2.5	90.55	10/06/10	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		P04-05	5	88.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		P04-07.5	7.5	85.55			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		P04-10	10	83.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		P04-13	13	80.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		P04-17	17	76.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.029	--	--
		P04-20	20	73.05			--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--			
P05	93.05	P05-02.5	2.5	90.55	10/06/10	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>1.4</b>	--	--		
		P05-05	5	88.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>2.5</b>	--	--
		P05-07.5	7.5	85.55			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.073</b>	--	--
		P05-10	10	83.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.087</b>	--	--
		P05-15	15	78.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.082</b>	--	--
		P05-20	20	73.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.14</b>	--	--
P06	93.05	P06-02.5	2.5	90.55	10/06/10	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.15</b>	--	--		
		P06-05	5	88.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.68</b>	--	--
		P06-08	8	85.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.44</b>	--	--
		P06-11	11	82.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.028	--	--
		P06-14	14	79.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.063</b>	--	--
		P06-20	20	73.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.099</b>	--	--
P07	93.05	P07-02.5	2.5	90.55	10/06/10	SoundEarth	<2	--	--	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.03	0.047	--	--		
		P07-05	5	88.05			<2	--	--	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.13</b>	--	--		
		P07-07.5	7.5	85.55			<2	--	--	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.055</b>	--	--		
		P01-11	11	82.05			<b>1,400<sup>x</sup></b>	--	--	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.16</b>	--	--		
P08	85.8215	P08-03	3	82.82	10/07/10	SoundEarth	<b>52<sup>x</sup></b>	<b>100<sup>x</sup></b>	<250	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.15</b>	<b>63</b>	--	--	
		P08-05	5	80.82			<b>2.6<sup>x</sup></b>	--	--	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.46</b>	--	--	
		P08-07.5	7.5	78.32			<b>580<sup>x</sup></b>	--	--	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.14</b>	<b>450</b>	--	--
		P08-10	10	75.82			<b>150<sup>x</sup></b>	<b>4,300<sup>x</sup></b>	<b>3,200</b>	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.13</b>	<b>250</b>	--	--
		P08-14	14	71.82			<2	--	--	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<b>1.3</b>	--	--	
		P08-18	18	67.82			<2	--	--	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.03	<b>1.6</b>	--	--		
		P08-23	23	62.82			<2	<50	<250	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.03	<b>1.6</b>	--	--			
<b>MTCA Cleanup Level</b>							<b>100/30<sup>a,b</sup></b>	<b>2,000<sup>b</sup></b>	<b>2,000<sup>b</sup></b>	<b>0.03<sup>b</sup></b>	<b>7<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>9<sup>b</sup></b>	<b>0.67<sup>c</sup></b>	<b>160<sup>d</sup></b>	<b>1,600<sup>d</sup></b>	<b>11<sup>c</sup></b>	<b>0.03<sup>b</sup></b>	<b>0.05<sup>b</sup></b>	<b>0.7<sup>e</sup></b>	<b>NE</b>		



**Table 1**  
**Soil Analytical Results for Petroleum Hydrocarbons and VOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Surface Elevation (NAVD88)	Sample ID	Depth (feet)	Elevation (NAVD88)	Date Sampled	Sampled By	Analytical Results (mg/kg)															
							GRPH <sup>(1)</sup>	DRPH <sup>(2)</sup>	ORPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	Vinyl Chloride <sup>(3)</sup>	cis-1,2-DCE <sup>(3)</sup>	trans-1,2-DCE <sup>(3)</sup>	EDC <sup>(3)</sup>	TCE <sup>(3)</sup>	PCE <sup>(3)</sup>	PCE TCLP <sup>(4)</sup> (mg/L)	SVOCs <sup>(5)(6)</sup>	
P09	88.92304	P09-05	5	83.92	10/07/10	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.098	--	--	
		P09-07.5	7.5	81.42			<2	<50	<250	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		P09-12	12	76.92			2.3 <sup>x</sup>	--	--	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.03	0.076	--	--	
		P09-15	15	73.92			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.089	--	--
P10	87.7803	P10-02.5	2.5	85.28	10/07/10	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.13	--	--		
		P10-07.5	7.5	80.28			<2	--	--	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.03	0.066	--	--	
		P10-14	14	73.78			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.038	--	--
		P10-18	18	69.78			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.069	--	--
P11	82.72992	P11-02.5	2.5	80.23	10/07/10	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		P11-07.5	7.5	75.23			<2	<50	<250	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.03	0.039	--	--		
		P11-11	11	71.73			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		P11-14	14	68.73			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
P12	92.26789	P12-05	5	87.27	10/07/10	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		P12-10	10	82.27			<2	--	--	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		P12-15	15	77.27			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		P13-02.5	2.5	82.11			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
P13	84.61304	P13-07.5	7.5	77.11	10/07/10	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		P13-10	10	74.61			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		P13-18	18	66.61			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		P14-02.5	2.5	71.67			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
P14	74.1706	P14-07.5	7.6	66.57	10/07/10	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		P14-14	14	60.17			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		P14-20	20	54.17			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		P15	86.16	P15-07.5			7.5	78.66	02/20/14	SoundEarth	--	--	--	--	--	--	--	--	--	--	0.0839	--
P16	85.8215	P16-02	2	83.82	02/20/14	SoundEarth	--	--	--	--	--	--	--	--	--	--	--	--	0.00698	--	--	
		P16-07.5	7.5	78.32			--	--	--	--	--	--	--	--	--	--	--	--	0.00125	--	--	
P17	82.73	P17-07.5	7.5	75.23	02/20/14	SoundEarth	--	--	--	--	--	--	--	--	--	--	--	--	0.0397	--	--	
P18	73.93	P18-05	5	68.93	02/20/14	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.24	--	--		
		P18-10	10	63.93			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.56	--	--	
P19	73.93	P19-05	5	68.93	02/20/14	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.18	--	--		
		P19-10	10	63.93			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.11	--	--	
		P19-15	15	58.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.13	--	--
P20	73.93	--	--	--	02/20/14	SoundEarth	No Samples Collected															
B01	81.34854	--	6-8	74.35	12/08/10	AECOM	<5.7	<5.1	<10	<0.001	NR	NR	NR	NR	<0.001	NR	NR	0.003	0.22	--	--	
		--	8-10	72.35			--	--	--	<0.0012	NR	NR	NR	NR	<0.0012	NR	NR	0.0028	0.2	--	--	
		--	18-20	62.35			--	--	--	<0.0009	NR	NR	NR	NR	0.0039	NR	NR	0.0058	0.86	--	--	
B02	93.05	--	7-9	85.05	12/08/10	AECOM	--	--	--	0.0062	NR	NR	NR	NR	0.0013	NR	NR	0.031	2.3	--	--	
		--	9-11	83.05			<6	<5.2	<10	0.001	NR	NR	NR	NR	0.0015	NR	NR	0.02	2.3	--	--	
		--	16-18	76.05			--	--	--	<0.0011	NR	NR	NR	NR	0.0013	NR	NR	0.0046	0.5	--	--	
B03	90.52796	--	--	--	--	AECOM	No Samples Collected															
B04	93.05	--	8-10	84.05	12/08/10	AECOM	--	--	--	0.003	NR	NR	NR	NR	<0.0009	NR	NR	0.0098	2	--	--	
		--	14-16	78.05			<5.2	<5	<10	<0.001	NR	NR	NR	NR	<0.001	NR	NR	0.0069	0.69	--	--	
		--	18-20	74.05			--	--	--	<0.001	NR	NR	NR	NR	<0.001	NR	NR	0.003	0.47	--	--	
<b>MTCA Cleanup Level</b>							<b>100/30<sup>a,b</sup></b>	<b>2,000<sup>b</sup></b>	<b>2,000<sup>b</sup></b>	<b>0.03<sup>b</sup></b>	<b>7<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>9<sup>b</sup></b>	<b>0.67<sup>c</sup></b>	<b>160<sup>d</sup></b>	<b>1,600<sup>d</sup></b>	<b>11<sup>c</sup></b>	<b>0.03<sup>b</sup></b>	<b>0.05<sup>b</sup></b>	<b>0.7<sup>e</sup></b>	<b>NE</b>	



**Table 1**  
**Soil Analytical Results for Petroleum Hydrocarbons and VOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Surface Elevation (NAVD88)	Sample ID	Depth (feet)	Elevation (NAVD88)	Date Sampled	Sampled By	Analytical Results (mg/kg)														
							GRPH <sup>(1)</sup>	DRPH <sup>(2)</sup>	ORPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	Vinyl Chloride <sup>(3)</sup>	cis-1,2-DCE <sup>(3)</sup>	trans-1,2-DCE <sup>(3)</sup>	EDC <sup>(3)</sup>	TCE <sup>(3)</sup>	PCE <sup>(3)</sup>	PCE TCLP <sup>(4)</sup> (mg/L)	SVOCs <sup>(5)(6)</sup>
B05	93.05	--	10-12	82.05	12/08/10	AECOM	--	--	--	<0.0009	NR	NR	NR	NR	<0.0009	NR	NR	<0.0009	0.057	--	--
		--	13-15	79.05			<5	<5.2	<10	<0.0009	NR	NR	NR	NR	<0.0009	NR	NR	0.0012	0.34	--	--
		--	18-20	74.05			--	--	--	<0.0009	NR	NR	NR	NR	<0.0009	NR	NR	0.0012	0.42	--	--
B06	73.93	--	5-7	67.93	12/08/10	AECOM	--	--	--	<0.051	NR	NR	NR	NR	<0.051	NR	NR	<0.051	0.87	--	--
		--	8-10	64.93			--	--	--	<0.047	NR	NR	NR	NR	<0.047	NR	NR	<0.047	0.53	--	--
		--	10-11.5	63.43			<4.9	<5.7	<1	<0.052	NR	NR	NR	NR	<0.052	NR	NR	<0.052	0.43	--	--
B07	86.47833	--	23-26	61.98	12/08/10	AECOM	<6.2	<5.9	<12	<0.06	NR	NR	NR	NR	0.064	NR	NR	<0.06	0.58	--	--
		--	35-37	50.48			--	--	--	<0.058	NR	NR	NR	NR	<0.058	NR	NR	<0.058	1.7	--	--
		--	37-40	47.98			--	--	--	<0.0009	NR	NR	NR	NR	0.017	NR	NR	0.0071	0.16	--	--
B13/MW06	74.78	B13-04.5	4.5	70.28	05/25/11	SoundEarth	2.8	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3
		B13-09	9	65.78			<2	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3
		B13-14	14	60.78			<2	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3
		B13-19	19	55.78			<2	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3
		B13-24	24	50.78			<2	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.069	--	<0.3
		B13-29	29	45.78			<2	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.039	--	<0.3
		B13-34	34	40.78			<2	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3
		B13-39	39	35.78			<2	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3
		B13-44	44	30.78			<2	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.037	--	<0.3
		B13-49	49	25.78	1,700	300	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.070	--	<0.3		
		B13-54	54	20.78	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3		
		B13-55	55	19.78	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3		
		B13-58	58	16.78	<2	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3		
		B13-64	64	10.78	<2	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3		
		B13-69	69	5.78	<2	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3		
B13-74	74	0.78	<2	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3				
B14	81.31295	B14-04	4	77.31	05/26/11	SoundEarth	<2	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3
		B14-09	9	72.31			<2	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3
		B14-14	14	67.31			<2	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3
		B14-19	19	62.31			<2	<50	<250	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3
		B14-23.5	23.5	57.81			<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3
		B14-30	30	51.31			1,100	350 <sup>x</sup>	<250	<0.2	<0.2	2.0	2.7	<0.05	<0.05	<0.05	<0.05	<0.03	0.23	--	<0.3
		B14-33.5	33.5	47.81			930	120 <sup>x</sup>	<250	<0.2	<0.2	2.4	3.1	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3
		B14-36	36	45.31			14	<50	<250	<0.02	<0.02	0.059	0.070	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3
		B14-41	41	40.31			<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	0.31
		B14-46	46	35.31	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	1.2		
		B14-51	51	30.31	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	0.44		
		B14-56	56	25.31	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3		
		B14-58	58	23.31	2,000	<50	<250	<0.1	<0.1	2.7	3.9	<0.05	<0.05	<0.05	<0.05	<0.03	0.13	--	<0.3		
		B14-61	61	20.31	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	1.1		
		B14-65	65	16.31	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3		
B14-69	69	12.31	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3				
B14-75	75	6.31	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	<0.3				
<b>MTCA Cleanup Level</b>							<b>100/30<sup>a,b</sup></b>	<b>2,000<sup>b</sup></b>	<b>2,000<sup>b</sup></b>	<b>0.03<sup>b</sup></b>	<b>7<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>9<sup>b</sup></b>	<b>0.67<sup>c</sup></b>	<b>160<sup>d</sup></b>	<b>1,600<sup>d</sup></b>	<b>11<sup>c</sup></b>	<b>0.03<sup>b</sup></b>	<b>0.05<sup>b</sup></b>	<b>0.7<sup>e</sup></b>	<b>NE</b>



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**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Surface Elevation (NAVD88)	Sample ID	Depth (feet)	Elevation (NAVD88)	Date Sampled	Sampled By	Analytical Results (mg/kg)																		
							GRPH <sup>(1)</sup>	DRPH <sup>(2)</sup>	ORPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	Vinyl Chloride <sup>(3)</sup>	cis-1,2-DCE <sup>(3)</sup>	trans-1,2-DCE <sup>(3)</sup>	EDC <sup>(3)</sup>	TCE <sup>(3)</sup>	PCE <sup>(3)</sup>	PCE TCLP <sup>(4)</sup> (mg/L)	SVOCs <sup>(5)(6)</sup>				
B16	93.05	B16-06	6	87.05	09/26/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.38	--	--				
		B16-11	11	82.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		B16-16	16	77.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.051	--	--		
		B16-17	17	76.05			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		B16-18	18	75.05			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B16-20	20	73.05			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		B16-22	22	71.05			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		B16-23.5	23.5	69.55			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.18	--	--	
		B16-25	25	68.05			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.085	--	--	
		B16-29	29	64.05			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		B16-30	30	63.05			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.028	--	--	
		B16-35	35	58.05			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B16-40	40	53.05			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B16-45	45	48.05			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.046	--	--	
		B16-50	50	43.05	--	--	09/27/11	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.18	--	--			
B16-55	55	38.05	--	--	--	--			--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B16-65	65	28.05	--	--	--	--			--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B16-70	70	23.05	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.043	--	--					
B17	93.05	B17-06	6	87.05	09/27/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.046	--	--				
		B17-11	11	82.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.053	--	--		
		B17-16	16	77.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.14	--	--		
		B17-21	21	72.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		B17-26	26	67.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.030	--	--		
		B17-30	30	63.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		B17-35	35	58.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.030	--	--		
		B17-40	40	53.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.076	--	--		
		B17-45	45	48.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.082	--	--		
		B17-50	50	43.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.042	--	--		
		B17-55	55	38.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.047	--	--		
		B17-60	60	33.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.062	--	--		
		B17-65	65	28.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.067	--	--		
B17-70	70	23.05	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--						
B17-75	75	18.05	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--						
B17-80	80	13.05	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--						
B18	93.05	B18-25	25	68.05	09/28/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.12	--	--				
		B18-30	30	63.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.059	--	--		
		B18-35	35	58.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.054	--	--		
		B18-40	40	53.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.11	--	--		
		B18-45	45	48.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.072	--	--		
		B18-50	50	43.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.12	--	--		
		B18-55	55	38.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.11	--	--		
		B18-60	60	33.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.12	--	--		
B18-65	65	28.05	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.11	--	--						
B18-70	70	23.05	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.027	--	--						
<b>MTCA Cleanup Level</b>							<b>100/30<sup>a,b</sup></b>	<b>2,000<sup>b</sup></b>	<b>2,000<sup>b</sup></b>	<b>0.03<sup>b</sup></b>	<b>7<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>9<sup>b</sup></b>	<b>0.67<sup>c</sup></b>	<b>160<sup>d</sup></b>	<b>1,600<sup>d</sup></b>	<b>11<sup>c</sup></b>	<b>0.03<sup>b</sup></b>	<b>0.05<sup>b</sup></b>	<b>0.7<sup>e</sup></b>	<b>NE</b>				





**Table 1**  
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**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Surface Elevation (NAVD88)	Sample ID	Depth (feet)	Elevation (NAVD88)	Date Sampled	Sampled By	Analytical Results (mg/kg)															
							GRPH <sup>(1)</sup>	DRPH <sup>(2)</sup>	ORPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	Vinyl Chloride <sup>(3)</sup>	cis-1,2-DCE <sup>(3)</sup>	trans-1,2-DCE <sup>(3)</sup>	EDC <sup>(3)</sup>	TCE <sup>(3)</sup>	PCE <sup>(3)</sup>	PCE TCLP <sup>(4)</sup> (mg/L)	SVOCs <sup>(5)(6)</sup>	
B19	93.05	B19-25	25	68.05	09/29/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.11	--	--	
		B19-30	30	63.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B19-35	35	58.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B19-40	40	53.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B19-45	45	48.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B19-50	50	43.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B19-55	55	38.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B19-60	60	33.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B19-65	65	28.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
B19-70	70	23.05	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B20	93.05	B20-15	15	78.05	09/30/11	SoundEarth	2,200	--	--	<0.1	<0.1	4.6	22	<0.05	<0.05	<0.05	<0.05	<0.03	0.22	--	--	
		B20-20	20	73.05			<2	--	--	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B20-25	25	68.05			34	--	--	<0.02	<0.02	0.061	0.30	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B20-30	30	63.05			<2	--	--	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B20-35	35	58.05			<2	--	--	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B20-40	40	53.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B20-45	45	48.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B20-50	50	43.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B20-55	55	38.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B20-60	60	33.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
B20-65	65	28.05	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B20-70	70	23.05	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B21	93.05	B21-05	5	88.05	09/30/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.28	--	--	
		B21-10	10	83.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B21-15	15	78.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B21-20	20	73.05	10/04/11		--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B21-25	25	68.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B21-30	30	63.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B21-35	35	58.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B21-40	40	53.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B21-45	45	48.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B21-50	50	43.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B21-55	55	38.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B21-60	60	33.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B21-65	65	28.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
B21-70	70	23.05	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
<b>MTCA Cleanup Level</b>							<b>100/30<sup>a,b</sup></b>	<b>2,000<sup>b</sup></b>	<b>2,000<sup>b</sup></b>	<b>0.03<sup>b</sup></b>	<b>7<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>9<sup>b</sup></b>	<b>0.67<sup>c</sup></b>	<b>160<sup>d</sup></b>	<b>1,600<sup>d</sup></b>	<b>11<sup>c</sup></b>	<b>0.03<sup>b</sup></b>	<b>0.05<sup>b</sup></b>	<b>0.7<sup>e</sup></b>	<b>NE</b>	



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**Troy Laundry Seattle Site**  
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Sample Location	Surface Elevation (NAVD88)	Sample ID	Depth (feet)	Elevation (NAVD88)	Date Sampled	Sampled By	Analytical Results (mg/kg)																
							GRPH <sup>(1)</sup>	DRPH <sup>(2)</sup>	ORPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	Vinyl Chloride <sup>(3)</sup>	cis-1,2-DCE <sup>(3)</sup>	trans-1,2-DCE <sup>(3)</sup>	EDC <sup>(3)</sup>	TCE <sup>(3)</sup>	PCE <sup>(3)</sup>	PCE TCLP <sup>(4)</sup> (mg/L)	SVOCs <sup>(5)(6)</sup>		
B22	93.05	B22-05	5	88.05	10/03/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		B22-10	10	83.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B22-15	15	78.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B22-20	20	73.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B22-25	25	68.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B22-30	30	63.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B22-35	35	58.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B22-40	40	53.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B22-45	45	48.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B22-50	50	43.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B22-55	55	38.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B22-60	60	33.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
B22-65	65	28.05	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B22-70	70	23.05	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B23	93.05	B23-05	5	88.05	10/05/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		B23-10	10	83.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B23-15	15	78.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B23-20	20	73.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B23-25	25	68.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B23-30	30	63.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B23-35	35	58.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B23-40	40	53.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B23-45	45	48.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B23-50	50	43.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B23-55	55	38.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B23-60	60	33.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
B23-65	65	28.05	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B23-70	70	23.05	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B24	93.05	B24-05	5	88.05	10/05/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		B24-10	10	83.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B24-15	15	78.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B24-20	20	73.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B24-25	25	68.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B24-30	30	63.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B24-35	35	58.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B24-40	40	53.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B24-45	45	48.05			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B24-50	50	43.05	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		B24-55	55	38.05	--	--	10/06/11	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B24-60	60	33.05	--	--			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
B24-65	65	28.05	--	--	--	--			--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
B24-70	70	23.05	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--			
<b>MTCA Cleanup Level</b>							<b>100/30<sup>a,b</sup></b>	<b>2,000<sup>b</sup></b>	<b>2,000<sup>b</sup></b>	<b>0.03<sup>b</sup></b>	<b>7<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>9<sup>b</sup></b>	<b>0.67<sup>c</sup></b>	<b>160<sup>d</sup></b>	<b>1,600<sup>d</sup></b>	<b>11<sup>c</sup></b>	<b>0.03<sup>b</sup></b>	<b>0.05<sup>b</sup></b>	<b>0.7<sup>e</sup></b>	<b>NE</b>		



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Draft

Sample Location	Surface Elevation (NAVD88)	Sample ID	Depth (feet)	Elevation (NAVD88)	Date Sampled	Sampled By	Analytical Results (mg/kg)															
							GRPH <sup>(1)</sup>	DRPH <sup>(2)</sup>	ORPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	Vinyl Chloride <sup>(3)</sup>	cis-1,2-DCE <sup>(3)</sup>	trans-1,2-DCE <sup>(3)</sup>	EDC <sup>(3)</sup>	TCE <sup>(3)</sup>	PCE <sup>(3)</sup>	PCE TCLP <sup>(4)</sup> (mg/L)	SVOCs <sup>(5)(6)</sup>	
B25	93.05	B25-05	5	88.05	10/06/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B25-10	10	83.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B25-20	20	73.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B25-25	25	68.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B25-30	30	63.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B25-35	35	58.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B25-40	40	53.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B25-45	45	48.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B25-50	50	43.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B25-55	55	38.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B25-60	60	33.05			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
B25-65	65	28.05	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B25-70	70	23.05	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B26/MW08	92.88	B26-05	5	87.88	10/07/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B26-10	10	82.88			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B26-15	15	77.88			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B26-20	20	72.88			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B26-25	25	67.88			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B26-30	30	62.88			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B26-35	35	57.88			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B26-40	40	52.88			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B26-45	45	47.88			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B26-50	50	42.88			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B26-55	55	37.88			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B26-60	60	32.88			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B26-70	70	22.88			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B26-80	80	12.88			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B26-90	90	2.88			--	--	10/10/11	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025
B26-100	100	-7.12	--	--	--	--	--	--			--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
B26-110	110	-17.12	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
B27/MW09	92.92	B27-20	20	72.92	10/11/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B27-25	25	67.92			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B27-30	30	62.92			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B27-35	35	57.92			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B27-40	40	52.92			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B27-45	45	47.92			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B27-50	50	42.92			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B27-55	55	37.92			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B27-60	60	32.92			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B27-65	65	27.92			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B27-70	70	22.92			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B27-80	80	12.92			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B27-90	90	2.92			--	--	10/12/11	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025
B27-100	100	-7.08	--	--	--	--	--	--			--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
B27-110	110	-17.08	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
<b>MTCA Cleanup Level</b>							<b>100/30<sup>a,b</sup></b>	<b>2,000<sup>b</sup></b>	<b>2,000<sup>b</sup></b>	<b>0.03<sup>b</sup></b>	<b>7<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>9<sup>b</sup></b>	<b>0.67<sup>c</sup></b>	<b>160<sup>d</sup></b>	<b>1,600<sup>d</sup></b>	<b>11<sup>c</sup></b>	<b>0.03<sup>b</sup></b>	<b>0.05<sup>b</sup></b>	<b>0.7<sup>e</sup></b>	<b>NE</b>	



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**Soil Analytical Results for Petroleum Hydrocarbons and VOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Surface Elevation (NAVD88)	Sample ID	Depth (feet)	Elevation (NAVD88)	Date Sampled	Sampled By	Analytical Results (mg/kg)																								
							GRPH <sup>(1)</sup>	DRPH <sup>(2)</sup>	ORPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	Vinyl Chloride <sup>(3)</sup>	cis-1,2-DCE <sup>(3)</sup>	trans-1,2-DCE <sup>(3)</sup>	EDC <sup>(3)</sup>	TCE <sup>(3)</sup>	PCE <sup>(3)</sup>	PCE TCLP <sup>(4)</sup> (mg/L)	SVOCs <sup>(5)(6)</sup>										
B28/MW10	92.73	B28-05	5	87.73	10/10/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--										
		B28-10	10	82.73			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--								
		B28-15	15	77.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B28-20	20	72.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B28-25	25	67.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B28-30	30	62.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B28-35	35	57.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B28-40	40	52.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B28-45	45	47.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B28-50	50	42.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B28-55	55	37.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B28-60	60	32.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B28-65	65	27.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B28-70	70	22.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B28-75	75	17.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
B28-80	80	12.73	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--											
B28-85	85	7.73	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--											
B28-90	90	2.73	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--											
B29	83.53891	B29-15	15	68.54	10/10/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--										
		B29-20	20	63.54			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--								
		B29-25	24	59.54			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B29-30	30	53.54			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B29-35	35	48.54			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B29-40	40	43.54			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B29-45	45	38.54			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B29-50	50	33.54			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B29-55	55	28.54			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B29-60	60	23.54			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
B29-65	65	18.54	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--											
B29-70	70	13.54	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--											
B30/MW11	88.23	B30-15	15	73.23	10/11/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--										
		B30-16.5	16.5	71.73			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--								
		B30-18	18	70.23			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.026	--	--							
		B30-20	20	68.23			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B30-21.5	21.5	66.73			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
		B30-23	23	65.23			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
		B30-24	24	64.23			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
		B30-30	30	58.23			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
		B30-35	35	53.23			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
		B30-40	40	48.23			--	--	--	--	--	--	--	--	--	--	3.4	--	--	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B30-45	45	43.23			--	--	--	--	--	--	--	--	--	--	730	--	--	<0.1	<0.1	1.5	5.9	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B30-50	50	38.23			--	--	--	--	--	--	--	--	--	--	<2	--	--	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B30-55	55	33.23			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		B30-60	60	28.23			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		B30-65	65	23.23			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
B30-70	70	18.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
B30-75	75	13.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
B30-80	80	8.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
B30-83	83	5.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
<b>MTCA Cleanup Level</b>							<b>100/30<sup>a,b</sup></b>	<b>2,000<sup>b</sup></b>	<b>2,000<sup>b</sup></b>	<b>0.03<sup>b</sup></b>	<b>7<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>9<sup>b</sup></b>	<b>0.67<sup>c</sup></b>	<b>160<sup>d</sup></b>	<b>1,600<sup>d</sup></b>	<b>11<sup>c</sup></b>	<b>0.03<sup>b</sup></b>	<b>0.05<sup>b</sup></b>	<b>0.7<sup>e</sup></b>	<b>NE</b>										



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Draft

Sample Location	Surface Elevation (NAVD88)	Sample ID	Depth (feet)	Elevation (NAVD88)	Date Sampled	Sampled By	Analytical Results (mg/kg)															
							GRPH <sup>(1)</sup>	DRPH <sup>(2)</sup>	ORPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	Vinyl Chloride <sup>(3)</sup>	cis-1,2-DCE <sup>(3)</sup>	trans-1,2-DCE <sup>(3)</sup>	EDC <sup>(3)</sup>	TCE <sup>(3)</sup>	PCE <sup>(3)</sup>	PCE TCLP <sup>(4)</sup> (mg/L)	SVOCs <sup>(5)(6)</sup>	
B31/MW12	74.44	B31-80	80	-5.56	10/13/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B31-85	85	-10.56			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B31-90	90	-15.56			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B31-95	95	-20.56			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B31-100	100	-25.56			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
B32	85.01239	--	--	--	--	AESI	Geotech Boring - no samples collected															
B33	73.93	B33-05	5	68.93	10/13/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B33-10	10	63.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B33-15	15	58.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B33-20	20	53.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B33-25	25	48.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B33-30	30	43.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B33-35	35	38.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B33-40	40	33.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B33-45	45	28.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B33-50	50	23.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B33-55	55	18.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
B33-60	60	13.93	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B33-65	65	8.93	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B34	73.93	B34-25	25	48.93	10/14/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B34-30	30	43.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B34-35	35	38.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B34-40	40	33.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B34-45	45	28.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B34-50	50	23.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.029	--	--
		B34-55	55	18.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B34-60	60	13.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
B34-65	65	8.93	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B35	73.93	B35-05	5	68.93	10/14/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B35-10	10	63.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B35-15	15	58.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B35-20	20	53.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B35-25	25	48.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B35-30	30	43.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B35-35	35	38.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B35-40	40	33.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B35-45	45	28.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B35-50	50	23.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B35-55	55	18.93			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
B35-60	60	13.93	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B35-65	65	8.93	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
<b>MTCA Cleanup Level</b>							<b>100/30<sup>a,b</sup></b>	<b>2,000<sup>b</sup></b>	<b>2,000<sup>b</sup></b>	<b>0.03<sup>b</sup></b>	<b>7<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>9<sup>b</sup></b>	<b>0.67<sup>c</sup></b>	<b>160<sup>d</sup></b>	<b>1,600<sup>d</sup></b>	<b>11<sup>c</sup></b>	<b>0.03<sup>b</sup></b>	<b>0.05<sup>b</sup></b>	<b>0.7<sup>e</sup></b>	<b>NE</b>	





**Table 1**  
**Soil Analytical Results for Petroleum Hydrocarbons and VOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Surface Elevation (NAVD88)	Sample ID	Depth (feet)	Elevation (NAVD88)	Date Sampled	Sampled By	Analytical Results (mg/kg)																	
							GRPH <sup>(1)</sup>	DRPH <sup>(2)</sup>	ORPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	Vinyl Chloride <sup>(3)</sup>	cis-1,2-DCE <sup>(3)</sup>	trans-1,2-DCE <sup>(3)</sup>	EDC <sup>(3)</sup>	TCE <sup>(3)</sup>	PCE <sup>(3)</sup>	PCE TCLP <sup>(4)</sup> (mg/L)	SVOCs <sup>(5)(6)</sup>			
B36	73.93	B36-05	5	68.93	10/17/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--			
		B36-10	10	63.93			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--	
		B36-15	15	58.93			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.028	--	--
		B36-20	20	53.93			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		B36-25	25	48.93			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		B36-30	30	43.93			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.039	--	--
		B36-35	35	38.93			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B36-40	40	33.93			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<b>0.099</b>	--	--
		B36-45	45	28.93			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B36-50	50	23.93			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B36-55	55	18.93			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
		B36-60	60	13.93			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--
B36-65	65	8.93	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B36-70	70	3.93	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
B39	86.16	B39-3-4	3-4	82.66	01/16/12	AECOM	--	--	--	--	--	--	--	<0.0011	0.0029	<0.0011	<0.0011	0.0077	<b>5.1</b>	--	--			
		B39-7-8	7-8	78.66			--	--	--	--	--	--	--	--	--	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<b>0.088</b>	--	--	
		B39-11-12	11-12	74.66			--	--	--	--	--	--	--	--	--	--	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	0.049	--	--
B40	89.28	B40-7-8	7-8	81.78	01/16/12	AECOM	--	--	--	--	--	--	--	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	0.0017	--	--			
		B40-11-12	11-12	77.78			--	--	--	--	--	--	--	--	--	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	0.0013	--	--	
B41	89.39	B41-7-8	7-8	81.89	01/16/12	AECOM	--	--	--	--	--	--	--	<0.0009	<0.0009	<0.0009	<0.0009	0.0015	<b>0.180</b>	--	--			
		B41-11-12	11-12	77.89			--	--	--	--	--	--	--	--	--	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<b>0.130</b>	--	--	
B42	86.16	B42-3-4	3-4	82.66	01/16/12	AECOM	--	--	--	--	--	--	--	<0.001	<0.001	<0.001	<0.001	<0.001	<b>0.053</b>	--	--			
		B42-7-8	7-8	78.66			--	--	--	--	--	--	--	--	--	<0.001	<0.001	<0.001	<0.001	<0.0012	0.028	--	--	
B43	84.78	B43-3-4	3-4	81.28	01/16/12	AECOM	--	--	--	--	--	--	--	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<b>0.220</b>	--	--			
		B43-7-8	7-8	77.28			--	--	--	--	--	--	--	--	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.015	--	--	
B44	82.73	B44-3-4	3-4	79.23	01/16/12	AECOM	--	--	--	--	--	--	--	<0.0009	0.019	<0.0009	<0.0009	0.01	<b>1.7</b>	--	--			
		B44-7-8	7-8	75.23			--	--	--	--	--	--	--	--	--	<0.0011	0.0013	<0.0011	<0.0011	<b>0.092</b>	<b>5.6</b>	--	--	
		B44-11-12	11-12	71.23			--	--	--	--	--	--	--	--	--	<0.0011	<0.0011	<0.0011	<0.0011	0.0009	<b>0.057</b>	--	--	
		B44-11-12	15-16	67.23			--	--	--	--	--	--	--	--	--	<0.0011	<0.0011	<0.0011	<0.0011	0.0007	0.045	--	--	
B45	83.65	B45-3-4	3-4	80.15	01/16/12	AECOM	--	--	--	--	--	--	--	<0.0011	<0.063	<0.001	<0.001	0.0033	<b>7.7</b>	--	--			
		B45-7-8	7-8	76.15			--	--	--	--	--	--	--	--	--	<0.0015	0.015	<0.0015	<0.0015	<b>0.035</b>	<b>11</b>	--	--	
		B45-11-12	11-12	72.15			--	--	--	--	--	--	--	--	--	<0.001	0.0068	<0.001	<0.001	0.018	<b>6.4</b>	--	--	
		B45-11-12	15-16	68.15			--	--	--	--	--	--	--	--	--	<0.0012	0.0006	<0.0012	<0.0012	0.0015	<b>0.078</b>	--	--	
<b>Boren Avenue North</b>																								
B11/MW04	70.69	B11-05	5	65.69	05/25/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND			
		B11-10	10	60.69			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B11-15	15	55.69			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B11-20	20	50.69			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B11-25	25	45.69			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B11-30	30	40.69			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B11-35	35	35.69			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B11-40	40	30.69			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B11-45	45	25.69			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B11-50	50	20.69			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B11-55	55	15.69			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B11-60	60	10.69			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
B11-65	65	5.69	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND				
<b>MTCA Cleanup Level</b>							<b>100/30<sup>a,b</sup></b>	<b>2,000<sup>b</sup></b>	<b>2,000<sup>b</sup></b>	<b>0.03<sup>b</sup></b>	<b>7<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>9<sup>b</sup></b>	<b>0.67<sup>c</sup></b>	<b>160<sup>d</sup></b>	<b>1,600<sup>d</sup></b>	<b>11<sup>c</sup></b>	<b>0.03<sup>b</sup></b>	<b>0.05<sup>b</sup></b>	<b>0.7<sup>e</sup></b>	<b>NE</b>			



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**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Surface Elevation (NAVD88)	Sample ID	Depth (feet)	Elevation (NAVD88)	Date Sampled	Sampled By	Analytical Results (mg/kg)																				
							GRPH <sup>(1)</sup>	DRPH <sup>(2)</sup>	ORPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	Vinyl Chloride <sup>(3)</sup>	cis-1,2-DCE <sup>(3)</sup>	trans-1,2-DCE <sup>(3)</sup>	EDC <sup>(3)</sup>	TCE <sup>(3)</sup>	PCE <sup>(3)</sup>	PCE TCLP <sup>(4)</sup> (mg/L)	SVOCs <sup>(5)(6)</sup>						
B12/MW05	84.04	B12-10	10	74.04	05/25/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND						
		B12-15	15	69.04			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND					
		B12-20	20	64.04			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND				
		B12-25	25	59.04			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND				
		B12-30	30	54.04			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND				
		B12-35	35	49.04			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND				
		B12-45	45	39.04			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND				
		B12-55	55	29.04	05/26/11		--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.044	--	ND				
		B12-60	60	24.04			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.057	--	ND				
		B12-70	70	14.04			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	0.035	--	ND				
		B12-75	75	9.04	--	--	--	--	--	--	--	--	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B12-80	80	4.04	--	--	--	--	--	--	--	--	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
B15/MW07	74.55	B15-30	30	44.55	05/26/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND						
		B15-35	35	39.55			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND					
		B15-40	40	34.55			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND				
		B15-45	45	29.55			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND				
		B15-50	50	24.55			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND				
		B15-60	60	14.55			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND				
		B15-65	65	9.55			<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND					
		B15-70	70	4.55			<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND					
B37/MW13	90.66	B37-15	15	75.66	10/18/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--						
		B37-20	20	70.66			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
		B37-25	25	65.66			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
		B37-30	30	60.66			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
		B37-35	35	55.66			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
		B37-40	40	50.66			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
		B37-45	45	45.66			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
		B37-50	50	40.66			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
		B37-55	55	35.66			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--			
		B37-60	60	30.66			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--			
		B37-65	65	25.66			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--			
		B37-70	70	20.66			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--			
		B37-75	75	15.66			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--			
		B37-80	80	10.66			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--			
B37-85	85	5.66	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--							
B56/MW31	61.00	B56-20.0	20	41.00	09/11/19	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--						
		B56-30.0	30	31.00			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--					
		B56-40.0	40	21.00			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--				
<b>Terry Avenue North</b>																											
B49/MW15	58.79	B49-36	36	22.79	12/05/12	SoundEarth	<2	--	--	<0.03	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--						
		B49-41	41	17.79			<2	--	--	<0.03	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--						
		B48-46	46	12.79			<2	--	--	<0.03	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--						
<b>Thomas Street</b>																											
B38/MW14	104.4	B38-95	95	9.40	10/19/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--						
		B38-100	100	4.40			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--				
		B38-105	105	-0.60			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--			
<b>MTC Cleanup Level</b>							<b>100/30<sup>a,b</sup></b>	<b>2,000<sup>b</sup></b>	<b>2,000<sup>b</sup></b>	<b>0.03<sup>b</sup></b>	<b>7<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>9<sup>b</sup></b>	<b>0.67<sup>c</sup></b>	<b>160<sup>d</sup></b>	<b>1,600<sup>d</sup></b>	<b>11<sup>c</sup></b>	<b>0.03<sup>b</sup></b>	<b>0.05<sup>b</sup></b>	<b>0.7<sup>e</sup></b>	<b>NE</b>						



**Table 1**  
**Soil Analytical Results for Petroleum Hydrocarbons and VOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Surface Elevation (NAVD88)	Sample ID	Depth (feet)	Elevation (NAVD88)	Date Sampled	Sampled By	Analytical Results (mg/kg)																	
							GRPH <sup>(1)</sup>	DRPH <sup>(2)</sup>	ORPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	Vinyl Chloride <sup>(3)</sup>	cis-1,2-DCE <sup>(3)</sup>	trans-1,2-DCE <sup>(3)</sup>	EDC <sup>(3)</sup>	TCE <sup>(3)</sup>	PCE <sup>(3)</sup>	PCE TCLP <sup>(4)</sup> (mg/L)	SVOCs <sup>(5)(6)</sup>			
B50/MW16	99.02	B50-06	6	93.02	12/06/12	SoundEarth	<2	--	--	<0.03	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--			
		B50-11	11	88.02			<2	--	--	<0.03	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		B50-81	81	18.02	12/07/12		<2	--	--	<0.03	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--		
		B50-84	84	15.02			2,500	--	--	<0.03	<0.05	0.93	5	<0.05	0.12	<0.05	<0.05	<0.05	0.10	2.3	--	--		
		B50-86	86	13.02			170	--	--	<0.03	<0.05	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	0.14	--	--		
B50-91	91	8.02	<2	--	--	<0.03	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	--					
B51	98.35	B51-72.5	72.5	25.85	03/25/14	SoundEarth	<2	--	--	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.02	<0.025	--	--			
		B51-80	80	18.35			<2	--	--	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.02	<0.025	--	--			
		B51-82.5	82.5	15.85			3,200	--	--	<0.2	<0.2	24	52	<0.05	0.060	<0.05	<0.05	<0.05	<0.02	0.16	--	--		
B52	99.54	B52-70	70	29.54	03/26/14	SoundEarth	<2	--	--	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.02	<0.025	--	--			
		B52-80	80	19.54			<2	--	--	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.02	<0.025	--	--			
		B52-82.5	82.5	17.04			65	--	--	<0.02	<0.02	0.081	0.30	<0.05	<0.05	<0.05	<0.05	<0.02	<0.025	--	--			
		B52-85	85	14.54			<2	--	--	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.02	0.082	--	--			
B53	100.54	B53-70	70	30.54	03/27/14	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.02	<0.025	--	--			
		B53-75	75	25.54			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.02	<0.025	--	--	
		B53-85	85	15.54			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.02	<0.025	--	--	
		B53-90	90	10.54			<2	--	--	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.02	<0.025	--	--			
<b>Harrison Street</b>																								
B08/MW01	68.68	B08-05	5	63.68	05/19/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND			
		B08-10	10	58.68			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B08-15	15	53.68			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B08-20	20	48.68			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B08-25	25	43.68			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B08-30	30	38.68			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B08-35	35	33.68			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B08-40	40	28.68			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B08-45	45	23.68			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B08-50	50	18.68			<2	<50	<250	<0.2	<0.02	<0.2	<0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND		
B08-55	55	13.68	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND				
B08-60	60	8.68	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND						
B09/MW02	70.92	B09-07	7	63.92	05/20/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND			
		B09-10	10	60.92			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B09-15	15	55.92			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B09-20	20	50.92			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B09-25	25	45.92			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B09-30	30	40.92			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B09-35	35	35.92			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B09-40	40	30.92			--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B09-45	45	25.92			<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND		
		B09-50	50	20.92			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B09-55	55	15.92			--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B09-60	60	10.92			<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND		
B09-65	65	5.92	--	--	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND				
B09-70	70	0.92	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND						
<b>MTCA Cleanup Level</b>							<b>100/30<sup>a,b</sup></b>	<b>2,000<sup>b</sup></b>	<b>2,000<sup>b</sup></b>	<b>0.03<sup>b</sup></b>	<b>7<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>9<sup>b</sup></b>	<b>0.67<sup>c</sup></b>	<b>160<sup>d</sup></b>	<b>1,600<sup>d</sup></b>	<b>11<sup>c</sup></b>	<b>0.03<sup>b</sup></b>	<b>0.05<sup>b</sup></b>	<b>0.7<sup>e</sup></b>	<b>NE</b>			



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**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Surface Elevation (NAVD88)	Sample ID	Depth (feet)	Elevation (NAVD88)	Date Sampled	Sampled By	Analytical Results (mg/kg)															
							GRPH <sup>(1)</sup>	DRPH <sup>(2)</sup>	ORPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	Vinyl Chloride <sup>(3)</sup>	cis-1,2-DCE <sup>(3)</sup>	trans-1,2-DCE <sup>(3)</sup>	EDC <sup>(3)</sup>	TCE <sup>(3)</sup>	PCE <sup>(3)</sup>	PCE TCLP <sup>(4)</sup> (mg/L)	SVOCs <sup>(5)(6)</sup>	
B10/MW03	84.65	B10-05	5	79.65	05/24/11	SoundEarth	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B10-10	10	74.65			<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND	
		B10-15	15	69.65			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B10-20	20	64.65			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B10-25	25	59.65			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B10-30	30	54.65			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B10-35	35	49.65			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B10-40	40	44.65			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B10-45	45	39.65			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B10-50	50	34.65			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B10-55	55	29.65			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
		B10-60	60	24.65			--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND
B10-65	65	19.65	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND				
B10-75	75	9.65	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND					
B10-80	80	4.65	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<0.05	<0.03	<0.025	--	ND					
B57/MW32	78.62	B57-30.0	20	58.62	09/10/19	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--		
		B57-40.0	30	48.62			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--	
		B57-50.0	60	18.62			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--	
		B57-60.0	80	-1.38			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--	
B58/MW33	56.94	B58-20.0	20	36.94	09/12/19	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--		
		B58-30.0	60	-3.06			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--	
		B58-40.0	80	-23.06			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--	
<b>South-Adjoining Property</b>																						
B54/MW29	102.06	B54-20.0	20	82.06	09/17/19	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--		
		B54-30.0	30	72.06			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<b>0.093</b>	<0.025	--	--	
		B54-40.0	40	62.06			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--	
		B54-60.0	60	42.06			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--	
		B54-80.0	80	22.06			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--	
B55/MW30	102.34	B55-20.0	20	82.34	09/18/19	SoundEarth	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<b>0.033</b>	<0.025	--	--		
		B55-30.0	30	72.34			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--	
		B55-40.0	40	62.34			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--	
		B55-60.0	60	42.34			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--	
		B55-80.0	80	22.34			--	--	--	--	--	--	--	<0.05	<0.05	<0.05	--	<0.02	<0.025	--	--	
<b>MTCA Cleanup Level</b>							<b>100/30<sup>a,b</sup></b>	<b>2,000<sup>b</sup></b>	<b>2,000<sup>b</sup></b>	<b>0.03<sup>b</sup></b>	<b>7<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>9<sup>b</sup></b>	<b>0.67<sup>c</sup></b>	<b>160<sup>d</sup></b>	<b>11<sup>c</sup></b>	<b>0.03<sup>b</sup></b>	<b>0.05<sup>b</sup></b>	<b>0.7<sup>e</sup></b>	<b>NE</b>		

**NOTES:**

Red denotes concentration exceeds MTCA Soil cleanup level.

<sup>(1)</sup>Analyzed by NWTPH Method NWTPH-Gx.

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

<sup>(3)</sup>Analyzed by EPA Method 8260C or 8021B.

<sup>(4)</sup>Analyzed by SW8260/TCLP ZHE.

<sup>(5)</sup>Analyzed by EPA Method 8270C.

<sup>(6)</sup>Bis(2-ethylhexyl) phthalate was the only SVOC detected, the concentrations of which are well below the MTCA Method B cleanup level of 71 mg/kg. The reported results are the highest laboratory detection limit for all SVOCs analyzed or the concentration of (2-bis(2-ethylhexyl) phthalate, if detected in the sample.

<sup>a</sup>100 mg/kg when benzene is not present and 30 mg/kg when benzene is present.

<sup>b</sup>MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of WAC, revised November 2007.

<sup>c</sup>MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Carcinogen, Standard Formula Value, CLARC Website <<https://fortress.wa.gov/ecy/clarc/CLARHome.aspx>>.

<sup>d</sup>MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Non-Carcinogen, Standard Formula Value, CLARC Website <<https://fortress.wa.gov/ecy/clarc/CLARHome.aspx>>.

<sup>e</sup>Protection of Environment, Title 40 Part 261.24 of CFR, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic.

**Laboratory Note:**

<sup>a</sup>The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

-- = not analyzed, measured, or calculated  
 < = analytical result does not exceed laboratory reporting limit  
 AECOM = AECOM Technology Corporation  
 AESI = Associated Earth Sciences, Inc.  
 CFR = Code of Federal Regulations  
 CLARC = cleanup levels and risk calculations  
 DCE = dichloroethene  
 DRPH = diesel-range petroleum hydrocarbons  
 EDC = 1,2-dichloroethane (ethylene dichloride)  
 EPA = US Environmental Protection Agency  
 GRPH = gasoline-range petroleum hydrocarbons  
 mg/kg = milligrams per kilogram  
 mg/L = milligrams per liter  
 MTCA = Washington State Model Toxics Control Act  
 NAVD88 = North American Vertical Datum 1988  
 NE = not established  
 NR = not reported

NWTPH = northwest total petroleum hydrocarbon  
 ORPH = oil-range petroleum hydrocarbons  
 PCE = tetrachloroethylene  
 SoundEarth = SoundEarth Strategies, Inc.  
 SVOC = semivolatle organic compound  
 TCE = trichloroethylene  
 TCLP = Toxicity Characteristic Leaching Procedure  
 VOC = volatile organic compound  
 WAC = Washington Administrative Code

**Table 2**  
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**Troy Laundry Seattle Site**  
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**Seattle, Washington**

Well	TOC Elevation <sup>(1)</sup> (feet)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Top of Well Screen Elevation (feet NAVD88 approximate)	Bottom of Well Screen Elevation (feet NAVD88 approximate)	Date	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet NAVD88)
<b>Troy Laundry Property</b>								
MW06	74.78	60	75	15	0	05/31/11	58.70	16.08
						10/20/11	58.91	15.87
						12/13/12	58.71	16.07
						08/29/13	60.30	14.48
DECOMMISSIONED 2013								
MW08	92.88	105	110	-12	-17	10/20/11	77.18	15.70
						08/29/13	78.10	14.78
DECOMMISSIONED 2013								
MW09	92.92	105	110	-12	-17	10/20/11	77.24	15.68
						08/29/13	78.51	14.41
DECOMMISSIONED 2013								
MW10	92.73	75	90	18	3	10/20/11	77.14	15.59
						12/13/12	77.01	15.72
						08/29/13	78.28	14.45
DECOMMISSIONED 2013								
MW11	88.23	68	83	20	5	10/20/11	72.43	15.80
						12/13/12	72.29	15.94
						08/29/13	73.78	14.45
DECOMMISSIONED 2013								
MW12	74.44	95	100	-21	-26	10/20/11	58.71	15.73
						08/29/13	59.99	14.45
DECOMMISSIONED 2013								
MW17	35.72	22	37	14	-1	05/05/15	25.26	10.46
						08/03/15	24.82	10.90
						12/07/15	25.49	10.23
						03/07/16	24.98	10.74
						07/12/16	24.61	11.11
						10/18/16	23.14	12.58
						01/24/17	20.84	14.88
						05/31/17	22.75	12.97
						09/21/17	25.73	9.99
						12/14/17	25.14	10.58
						03/08/18	23.04	12.68
						06/28/18	22.00	13.72
						09/19/18	21.64	14.08
						12/13/18	21.42	14.30
						MW18	35.34	35
08/03/15	24.49	10.85						
12/07/15	25.21	10.13						
03/07/16	24.64	10.70						
07/12/16	24.23	11.11						
10/18/16	22.81	12.53						
01/24/17	20.98	14.36						
05/31/17	22.49	12.85						
09/21/17	25.36	9.98						
12/14/17	24.70	10.64						
03/08/18	22.60	12.74						
06/28/18	21.70	13.64						
09/19/18	21.34	14.00						
12/13/18	21.12	14.22						
06/13/19	20.62	14.72						
10/09/19	20.50	14.84						
12/04/19	22.15	13.19						
06/25/20	23.81	11.53						
12/09/20	24.42	10.92						
06/22/21	23.01	12.33						



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**Seattle, Washington**

Well	TOC Elevation <sup>(1)</sup> (feet)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Top of Well Screen Elevation (feet NAVD88 approximate)	Bottom of Well Screen Elevation (feet NAVD88 approximate)	Date	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet NAVD88)
MW19	37.69	35	55	3	-17	05/05/15	27.24	10.45
						08/03/15	26.82	10.87
						12/07/15	27.51	10.18
						03/07/16	26.97	10.72
						07/12/16	26.57	11.12
						10/18/16	25.12	12.57
						01/24/17	22.97	14.72
						05/31/17	24.74	12.95
						09/21/17	27.60	10.09
						12/14/17	26.97	10.72
						03/08/18	24.89	12.80
						06/28/18	24.00	13.69
						09/19/18	23.65	14.04
						12/13/18	25.41	12.28
						06/13/19	22.95	14.74
						10/09/19	27.60	10.09
12/04/19	23.33	14.36						
06/25/20	26.16	11.53						
12/09/20	26.76	10.93						
06/22/20	25.31	12.38						
MW20	35.63	35	55	1	-19	05/05/15	25.24	10.39
						08/03/15	24.44	11.19
						12/07/15	25.50	10.13
						03/07/16	24.94	10.69
						07/12/16	24.62	11.01
						10/18/16	23.13	12.50
						01/24/17	21.32	14.31
						05/31/17	22.70	12.93
						09/21/17	25.53	10.10
						12/14/17	24.91	10.72
						03/08/18	22.89	12.74
						06/28/18	22.01	13.62
						09/19/18	21.67	13.96
						12/13/18	21.43	14.20
						06/13/19	20.95	14.68
						10/09/19	24.25	11.38
12/04/19	21.45	14.18						
06/25/20	23.99	11.64						
12/09/20	24.63	11.00						
06/22/21	23.27	12.36						
MW21	35.58	35	55	1	-19	05/05/15	25.21	10.37
						08/03/15	24.82	10.76
						12/07/15	25.49	10.09
						03/07/16	24.90	10.68
						07/12/16	24.56	11.02
						10/18/16	23.00	12.58
						01/24/17	21.54	14.04
						05/31/17	23.37	12.21
						09/21/17	25.96	9.62
						12/14/17	25.20	10.38
						03/08/18	24.10	11.48
						06/28/18	22.89	12.69
						09/19/18	INACCESSIBLE	
						12/13/18	22.59	12.99
						06/13/19	23.70	11.88
						10/09/19	26.52	9.06
12/04/19	20.50	15.08						
06/25/20	23.83	11.75						
12/09/20	24.60	10.98						
06/22/21	23.21	12.37						
MW22	35.47	35	55	0	-20	05/05/15	25.14	10.33
						08/03/15	24.75	10.72
						12/07/15	25.41	10.06
						03/07/16	24.86	10.61
						07/12/16	24.52	10.95
						10/18/16	23.05	12.42
						01/24/17	21.68	13.79
						05/31/17	23.45	12.02
						09/21/17	26.20	9.27
						12/14/17	25.60	9.87
						03/08/18	23.65	11.82
						06/28/18	23.30	12.17
						09/19/18	INACCESSIBLE	
						12/13/18	21.62	13.85
						06/13/19	--	--
						10/09/19	20.73	14.74
12/04/19	20.18	15.29						
06/25/20	23.75	11.72						
12/09/20	24.39	11.08						
06/22/21	23.10	12.37						

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**Seattle, Washington**

Well	TOC Elevation <sup>(1)</sup> (feet)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Top of Well Screen Elevation (feet NAVD88 approximate)	Bottom of Well Screen Elevation (feet NAVD88 approximate)	Date	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet NAVD88)
MW23	35.43	36	56	-1	-21	05/05/15	25.08	10.35
						08/03/15	24.72	10.71
						12/07/15	25.34	10.09
						03/07/16	24.77	10.66
						07/12/16	24.54	10.89
						10/18/16	22.98	12.45
						01/24/17	21.06	14.37
						05/31/17	22.41	13.02
						09/21/17	25.11	10.32
						12/14/17	24.65	10.78
						03/08/18	22.69	12.74
						06/28/18	21.03	14.40
						09/19/18	21.50	13.93
						12/13/18	21.22	14.21
						06/13/19	20.80	14.63
						10/09/19	22.03	13.40
12/04/19	21.22	14.21						
06/25/20	23.75	11.68						
12/09/20	24.40	11.03						
06/22/21	23.07	12.36						
MW24	34.88	35	55	0	-20	05/05/15	24.47	10.41
						08/03/15	24.06	10.82
						12/07/15	24.72	10.16
						03/07/16	24.12	10.76
						07/12/16	23.76	11.12
						10/18/16	22.19	12.69
						01/24/17	19.95	14.93
						05/31/17	23.29	11.59
						09/21/17	INACCESSIBLE	
						12/14/17	24.22	10.66
						03/08/18	22.10	12.78
						06/28/18	21.98	12.90
						09/19/18	20.81	14.07
						12/13/18	20.65	14.23
						06/13/19	20.18	14.70
						10/09/19	21.65	13.23
12/04/19	21.40	13.48						
06/25/20	23.27	11.61						
12/09/20	23.91	10.97						
06/22/21	22.52	12.36						
MW25	41.38	35.5	55.5	6	-14	05/05/15	30.85	10.53
						08/03/15	30.60	10.78
						12/07/15	31.30	10.08
						03/07/16	30.71	10.67
						07/12/16	30.44	10.94
						10/18/16	28.95	12.43
						01/24/17	27.07	14.31
						05/31/17	28.24	13.14
						09/21/17	31.09	10.29
						12/14/17	30.52	10.86
						03/08/18	28.54	12.84
						06/28/18	27.69	13.69
						09/19/18	27.32	14.06
						12/13/18	27.12	14.26
						06/13/19	26.64	14.74
						10/09/19	27.79	13.59
12/04/19	26.63	14.75						
06/25/20	29.70	11.68						
12/09/20	30.33	11.05						
06/22/21	28.97	12.41						

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Well	TOC Elevation <sup>(1)</sup> (feet)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Top of Well Screen Elevation (feet NAVD88 approximate)	Bottom of Well Screen Elevation (feet NAVD88 approximate)	Date	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet NAVD88)
IW91	35.82	20	55	16	-19	05/05/15	25.56	10.26
						08/03/15	25.19	10.63
						12/07/15	25.84	9.98
						03/07/16	25.24	10.58
						07/12/16	24.90	10.92
						10/18/16	23.41	12.41
						01/24/17	21.61	14.21
						05/31/17	22.79	13.03
						09/21/17	25.42	10.40
						12/14/17	24.96	10.86
						03/08/18	23.08	12.74
						06/28/18	22.30	13.52
						09/19/18	21.95	13.87
						12/13/18	21.69	14.13
						06/13/19	21.23	14.59
						10/09/19	23.90	11.92
12/04/19	21.11	14.71						
06/25/20	23.98	11.84						
12/09/20	24.63	11.19						
06/22/21	23.45	12.37						
<b>Boren Avenue North</b>								
MW04	70.69	50	65	21	6	05/27/11	52.22	18.47
	70.82					10/20/11	52.82	17.87
						12/10/12	52.88	17.81
						08/29/13	57.25	13.44
						05/05/15	58.22	12.60
						08/03/15	56.87	13.95
						12/07/15	58.82	12.00
						03/07/16	59.25	11.57
						07/12/16	58.49	12.33
						10/18/16	57.02	13.80
						01/24/17	54.06	16.76
						05/31/17	55.59	15.23
						09/21/17	62.08	8.74
						12/14/17	62.03	8.79
						03/08/18	57.70	13.12
						06/28/18	54.94	15.88
09/19/18	54.38	16.44						
12/13/18	54.26	16.56						
06/13/19	53.61	17.21						
10/09/19	55.40	15.42						
12/04/19	54.04	16.78						
06/25/20	62.05	8.77						
12/09/20	62.18	8.64						
06/22/21	60.06	10.76						
MW05	84.04	65	80	19	4	05/27/11	67.40	16.64
						10/20/11	67.91	16.13
						12/10/12	68.54	15.50
						08/29/13	69.72	14.32
						05/05/15	INACCESSIBLE	
DECOMMISSIONED 2015								
MW07	74.55	55	70	20	5	05/31/11	56.33	18.22
	74.68					10/20/11	56.87	17.68
						12/10/12	56.96	17.59
						08/29/13	60.95	13.60
						05/05/15	62.69	11.99
						08/03/15	61.67	13.01
						12/07/15	63.19	11.49
						03/07/16	63.22	11.46
						07/12/16	62.82	11.86
						10/18/16	61.26	13.42
						01/24/17	58.41	16.27
						05/31/17	59.90	14.78
						09/21/17	65.17	9.51
						12/14/17	INACCESSIBLE	
						03/08/18	61.76	12.92
						06/28/18	59.45	15.23
09/19/18	59.07	15.61						
12/13/18	58.87	15.81						
06/13/19	57.93	16.75						
10/09/19	61.02	13.66						
12/04/19	58.38	16.30						
06/30/20	64.92	9.76						
12/09/20	65.28	9.40						
06/22/21	63.21	11.47						

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MW13	90.66	70	85	21	-15	10/20/11	74.69	15.97
						12/10/12	75.38	15.28
						08/29/13	76.23	14.43
	05/05/15					INACCESSIBLE		
	08/03/15					80.07	10.79	
	12/07/15					80.73	10.13	
	03/07/16					80.07	10.79	
	07/12/16					80.03	10.83	
	10/18/16					78.16	12.70	
	01/24/17					75.56	15.30	
	05/31/17					77.40	13.46	
	09/21/17					80.46	10.40	
	12/14/17					80.19	10.67	
	03/08/18					78.13	12.73	
	06/28/18					77.01	13.85	
	09/19/18					76.68	14.18	
	12/13/18					76.52	14.34	
	06/13/19					76.00	14.86	
	10/09/19					81.45	9.41	
	12/04/19					76.00	14.86	
06/25/20	79.24	11.62						
12/09/20	79.98	10.88						
06/22/21	78.58	12.28						
MW27	83.82	90	105	-6	-21	12/07/15	73.86	9.96
						03/07/16	73.23	10.59
						07/12/16	73.01	10.81
						10/18/16	71.38	12.44
						01/24/17	69.57	14.25
						05/31/17	70.89	12.93
						09/21/17	73.87	9.95
						12/14/17	73.25	10.57
						03/08/18	71.10	12.72
						06/28/18	70.20	13.62
						09/19/18	69.85	13.97
						12/13/18	69.69	14.13
						06/13/19	69.19	14.63
						10/09/19	70.30	13.52
						12/04/19	69.11	14.71
06/30/20	72.38	11.44						
12/09/20	73.10	10.72						
06/22/21	71.61	12.21						
MW31	60.75	40	60	21	1	10/09/19	46.49	14.26
						12/04/19	44.16	16.59
						06/30/20	55.35	5.40
						12/09/20	55.66	5.09
						06/22/21	49.39	11.36
<b>Terry Avenue North</b>								
MW15	58.79	41	56	18	3	12/10/12	40.78	18.01
						08/29/13	45.37	13.42
						05/05/15	45.86	13.03
	08/03/15					44.81	14.08	
	12/07/15					47.08	11.81	
	03/07/16					47.58	11.31	
	07/12/16					46.73	12.16	
	10/18/16					44.97	13.92	
	01/24/17					42.05	16.84	
	05/31/17					43.08	15.81	
	09/21/17					49.62	9.27	
	12/14/17					49.92	8.97	
	03/08/18					45.80	13.09	
	06/28/18					42.95	15.94	
	09/19/18					42.35	16.54	
	12/13/18					42.26	16.63	
	06/13/19					41.65	17.24	
	10/09/19					41.80	17.09	
	12/04/19					42.00	16.89	
	06/25/20					51.75	7.14	
12/09/20	52.94	5.95						
06/22/21	--	--						

**Table 2**  
**Summary of Groundwater Elevations**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Well	TOC Elevation <sup>(1)</sup> (feet)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Top of Well Screen Elevation (feet NAVD88 approximate)	Bottom of Well Screen Elevation (feet NAVD88 approximate)	Date	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet NAVD88)
<b>Thomas Street</b>								
MW14	104.4	90	105	14	-1	10/20/11	88.81	15.59
						12/13/12	88.66	15.74
						08/29/13	89.99	14.41
DECOMMISSIONED 2013								
MW16	99.02	91	106	8	-7	12/10/12	83.47	15.55
	99.18					08/29/13	84.59	14.43
						05/05/15	88.87	10.31
						08/03/15	88.53	10.65
						12/07/15	89.15	10.03
						03/07/16	88.54	10.64
						07/12/16	88.41	10.77
						10/18/16	86.74	12.44
						01/24/17	84.71	14.47
						05/31/17	86.04	13.14
						09/21/17	88.85	10.33
12/14/17	88.43	10.75						
03/08/18	86.51	12.67						
WELL DAMAGED 2018								
MW28	99.18	90	105	9.18	-5.82	06/13/19	84.54	14.64
						10/08/19	84.75	14.43
						12/04/19	84.48	14.70
						06/25/20	87.38	11.80
						12/09/20	88.1	11.08
						05/21/21	87.23	11.95
						06/22/21	86.77	12.41
						08/17/21	86.65	12.53
09/21/21	86.56	12.62						
<b>Fairview Avenue North</b>								
MW-C	107.75	85	100	23	8	08/29/13	93.32	14.43
						05/05/15	97.64	10.11
<b>Harrison Street</b>								
MW01	68.68	45	60	24	9	05/25/11	50.59	18.09
	68.82					10/20/11	51.03	17.65
						12/10/12	51.24	17.44
						08/29/13	54.35	14.33
						05/05/15	58.11	10.71
						08/03/15	INACCESSIBLE	
						12/07/15	58.60	10.22
						03/07/16	57.69	11.13
						07/12/16	57.42	11.23
						10/18/16	55.65	13.00
						01/24/17	52.27	16.38
	05/31/17					54.69	13.96	
	09/21/17					58.91	9.74	
	12/14/17					58.14	10.51	
	03/08/18					55.84	12.81	
	06/28/18					54.20	14.45	
	09/19/18					53.93	14.72	
	12/13/18					53.05	15.60	
	06/13/19					52.34	16.31	
	10/09/19					56.65	12.00	
12/04/19	52.76	15.89						
06/25/20	57.08	11.57						
12/09/20	57.84	10.81						
06/22/21	56.32	12.33						
MW02	70.92	55	70	16	1	05/25/11	54.84	16.08
						10/20/11	55.08	15.84
						12/10/12	55.27	15.65
						08/29/13	56.48	14.44
						05/05/15	INACCESSIBLE	
						08/03/15	INACCESSIBLE	
DECOMMISSIONED 2015								
MW03	84.65	65	80	20	5	05/27/11	68.75	15.90
						10/20/11	68.97	15.68
						12/10/12	69.21	15.44
						08/29/13	70.21	14.44
						05/05/15	INACCESSIBLE	
						08/03/15	INACCESSIBLE	
DECOMMISSIONED 2015								



**Table 2**  
**Summary of Groundwater Elevations**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Well	TOC Elevation <sup>(1)</sup> (feet)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Top of Well Screen Elevation (feet NAVD88 approximate)	Bottom of Well Screen Elevation (feet NAVD88 approximate)	Date	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet NAVD88)
MW26	70.57	75	90	-4	-19	12/07/15	60.42	10.15
						03/07/16	59.82	10.75
						07/12/16	59.52	11.05
						10/18/16	58.10	12.47
						01/24/17	56.10	14.47
						05/31/17	57.79	12.78
						09/21/17	60.94	9.63
						12/14/17	60.11	10.46
						03/08/18	57.79	12.78
						06/28/18	56.83	13.74
						09/19/18	56.50	14.07
						12/13/18	56.34	14.23
						06/13/19	55.82	14.75
						10/09/19	57.28	13.29
						12/04/09	55.80	14.77
06/25/20	59.19	11.38						
12/09/20	59.85	10.72						
06/22/21	58.25	12.32						
MW32	78.38	60	75	18	3	10/09/19	65.80	12.58
						12/04/19	62.63	15.75
						06/25/20	66.88	11.50
						12/09/20	67.40	10.98
MW33	56.62	31	51	26	6	10/09/19	40.30	16.32
						12/04/19	39.93	16.69
						06/30/20	50.69	5.93
						12/09/20	WELL DRY	
06/22/21	46.00	10.62						
SMW01	49.45	30	40	19	9	08/29/13	36.78	12.67
SMW02	49.26	30	40	19	9	08/29/13	36.67	12.59
SMW06	48.63	30	40	19	9	08/29/13	36.39	12.24
SMW08	49.30	30	40	19	9	08/29/13	36.69	12.61
<b>Westlake Avenue North</b>								
SMW09	48.25	30	40	18	8	08/29/13	35.84	12.41
<b>South-Adjoining Property</b>								
MW29	101.72	82	102	20	0	10/09/19	86.91	14.81
						12/04/19	87.03	14.69
						06/25/20	89.84	11.88
						12/09/20	90.57	11.15
						06/22/21	89.29	12.43
MW30	101.97	84	104	18	-2	10/09/19	87.95	14.02
						12/04/19	87.25	14.72
						06/25/20	90.12	11.85
						12/09/20	91.10	10.87
						06/22/21	89.62	12.35
ONNI-4	106.05	93	105	13	1	06/25/20	97.13	8.92
						12/09/20	97.83	8.22
						06/22/21	96.63	9.42
ONNI-5	105.45	93	105	12	0	02/06/20	93.10	12.35
						06/25/20	95.65	9.80
						12/09/20	96.30	9.15
						06/22/21	95.14	10.31
<b>North-Adjoining Property</b>								
SLU-MW01 <sup>(2)</sup>	53.43	35	45	18	8	08/29/13	40.00	13.43
DECOMMISSIONED 2013								
SLU-MW02 <sup>(2)</sup>	52.76	30	40	23	13	08/29/13	DRY	--
DECOMMISSIONED 2013								

**NOTES:**

<sup>(1)</sup>TOC elevations surveyed relative to NAVD88.

<sup>(2)</sup>Groundwater elevation data compiled from reports on file at the Washington State Department of Ecology.

-- = not analyzed, measured, or calculated

NAVD88 = North American Vertical Datum of 1988

TOC = top of casing

**Table 3**  
**Groundwater Analytical Results for CVOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Sample Location	Sample Identification	Sample Date	Sampled By	PCE <sup>(1)</sup> (µg/L)	TCE <sup>(1)</sup> (µg/L)	cis-1-2-DCE <sup>(1)</sup> (µg/L)	trans-1-2-DCE <sup>(1)</sup> (µg/L)	Vinyl Chloride <sup>(1)</sup> (µg/L)
<b>Troy Laundry Property</b>								
MW06	MW06-20110531	05/31/11	SoundEarth	3.1	<b>8.2</b>	<b>150<sup>ve</sup></b>	<1	<b>0.76</b>
	MW06-20111012	10/12/11	SoundEarth	3.6	<b>11</b>	<b>120</b>	<1	<b>0.76</b>
	MW06-20130909	09/09/13	SoundEarth	3.8	4.5	<b>150</b>	<1	<b>0.93</b>
DECOMMISSIONED 2013								
MW08	MW08-20111013	10/13/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW08-20130910	09/10/13	SoundEarth	<1	<1	<1	<1	<0.2
DECOMMISSIONED 2013								
MW09	MW09-20111013	10/13/11	SoundEarth	<1	<b>16</b>	<b>22</b>	<1	<0.2
	MW09-20130910	09/10/13	SoundEarth	1.6	<b>15</b>	2.0	<1	<0.2
DECOMMISSIONED 2013								
MW10	MW10-20111012	10/12/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW10-20130909	09/09/13	SoundEarth	<1	<1	<1	<1	<0.2
DECOMMISSIONED 2013								
MW11	MW11-20111013	10/13/11	SoundEarth	<b>21</b>	2.6	5.6	<1	<0.2
	MW11-20130909	09/09/13	SoundEarth	<b>39</b>	3.8	3.6	<1	<0.2
DECOMMISSIONED 2013								
MW12	MW12-20111017	10/17/11	SoundEarth	<1	<b>19</b>	1.3	<1	<0.2
	MW12-20130909	09/09/13	SoundEarth	<1	<b>20</b>	<1	<1	<0.2
DECOMMISSIONED 2013								
MW17	MW17-20150506	05/06/15	SoundEarth	<1	2.2	<1	<1	<0.2
	MW17-20150804	08/07/15	SoundEarth	<1	1.5	<1	<1	<0.2
	MW17-20151207	12/07/15	SoundEarth	<1	1.5	<1	<1	<0.2
	MW17-20160308	03/08/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW17-20160714	07/14/16	SoundEarth	<1	1.2	<1	<1	<0.2
	MW17-20161020	10/20/16	SoundEarth	<1	2.1	<1	<1	<0.2
	MW17-20170126	01/26/17	SoundEarth	<1	1.9	<1	<1	<0.2
	MW17-20170601	06/01/17	SoundEarth	<1	2.5	<1	<1	<0.2
	MW17-20170923	09/23/17	SoundEarth	<1	2.1	1.2	<1	<0.2
	MW17-20171216	12/16/17	SoundEarth	<1	2.5	1.7	<1	<0.2
	MW17-20180310	03/10/18	SoundEarth	<1	2.6	1.5	<1	<0.2
	MW17-20180630	06/30/18	SoundEarth	<1	2.8	2.2	<1	<0.2
	MW17-20180922	09/22/18	SoundEarth	<1	2.7	2.0	<1	<0.2
	MW17-20181215	12/15/18	SoundEarth	<1	2.9	2.2	<1	<0.2
	MW17-20190615	06/15/19	SoundEarth	<1	3.4	2.2	<1	<0.2
	MW17-20191207	12/07/19	SoundEarth	<1	3.9	2.2	<1	<0.2
	MW17-20200627	06/27/20	SoundEarth	<1	<1	<1	<1	<0.2
MW17-20201212	12/12/20	SoundEarth	<1	<1	<1	<1	<0.2	
MW17-20210625	06/25/21	SoundEarth	<1	1.7	<1	<1	<0.2	
MW18	MW18-20150506	05/06/15	SoundEarth	<1	<b>46</b>	5.2	<1	<0.2
	MW18-20150803	08/03/15	SoundEarth	<1	<b>51</b>	4.6	<1	<0.2
	MW18-20151208	12/08/15	SoundEarth	<1	<b>51</b>	9.9	<1	<0.2
	MW18-20160308	03/08/16	SoundEarth	<1	<b>44</b>	8.1	<1	<0.2
	MW18-20160714	07/14/16	SoundEarth	<1	3.3	1.7	<1	<0.2
	MW18-20161020	10/20/16	SoundEarth	<1	<b>6.5</b>	4.0	<1	<0.2
	MW18-20170126	01/26/17	SoundEarth	<1	<b>7.7</b>	14	<1	<b>0.25</b>
	MW18-20170601	06/01/17	SoundEarth	<1	3.3	14	<1	<b>0.31</b>
	MW18-20170923	09/23/17	SoundEarth	<1	<1	<b>22</b>	<1	<b>0.38</b>
	MW18-20171216	12/16/17	SoundEarth	<1	<1	<b>22</b>	<1	<b>0.24</b>
	MW18-20180310	03/10/18	SoundEarth	<1	<1	<b>27</b>	<1	<b>0.40</b>
	MW18-20180630	06/30/18	SoundEarth	<1	<1	<b>27</b>	<1	<b>0.43</b>
	MW18-20180922	09/22/18	SoundEarth	<1	<1	<b>21</b>	<1	<b>0.42</b>
	MW18-20181215	12/15/18	SoundEarth	<1	<1	<b>24</b>	<1	<b>0.49</b>
	MW18-20190615	06/15/19	SoundEarth	<1	<1	<b>28</b>	<1	<b>0.44</b>
	MW18-20191207	12/07/19	SoundEarth	<1	<1	<b>28</b>	<1	<b>0.55</b>
	MW18-20200627	06/27/20	SoundEarth	<1	<1	<b>27</b>	<1	<b>1.5</b>
MW18-20201212	12/12/20	SoundEarth	<1	<1	15	<1	<b>2.4</b>	
MW18-20210625	06/25/21	SoundEarth	<1	<1	1.9	<1	<b>1.7</b>	
<b>MTCA Cleanup Level</b>				<b>5<sup>(2)</sup></b>	<b>5<sup>(2)</sup></b>	<b>16<sup>(3)</sup></b>	<b>160<sup>(3)</sup></b>	<b>0.2<sup>(2)</sup></b>

**Table 3**  
**Groundwater Analytical Results for CVOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Sample Location	Sample Identification	Sample Date	Sampled By	PCE <sup>(1)</sup> (µg/L)	TCE <sup>(1)</sup> (µg/L)	cis-1-2-DCE <sup>(1)</sup> (µg/L)	trans-1-2-DCE <sup>(1)</sup> (µg/L)	Vinyl Chloride <sup>(1)</sup> (µg/L)
MW19	MW19-20150507	05/07/15	SoundEarth	<1	69	15	<1	<0.2
	MW19-20150803	08/03/15	SoundEarth	<1	61	20	<1	<0.2
	MW19-20151207	12/07/15	SoundEarth	<1	65	23	<1	<0.2
	MW19-20160308	03/08/16	SoundEarth	<1	52	26	<1	<0.2
	MW19-20160713	07/13/16	SoundEarth	<1	4.6	10	<1	<0.2
	MW19-20161021	10/21/16	SoundEarth	<1	10	4.4	<1	0.40
	MW19-20170125	01/25/17	SoundEarth	<1	5.5	3.9	<1	0.30
	MW19-20170601	06/01/17	SoundEarth	<1	5.7	3.5	<1	0.44
	MW19-20170923	09/23/17	SoundEarth	<1	1.7	3.4	<1	0.97
	MW19-20171216	12/16/17	SoundEarth	<1	1.1	13	<1	0.97
	MW19-20180310	03/10/18	SoundEarth	<1	<1	12	<1	0.78
	MW19-20180630	06/30/18	SoundEarth	<1	<1	12	<1	0.96
	MW19-20180922	09/22/18	SoundEarth	<1	<1	16	<1	0.86
	MW19-20190615	06/15/19	SoundEarth	<1	<1	27	<1	0.79
	MW19-20191207	12/07/19	SoundEarth	<1	<1	35	<1	0.98
	MW19-20200627	06/27/20	SoundEarth	<1	<1	41	<1	0.78
MW19-20201212	12/12/20	SoundEarth	<1	<1	22	<1	2.6	
MW19-20210625	06/25/21	SoundEarth	<1	<1	<1	<1	1.0	
MW20	MW20-20150506	05/06/15	SoundEarth	<1	<1	1.5	<1	<0.2
	MW20-20150803	08/03/15	SoundEarth	<1	<1	1.2	<1	<0.2
	MW20-20151207	12/07/15	SoundEarth	<1	<1	<1	<1	<0.2
	MW20-20160309	03/09/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW20-20160715	07/15/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW20-20161020	10/20/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW20-20170125	01/25/17	SoundEarth	<1	<1	4.1	<1	<0.2
	MW20-20170601	06/01/17	SoundEarth	<1	<1	1.2	<1	<0.2
	MW20-20170924	09/24/17	SoundEarth	<1	<1	9.5	<1	<0.2
	MW20-20171216	12/16/17	SoundEarth	<1	1.3	15	<1	0.35
	MW20-20180310	03/10/18	SoundEarth	<1	<1	11	<1	<0.2
	MW20-20180630	06/30/18	SoundEarth	<1	<1	7	<1	<0.2
	MW20-20180922	09/22/18	SoundEarth	<1	<1	5.3	<1	<0.2
	MW20-20181215	12/15/18	SoundEarth	<1	<1	4.4	<1	<0.2
	MW20-20190615	06/15/19	SoundEarth	<1	<1	3.8	<1	<0.2
	MW20-20191207	12/07/19	SoundEarth	<1	<1	3.0	<1	<0.2
MW20-20200627	06/27/20	SoundEarth	<1	1.2	6.1	<1	<0.2	
MW20-20201212	12/12/20	SoundEarth	<1	1.3	6.0	<1	<0.2	
MW20-20210625	06/25/21	SoundEarth	<1	1.6	5.3	<1	<0.2	
MW21	MW21-20150506	05/06/15	SoundEarth	5.1	1.6	7.2	<1	<0.2
	MW21-20150804	08/04/15	SoundEarth	4.9	1.4	4.5	<1	<0.2
	MW21-20151208	12/08/15	SoundEarth	7.3	2.0	6.7	<1	<0.2
	MW21-20160309	03/09/16	SoundEarth	5.3	1.4	7.9	<1	<0.2
	MW21-20160713	07/13/16	SoundEarth	<1	<1	1.2	<1	<0.2
	MW21-20161020	10/20/16	SoundEarth	<1	<1	1.7	<1	<0.2
	MW21-20170126	01/26/17	SoundEarth	<1	<1	2.4	<1	<0.2
	MW21-20170601	06/01/17	SoundEarth	<1	<1	2.4	<1	<0.2
	MW21-20170923	09/23/17	SoundEarth	<1	<1	3.7	<1	<0.2
	MW21-20171216	12/16/17	SoundEarth	<1	<1	14	<1	0.49
	MW21-20180310	03/10/18	SoundEarth	<1	<1	14	<1	0.43
	MW21-20180630	06/30/18	SoundEarth	<1	<1	6.0	<1	0.29
	MW21-20180922	09/22/18	SoundEarth	<1	<1	6.9	<1	0.30
	MW21-20181215	12/15/18	SoundEarth	<1	<1	16	<1	0.96
	MW21-20190615	06/15/19	SoundEarth	<1	<1	29	<1	1.1
	MW21-20191207	12/07/19	SoundEarth	<1	<1	34	<1	1.3
MW21-20200627	06/27/20	SoundEarth	<1	<1	13	<1	0.49	
MW21-20201212	12/12/20	SoundEarth	<1	<1	10	<1	1.8	
MW21-20210625	6/25/21	SoundEarth	<1	<1	11	<1	0.86	
<b>MTCA Cleanup Level</b>				<b>5<sup>(2)</sup></b>	<b>5<sup>(2)</sup></b>	<b>16<sup>(3)</sup></b>	<b>160<sup>(3)</sup></b>	<b>0.2<sup>(2)</sup></b>

**Table 3**  
**Groundwater Analytical Results for CVOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Sample Location	Sample Identification	Sample Date	Sampled By	PCE <sup>(1)</sup> (µg/L)	TCE <sup>(1)</sup> (µg/L)	cis-1-2-DCE <sup>(1)</sup> (µg/L)	trans-1-2-DCE <sup>(1)</sup> (µg/L)	Vinyl Chloride <sup>(1)</sup> (µg/L)
MW22	MW22-20150506	05/06/15	SoundEarth	11	2.2	27	<1	<0.2
	MW22-20150804	08/04/15	SoundEarth	17	3.0	34	<1	<0.2
	MW22-20151208	12/08/15	SoundEarth	19	3.7	42	<1	<0.2
	MW22-20160308	03/08/16	SoundEarth	28	4.5	52	<1	0.35
	MW22-20160713	07/13/16	SoundEarth	<1	<1	5.5	<1	<0.2
	MW22-20161020	10/20/16	SoundEarth	<1	<1	6.7	<1	0.65
	MW22-20170126	01/26/17	SoundEarth	<1	<1	8.5	<1	0.51
	MW22-20170601	06/01/17	SoundEarth	<1	<1	10	<1	1.5
	MW22-20170923	09/23/17	SoundEarth	<1	<1	18	<1	1.4
	MW22-20171216	12/16/17	SoundEarth	<1	<1	22	<1	1.2
	MW22-20180310	03/10/18	SoundEarth	<1	<1	22	<1	1.3
	MW22-20180630	06/30/18	SoundEarth	<1	<1	28	<1	1.2
	MW22-20180922	09/22/18	SoundEarth	<1	<1	33	<1	0.90
	MW22-20181215	12/15/18	SoundEarth	<1	<1	37	<1	1.2
	MW22-20190615	06/15/19	SoundEarth	1.1	1.1	49	<1	1.0
	MW22-20191207	12/07/19	SoundEarth	1.3	1.3	48	<1	1.0
	MW22-20200627	06/27/20	SoundEarth	1.4	1.3	42	<1	0.99
	MW22-20201212	12/12/20	SoundEarth	<1	<1	44	<1	1.1
MW22-20210625	06/25/21	SoundEarth	1.1	<1	43	<1	0.82	
MW23	MW23-20150507	05/07/15	SoundEarth	6.1	18	13	<1	<0.2
	MW23-20150804	08/04/15	SoundEarth	6.1	24	20	<1	0.20
	MW23-20151208	12/08/15	SoundEarth	3.8	16	120	<1	0.57
	MW23-20160308	03/08/16	SoundEarth	4.1	14	95	<1	0.64
	MW23-20160714	07/14/16	SoundEarth	<1	1.6	14	<1	2.2
	MW23-20161020	10/20/16	SoundEarth	<1	2.1	9.9	<1	0.48
	MW23-20170126	01/26/17	SoundEarth	<1	2.9	41	<1	1.4
	MW23-20170601	06/01/17	SoundEarth	<1	2.7	23	<1	0.74
	MW23-20170923	09/23/17	SoundEarth	<1	1.7	16	<1	0.50
	MW23-20171216	12/16/17	SoundEarth	<1	1.3	14	<1	0.51
	MW23-20180310	03/10/18	SoundEarth	<1	<1	20	<1	0.52
	MW23-20180630	06/30/18	SoundEarth	<1	<1	14	<1	0.53
	MW23-20180922	09/22/18	SoundEarth	<1	<1	16	<1	0.53
	MW23-20181215	12/15/18	SoundEarth	<1	<1	17	<1	<0.2
	MW23-20190615	06/15/19	SoundEarth	<1	<1	25	<1	0.72
	MW23-20191207	12/07/19	SoundEarth	<1	<1	38	<1	0.89
	MW23-20200627	06/27/20	SoundEarth	<1	<1	30	<1	0.76
	MW23-20201212	12/12/20	SoundEarth	<1	<1	30	<1	0.85
MW23-20210625	06/25/21	SoundEarth	<1	<1	26	<1	0.97	
MW24	MW24-20150506	05/06/15	SoundEarth	2.5	31	72	<1	0.26
	MW24-20150804	08/04/15	SoundEarth	5.5	28	75	<1	<0.2
	MW24-20151208	12/08/15	SoundEarth	11	28	54	<1	<0.2
	MW24-20160309	03/09/16	SoundEarth	11	23	45	<1	<0.2
	MW24-20160715	07/15/16	SoundEarth	<1	1.7	12	<1	<0.2
	MW98-20160715 (DUP)		SoundEarth	<1	1.8	12	<1	<0.2
	MW24-20161020	10/20/16	SoundEarth	<1	2.7	12	<1	0.26
	MW24-20170125	01/25/17	SoundEarth	<1	3.5	20	<1	0.81
	MW24-20170601	06/01/17	SoundEarth	1.1	4.8	35	<1	1.0
	MW24-20170924	09/24/17	SoundEarth	<1	1.8	33	<1	0.36
	MW24-20171216	12/16/17	SoundEarth	<1	1.3	30	<1	0.38
	MW24-20180310	03/10/18	SoundEarth	<1	<1	25	<1	0.36
	MW24-20180630	06/30/18	SoundEarth	1.5	1.9	41	<1	2.1
	MW24-20180922	09/22/18	SoundEarth	<1	<1	35	<1	0.37
	MW24-20181215	12/15/18	SoundEarth	<1	<1	43	<1	0.51
	MW24-20190615	06/15/19	SoundEarth	<1	<1	84	<1	1.0
	MW24-20191207	12/07/19	SoundEarth	<1	<1	83	<1	0.94
	MW24-20200627	06/27/20	SoundEarth	<1	<1	61	<1	0.76
MW24-20201212	12/12/20	SoundEarth	<1	<1	45	<1	0.61	
MW24-20210625	06/25/21	SoundEarth	<1	<1	37	<1	0.67	
<b>MTCA Cleanup Level</b>				<b>5<sup>(2)</sup></b>	<b>5<sup>(2)</sup></b>	<b>16<sup>(3)</sup></b>	<b>160<sup>(3)</sup></b>	<b>0.2<sup>(2)</sup></b>

**Table 3**  
**Groundwater Analytical Results for CVOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Sample Location	Sample Identification	Sample Date	Sampled By	PCE <sup>(1)</sup> (µg/L)	TCE <sup>(1)</sup> (µg/L)	cis-1-2-DCE <sup>(1)</sup> (µg/L)	trans-1-2-DCE <sup>(1)</sup> (µg/L)	Vinyl Chloride <sup>(1)</sup> (µg/L)
MW25	MW25-20150507	05/07/15	SoundEarth	<1	68	5.2	<1	<0.2
	MW99-20150507 (DUP)			<1	69	5.3	<1	<0.2
	MW25-20150805	08/05/15	SoundEarth	3.0	75	7.9	<1	<0.2
	MW99-20150805 (DUP)			2.9	73	7.8	<1	<0.2
	MW25-20151209	12/09/15	SoundEarth	11	71	8.4	<1	<0.2
	MW99-20151209 (DUP)			11	72	8.3	<1	<0.2
	MW25-20160308	03/08/16	SoundEarth	24	50	12	<1	<0.2
	MW99-20160308 (DUP)			25	50	12	<1	<0.2
	MW25-20160713	07/13/16	SoundEarth	6.1	4.8	23	<1	0.70
	MW25-20161019	10/19/16	SoundEarth	1.8	5.1	15	<1	0.96
	MW99-20161019 (DUP)			1.7	5.0	16	<1	1.0
	MW25-20170125	01/25/17	SoundEarth	1.0	3.6	44	<1	0.89
	MW99-20170125 (DUP)			1.1	3.7	44	<1	0.92
	MW25-20170601	06/01/17	SoundEarth	<1	1.2	15	<1	0.31
	MW99-20170601 (DUP)			<1	1.3	15	<1	0.41
	MW25-20170923	09/23/17	SoundEarth	<1	<1	15	<1	0.40
	MW99-20170923 (DUP)			<1	<1	15	<1	0.34
	MW25-20171216	12/16/17	SoundEarth	<1	<1	23	<1	0.41
	MW99-20171216 (DUP)			<1	<1	23	<1	0.40
	MW25-20180310	03/10/18	SoundEarth	<1	<1	25	<1	0.32
	MW99-20180310 (DUP)			<1	<1	25	<1	0.30
	MW25-20180630	06/30/18	SoundEarth	<1	<1	31	<1	0.52
	MW99-20180630 (DUP)			<1	<1	32	<1	0.49
	MW25-20180922	09/22/18	SoundEarth	<1	<1	37	<1	0.46
	MW99-20180922 (DUP)			<1	<1	36	<1	0.51
	MW25-20181215	12/15/18	SoundEarth	<1	<1	40	<1	0.60
	MW99-20181215 (DUP)			<1	<1	39	<1	0.57
	MW25-20190615	06/15/19	SoundEarth	<1	<1	45	<1	0.54
MW99-20190615 (DUP)			<1	<1	43	<1	0.50	
MW25-20191207	12/07/19	SoundEarth	<1	<1	40	<1	0.63	
MW99-20191207 (DUP)			<1	<1	36	<1	0.58	
MW25-20200627	6/27/2020	SoundEarth	<1	<1	40	<1	0.73	
MW99-20200627 (DUP)			<1	<1	37	<1	0.67	
MW25-20201212	12/12/20	SoundEarth	<1	<1	35	<1	0.43	
MW99-20201212 (DUP)			<1	<1	34	<1	0.43	
MW25-20210625	06/25/21	SoundEarth	<1	<1	48	<1	0.79	
MW99-20210625 (DUP)			<1	<1	47	<1	0.90	
IW04	IW04-20150508	05/08/15	SoundEarth	<1	15	1.9	<1	<0.2
	IW04-20160309	03/09/16	SoundEarth	<1	2.5	11	<1	<0.2
	IW04-20160714	07/14/16	SoundEarth	<1	<1	<1	<1	<0.2
	IW04-20161021	10/21/16	SoundEarth	<1	<1	1.8	<1	<0.2
	IW04-20170126	01/26/17	SoundEarth	<1	1.1	4.8	<1	<0.2
	IW04-20170601	06/01/17	SoundEarth	<1	1.2	12	<1	0.21
	IW04-20170923	09/23/17	SoundEarth	<1	<1	14	<1	0.22
	IW04-20171216	12/16/17	SoundEarth	<1	<1	19	<1	0.54
	IW04-20180310	03/10/18	SoundEarth	<1	<1	9.0	<1	0.65
	IW04-20180630	06/30/18	SoundEarth	<1	<1	5.3	<1	0.68
	IW04-20180922	09/22/18	SoundEarth	<1	<1	<1	<1	<0.2
	IW04-20181215	12/15/18	SoundEarth	<1	<1	1.9	<1	1.6
	IW04-20190615	06/15/19	SoundEarth	<1	<1	1.7	<1	1.0
	IW04-20191207	12/07/19	SoundEarth	<1	<1	1.4	<1	1.1
	IW04-20200627	06/27/20	SoundEarth	<1	<1	1.1	<1	0.77
	IW04-20201212	12/12/20	SoundEarth	<1	<1	1.0	<1	0.64
IW04-20210625	06/25/21	SoundEarth	<1	<1	<1	<1	0.46	
IW06	IW06-20150507	05/07/15	SoundEarth	6.3	13	<1	<1	<0.2
	IW06-20180310	03/10/18	SoundEarth	<1	<1	1.6	<1	<0.2
	IW06-20180630	06/30/18	SoundEarth	<1	<1	<1	<1	<0.2
	IW06-20181215	12/15/18	SoundEarth	1.0	<1	<1	<1	<0.2
	IW06-20190615	06/15/19	SoundEarth	1.7	<1	<1	<1	<0.2
	IW06-20191207	12/07/19	SoundEarth	1.4	<1	<1	<1	<0.2
	IW06-20200627	06/27/20	SoundEarth	<1	<1	5.2	<1	<0.2
	IW06-20201212	12/12/20	SoundEarth	<1	<1	3.3	<1	<0.2
IW06-20210625	06/25/21	SoundEarth	<1	<1	3.6	<1	0.59	
<b>MTCA Cleanup Level</b>				<b>5<sup>(2)</sup></b>	<b>5<sup>(2)</sup></b>	<b>16<sup>(3)</sup></b>	<b>160<sup>(3)</sup></b>	<b>0.2<sup>(2)</sup></b>



**Table 3**  
**Groundwater Analytical Results for CVOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Sample Location	Sample Identification	Sample Date	Sampled By	PCE <sup>(1)</sup> (µg/L)	TCE <sup>(1)</sup> (µg/L)	cis-1-2-DCE <sup>(1)</sup> (µg/L)	trans-1-2-DCE <sup>(1)</sup> (µg/L)	Vinyl Chloride <sup>(1)</sup> (µg/L)
IW50	IW50-20150803	08/03/15	SoundEarth	4.1	8.1	44	<1	<0.2
	IW50-20151208	12/08/15	SoundEarth	<1	<1	140	<1	1.8
	IW50-20160309	03/09/16	SoundEarth	<1	<1	110	<1	1.9
	IW50-20160715	07/15/16	SoundEarth	3.7	<1	38	<1	2.5
	IW50-20161021	10/21/16	SoundEarth	3.7	<1	23	<1	1.0
	IW50-20170126	01/26/17	SoundEarth	13	2.1	34	<1	0.74
	IW50-20170602	06/02/17	SoundEarth	<1	<1	81	<1	0.95
	IW50-20170924	09/24/17	SoundEarth	<1	<1	26	<1	2.6
	IW50-20171216	12/16/17	SoundEarth	<1	<1	15	<1	2.2
	IW50-20180310	03/10/18	SoundEarth	<1	<1	8.0	<1	3.6
	IW50-20180630	06/30/18	SoundEarth	<1	<1	4.5	<1	2.5
	IW50-20180922	09/22/18	SoundEarth	<1	<1	5.1	<1	2.9
	IW50-20181215	12/15/18	SoundEarth	1.6	<1	15	<1	4.5
	IW50-20190615	06/15/19	SoundEarth	5.2	2.0	54	<1	7.1
	IW50-20191207	12/07/19	SoundEarth	4.5	1.6	55	<1	7.4
	IW50-20200627	06/27/20	SoundEarth	3.9	<1	2.7	<1	1.1
IW50-20201212	12/12/20	SoundEarth	<1	<1	<1	<1	<0.2	
IW50-20210625	06/25/21	SoundEarth	3.7	<1	1.7	<1	0.85	
IW61	IW61-20151208	12/08/15	SoundEarth	10	2.8	120	<1	0.86
	IW61-20160309	03/09/16	SoundEarth	23	4.2	140	<1	1.7
	IW61-20160714	07/14/16	SoundEarth	8.3	1.6	24	<1	1.6
	IW61-20161021	10/21/16	SoundEarth	9.5	2.8	34	<1	0.96
	IW61-20170126	01/26/17	SoundEarth	8.3	2.9	32	<1	0.96
	IW61-20170602	06/02/17	SoundEarth	9.9	3.4	41	<1	1.3
	IW61-20170923	09/23/17	SoundEarth	12	3.2	45	<1	1.2
	IW61-20171216	12/16/17	SoundEarth	15	3.2	65	<1	1.2
	IW61-20180310	03/10/18	SoundEarth	15	2.7	71	<1	1.1
	IW61-20180323*	03/23/18	SoundEarth	15	2.9	82	<1	1.3
	IW61-20180630	06/30/18	SoundEarth	16	2.5	67	<1	1.7
	IW61-20180922	09/22/18	SoundEarth	13	2.1	63	<1	1.8
	IW61-20181215	12/15/18	SoundEarth	15	2.1	58	<1	2.0
	IW61-20190615	06/15/19	SoundEarth	13	2.4	71	<1	2.9
	IW61-20191207	12/07/19	SoundEarth	6.8	1.7	65	<1	4.0
	IW61-20200627	06/27/20	SoundEarth	5.3	1.1	63	<1	4.5
IW61-20201212	12/12/20	SoundEarth	<1	<1	30	<1	4.1 <sup>ca</sup>	
IW61-20210625	06/25/21	SoundEarth	<1	<1	25	<20	1.8	
IW91	IW91-20150506	05/06/15	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20150804	08/04/15	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20151208	12/08/15	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20160309	03/09/16	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20160714	07/14/16	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20161020	10/20/16	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20170126	01/26/17	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20170601	06/01/17	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20170923	09/23/17	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20171216	12/16/17	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20180310	03/10/18	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20180630	06/30/18	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20180922	09/22/18	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20181215	12/15/18	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20190615	06/15/19	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20191207	12/07/19	SoundEarth	<1	<1	<1	<1	<0.2
IW91-20200627	06/27/20	SoundEarth	<1	<1	<1	<1	<0.2	
IW91-20201212	12/12/20	SoundEarth	<1	<1	<1	<1	<0.2	
IW91-20210625	06/25/21	SoundEarth	<1	<1	<1	<1	<0.2	
<b>MTCA Cleanup Level</b>				<b>5<sup>(2)</sup></b>	<b>5<sup>(2)</sup></b>	<b>16<sup>(3)</sup></b>	<b>160<sup>(3)</sup></b>	<b>0.2<sup>(2)</sup></b>

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**Groundwater Analytical Results for CVOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Sample Location	Sample Identification	Sample Date	Sampled By	PCE <sup>(1)</sup> (µg/L)	TCE <sup>(1)</sup> (µg/L)	cis-1-2-DCE <sup>(1)</sup> (µg/L)	trans-1-2-DCE <sup>(1)</sup> (µg/L)	Vinyl Chloride <sup>(1)</sup> (µg/L)
<b>Boren Avenue North</b>								
MW04	MW04-20110527	05/27/11	SoundEarth	<1	15	<1	<1	<0.2
	MW04-20111012	10/12/11	SoundEarth	<1	15	<1	<1	<0.2
	MW04-20130909	09/09/13	SoundEarth	<1	22	15	<1	<0.2
	MW04-20150508	05/08/15	SoundEarth	1.4	13	4.2	<1	<0.2
	MW04-20150806	08/06/15	SoundEarth	<1	6.9	1.0	<1	<0.2
	MW04-20151209	12/09/15	SoundEarth	<1	9.2	<1	<1	<0.2
	MW04-20160308	03/08/16	SoundEarth	<1	9.6	1.1	<1	<0.2
	MW04-20160713	07/13/16	SoundEarth	1.0	8.9	1.3	<1	<0.2
	MW04-20161019	10/19/16	SoundEarth	<1	5.5	<1	<1	<0.2
	MW04-20170124	01/24/17	SoundEarth	<1	9.4	<1	<1	<0.2
	MW04-20170531	05/31/17	SoundEarth	<1	9.3	<1	<1	<0.2
	MW04-20170921	09/21/17	SoundEarth	<1	5.7	3.2	<1	<0.2
	MW04-20171214	12/14/17	SoundEarth	<1	8.0	2.4	<1	<0.2
	MW04-20180309	03/09/18	SoundEarth	<1	8.6	<1	<1	<0.2
	MW04-20180629	06/29/18	SoundEarth	<1	9.4	<1	<1	<0.2
	MW04-20180920	09/20/18	SoundEarth	<1	9.4	<1	<1	<0.2
	MW04-20181214	12/14/18	SoundEarth	<1	10	<1	<1	<0.2
	MW04-20190614	06/14/19	SoundEarth	<1	11	<1	<1	<0.2
	MW04-20191205	12/05/19	SoundEarth	<1	11	<1	<1	<0.2
	MW04-20200626	06/26/20	SoundEarth	<1	10	<1	<1	<0.2
MW04-20201211	12/11/20	SoundEarth	<1	9.2	<1	<1	<0.2	
MW04-20210624	06/24/21	SoundEarth	<1	11	<1	<1	<0.2	
MW05	MW05-20110527	05/27/11	SoundEarth	39	16	1.8	<1	<0.2
	MW05-20111012	10/12/11	SoundEarth	29	14	1.5	<1	<0.2
	MW05-20130910	09/10/13	SoundEarth	21	13	1.9	<1	<0.2
DECOMMISSIONED 2015								
MW07	MW07-20110531	05/31/11	SoundEarth	1.4	12	2.3	<1	<0.2
	MW07-20111012	10/12/11	SoundEarth	2.2	11	1.8	<1	<0.2
	MW07-20130909	09/09/13	SoundEarth	1.5	33	5.4	<1	<0.2
	MW07-20150508	05/08/15	SoundEarth	2.5	15	4.8	<1	<0.2
	MW07-20150805	08/05/15	SoundEarth	1.8	12	3.2	<1	<0.2
	MW07-20151209	12/09/15	SoundEarth	2.3	14	4.1	<1	<0.2
	MW07-20160308	03/08/16	SoundEarth	2.6	13	3.8	<1	<0.2
	MW07-20160713	07/13/16	SoundEarth	3.0	18	5.7	<1	<0.2
	MW07-20161019	10/19/16	SoundEarth	3.5	13	2.3	<1	<0.2
	MW07-20170124	01/24/17	SoundEarth	4.8	8.1	<1	<1	<0.2
	MW07-20170531	05/31/17	SoundEarth	4.7	8.6	<1	<1	<0.2
	MW07-20180308	03/08/18	SoundEarth	2.6	11	1.1	<1	<0.2
	MW07-20180629	06/29/18	SoundEarth	3.3	7.3	<1	<1	<0.2
	MW07-20180920	09/20/18	SoundEarth	2.8	6.0	<1	<1	<0.2
	MW07-20181214	12/14/18	SoundEarth	3.3	6.7	<1	<1	<0.2
	MW07-20190614	06/14/19	SoundEarth	3.9	5.9	<1	<1	<0.2
	MW07-20191205	12/05/19	SoundEarth	3.3	5.9	<1	<1	<0.2
	MW07-20200630	06/30/20	SoundEarth	<1	5.8	<1	<1	<0.2
MW07-20201210	12/10/20	SoundEarth	1.7	18	3.2	<1	<0.2	
MW07-20210623	06/23/21	SoundEarth	1.8	15	3.4	<1	<0.2	
<b>MTCA Cleanup Level</b>				<b>5<sup>(2)</sup></b>	<b>5<sup>(2)</sup></b>	<b>16<sup>(3)</sup></b>	<b>160<sup>(3)</sup></b>	<b>0.2<sup>(2)</sup></b>

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Sample Location	Sample Identification	Sample Date	Sampled By	PCE <sup>(1)</sup> (µg/L)	TCE <sup>(1)</sup> (µg/L)	cis-1-2-DCE <sup>(1)</sup> (µg/L)	trans-1-2-DCE <sup>(1)</sup> (µg/L)	Vinyl Chloride <sup>(1)</sup> (µg/L)
MW13	MW13-20111020	10/20/11	SoundEarth	5.1	1.2	<1	<1	<0.2
	MW13-20130910	09/10/13	SoundEarth	11	1.4	<1	<1	<0.2
	MW13-20150511	05/11/15	SoundEarth	4.6 <sup>ct</sup>	1.7 <sup>ct</sup>	<1 <sup>ct</sup>	<1 <sup>ct</sup>	<0.2 <sup>ct</sup>
	MW13-20150805	08/05/15	SoundEarth	5.4	2.3	<1	<1	<0.2
	MW13-20151215	12/15/15	SoundEarth	5.6	1.6	<1	<1	<0.2
	MW13-20160307	03/07/16	SoundEarth	6.6	1.6	<1	<1	<0.2
	MW13-20160712	07/12/16	SoundEarth	6.5	1.6	<1	<1	<0.2
	MW13-20161019	10/19/16	SoundEarth	10	2.2	<1	<1	<0.2
	MW13-20170124	01/24/17	SoundEarth	6.4	1.0	<1	<1	<0.2
	MW13-20170531	05/31/17	SoundEarth	10	1.5	<1	<1	<0.2
	MW13-20170921	09/21/17	SoundEarth	8.4	1.8	<1	<1	<0.2
	MW13-20171214	12/14/17	SoundEarth	5.2	1.4	<1	<1	<0.2
	MW13-20180308	03/08/18	SoundEarth	8.0	1.4	<1	<1	<0.2
	MW13-20180629	06/29/18	SoundEarth	4.4	<1	<1	<1	<0.2
	MW13-20180920	09/20/18	SoundEarth	6.5	1.3	<1	<1	<0.2
	MW13-20181214	12/14/18	SoundEarth	7.8	1.4	<1	<1	<0.2
	MW13-20190614	06/14/19	SoundEarth	7.0	1.1	<1	<1	<0.2
	MW13-20191205	12/05/19	SoundEarth	7.7	1.1	<1	<1	<0.2
MW13-20200626	06/26/20	SoundEarth	9.1	1.8	<1	<1	<0.2	
MW13-20201210	12/10/20	SoundEarth	7.2	1.6	<1	<1	<0.2	
MW13-20210623	06/23/21	SoundEarth	4.1	<1	<1	<1	<0.2	
MW27	MW27-20151210	12/10/15	SoundEarth	<1	21	2.5	<1	<0.2
	MW27-20160307	03/07/16	SoundEarth	<1	21	3.8	<1	<0.2
	MW27-20160713	07/13/16	SoundEarth	<1	18	4.5	<1	<0.2
	MW27-20161019	10/19/16	SoundEarth	<1	23	4.8	<1	<0.2
	MW27-20170124	01/24/17	SoundEarth	<1	33	13	<1	<0.2
	MW27-20170531	05/31/17	SoundEarth	<1	18	5.5	<1	<0.2
	MW27-20170921	09/21/17	SoundEarth	<1	16	4.0	<1	<0.2
	MW27-20171214	12/14/17	SoundEarth	<1	81	4.4	<1	<0.2
	MW27-20171229	12/29/17	SoundEarth	<1	60	3.5	<1	<0.2
	MW27-20180308	03/08/18	SoundEarth	<1	13	<1	<1	<0.2
	MW27-20180628	06/28/18	SoundEarth	<1	37	3.4	<1	<0.2
	MW27-20180920	09/20/18	SoundEarth	<1	21	3.7	<1	<0.2
	MW27-20181214	12/14/18	SoundEarth	<1	17	4.3	<1	<0.2
	MW27-20190614	06/14/19	SoundEarth	<1	14	2.3	<1	<0.2
	MW27-20191205	12/05/19	SoundEarth	<1	15	2.2	<1	<0.2
MW27-20200626	06/26/20	SoundEarth	<1	30	2.9	<1	<0.2	
MW27-20201210	12/10/20	SoundEarth	<1	69	3.7	<1	<0.2	
MW27-20210623	06/23/21	SoundEarth	<1	80	4.3	<1	<0.2	
MW31	MW31-20191009	10/09/19	SoundEarth	<1	1.8	<1	<1	<0.2
	MW31-20191205	12/05/19	SoundEarth	<1	3.3	<1	<1	<0.2
	MW31-20200701	07/01/20	SoundEarth	<1	12	<1	<1	<0.2
	MW31-20201211	12/11/20	SoundEarth	<1	17	<1	<1	<0.2
	MW31-20210624	06/24/21	SoundEarth	<1	5.0	<1	<1	<0.2
<b>Terry Avenue North</b>								
MW15	MW15-20121211	12/11/12	SoundEarth	<1	8.2	<1	<1	<0.2
	MW15-20121221	12/21/12	SoundEarth	<1	7.2	<1	<1	<0.2
	MW15-20130910	09/10/13	SoundEarth	<1	8.6	<1	<1	<0.2
	MW15-20150508	05/08/15	SoundEarth	<1	6.5	<1	<1	<0.2
	MW15-20150805	08/05/15	SoundEarth	<1	5.3	<1	<1	<0.2
	MW15-20151209	12/09/15	SoundEarth	<1	6.8	<1	<1	<0.2
	MW15-20160308	03/08/16	SoundEarth	<1	6.7	<1	<1	<0.2
	MW15-20160713	07/13/16	SoundEarth	<1	5.8	<1	<1	<0.2
	MW15-20161018	10/18/16	SoundEarth	<1	5.3	<1	<1	<0.2
	MW15-20170125	01/25/17	SoundEarth	<1	7.4	<1	<1	<0.2
	MW15-20170531	05/31/17	SoundEarth	<1	7.9	<1	<1	<0.2
	MW15-20170922	09/22/17	SoundEarth	<1	3.9	<1	<1	<0.2
	MW15-20171215	12/15/17	SoundEarth	<1	3.0	<1	<1	<0.2
	MW15-20180309	03/09/18	SoundEarth	<1	3.3	<1	<1	<0.2
	MW15-20180629	06/29/18	SoundEarth	<1	5.1	<1	<1	<0.2
	MW15-20180920	09/20/18	SoundEarth	<1	6.9	<1	<1	<0.2
	MW15-20181214	12/14/18	SoundEarth	<1	7.0	<1	<1	<0.2
	MW15-20190613	06/13/19	SoundEarth	<1	6.8	<1	<1	<0.2
	MW15-20191205	12/05/19	SoundEarth	<1	4.9	<1	<1	<0.2
MW15-20200626	06/26/20	SoundEarth	<1	1.2	<1	<1	<0.2	
MW15-20201211	12/11/20	SoundEarth	<1	<1	<1	<1	<0.2	
WELL DAMAGED 2021								
<b>MTCA Cleanup Level</b>				<b>5<sup>(2)</sup></b>	<b>5<sup>(2)</sup></b>	<b>16<sup>(3)</sup></b>	<b>160<sup>(3)</sup></b>	<b>0.2<sup>(2)</sup></b>

**Table 3**  
**Groundwater Analytical Results for CVOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Sample Location	Sample Identification	Sample Date	Sampled By	PCE <sup>(1)</sup> (µg/L)	TCE <sup>(1)</sup> (µg/L)	cis-1-2-DCE <sup>(1)</sup> (µg/L)	trans-1-2-DCE <sup>(1)</sup> (µg/L)	Vinyl Chloride <sup>(1)</sup> (µg/L)
<b>Thomas Street</b>								
MW14	MW14-20111020	10/20/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW14-20130911	09/11/13	SoundEarth	<1	<1	<1	<1	<0.2
DECOMMISSIONED 2013								
MW16	MW16-20121211	12/11/12	SoundEarth	16	12	220	<1	0.69
	MW16-20130911	09/11/13	SoundEarth	6.4	5.0	610	<1	1.9
	MW16-20150508	05/08/15	SoundEarth	7.5	7.6	640	<1	2.8
	MW16-20150805	08/05/15	SoundEarth	7.8	7.3	550	<1	2.4
	MW16-20151210	12/10/15	SoundEarth	5.3	4.5	510	<1	3.2
	MW16-20160308	03/08/16	SoundEarth	3.7	2.0	190	<1	1.3
	MW16-20160712	07/12/16	SoundEarth	<1	<1	160	<1	2.0
	MW16-20161019	10/19/16	SoundEarth	5.0	5.4	170	<1	1.2
	MW16-20170125	01/25/17	SoundEarth	6.4	6.8	220	<1	0.98
	MW16-20170531	05/31/17	SoundEarth	5.7	4.4	100	<1	0.49
	MW16-20170922	09/22/17	SoundEarth	5.4	5.2	78	<1	0.40
	MW16-20171229	12/29/17	SoundEarth	7.2	6.4	150	<1	0.89
MW16-20180309	03/09/18	SoundEarth	7.3	5.5	80	<1	0.35	
WELL DAMAGED 2018								
MW28	MW28-20190315	03/15/19	SoundEarth	7.7	4.7	67	<1	0.47
	MW28-20190613	06/13/19	SoundEarth	9.0	5.7	80	<1	0.35
	MW28-20191009	10/09/19	SoundEarth	8.7	6.1	72	<1	0.31
	MW28-20191204	12/04/19	SoundEarth	8.4	4.9	52	<1	0.27
	MW28-20200626	06/26/20	SoundEarth	9.1	5.1	22	<1	<0.2
	MW28-20201211	12/11/20	SoundEarth	8.3	4.9	19	<1	<0.2
	MW28-20210521	05/21/21	SoundEarth	9.2	4.3	17	<1	<0.2
	MW28-20210623	06/23/21	SoundEarth	7	3.5	14	<1	<0.2
MW28-20210817	08/17/21	SoundEarth	7.6	3.9	18	<1	<0.2	
MW28-20210921	09/21/21	SoundEarth	7.5	3.4	15	<1	<0.10	
<b>Fairview Avenue North</b>								
MW-C	MW-C-20130911	09/11/13	SoundEarth	<1	<1	<1	<1	<0.2
<b>Harrison Street</b>								
MW01	MW01-20110525	05/25/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20111011	10/11/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20130910	09/10/13	SoundEarth	<1	1.4	<1	<1	<0.2
	MW01-20150806	08/06/15	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20160308	03/08/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20160712	07/12/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20161018	10/18/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20170124	01/24/17	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20170531	05/31/17	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20171214	12/14/17	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20180309	03/09/18	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20180628	06/28/18	SoundEarth	<1	1.1	<1	<1	<0.2
	MW01-20180920	09/20/18	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20181214	12/14/18	SoundEarth	<1	1.1	<1	<1	<0.2
	MW01-20190614	06/14/19	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20191205	12/05/19	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20200626	06/26/20	SoundEarth	<1	<1	<1	<1	<0.2
MW01-20201211	12/11/20	SoundEarth	<1	<1	<1	<1	<0.2	
MW01-20210624	06/24/21	SoundEarth	<1	<1	<1	<1	<0.2	
MW02	MW02-20110525	05/25/11	SoundEarth	<1	5.2	<1	<1	<0.2
	MW02-20111011	10/11/11	SoundEarth	<1	3.0	<1	<1	<0.2
	MW02-20130911	09/11/13	SoundEarth	<1	3.6	<1	<1	<0.2
DECOMMISSIONED 2015								
MW03	MW03-20110527	05/27/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW03-20111011	10/11/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW03-20130911	09/11/13	SoundEarth	<1	<1	<1	<1	<0.2
DECOMMISSIONED 2015								
<b>MTCA Cleanup Level</b>				<b>5<sup>(2)</sup></b>	<b>5<sup>(2)</sup></b>	<b>16<sup>(3)</sup></b>	<b>160<sup>(3)</sup></b>	<b>0.2<sup>(2)</sup></b>

**Table 3**  
**Groundwater Analytical Results for CVOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Sample Location	Sample Identification	Sample Date	Sampled By	PCE <sup>(1)</sup> (µg/L)	TCE <sup>(1)</sup> (µg/L)	cis-1-2-DCE <sup>(1)</sup> (µg/L)	trans-1-2-DCE <sup>(1)</sup> (µg/L)	Vinyl Chloride <sup>(1)</sup> (µg/L)
MW26	MW26-20151210	12/10/15	SoundEarth	<1	11	<1	<1	<0.2
	MW26-20160307	03/07/16	SoundEarth	<1	10	<1	<1	<0.2
	MW26-20160712	07/12/16	SoundEarth	<1	12	<1	<1	<0.2
	MW26-20161018	10/18/16	SoundEarth	<1	12	<1	<1	<0.2
	MW26-20170124	01/24/17	SoundEarth	<1	13	<1	<1	<0.2
	MW26-20170531	05/31/17	SoundEarth	<1	7.9	<1	<1	<0.2
	MW26-20170921	09/21/17	SoundEarth	<1	7.1	<1	<1	<0.2
	MW26-20171214	12/14/17	SoundEarth	<1	15	1.4	<1	<0.2
	MW26-20180309	03/09/18	SoundEarth	<1	6.0	<1	<1	<0.2
	MW26-20180628	06/28/18	SoundEarth	<1	18	<1	<1	<0.2
	MW26-20180920	09/20/18	SoundEarth	<1	18	<1	<1	<0.2
	MW26-20181214	12/14/18	SoundEarth	<1	20	<1	<1	<0.2
	MW26-20190614	06/14/19	SoundEarth	<1	20	<1	<1	<0.2
	MW26-20191205	12/05/19	SoundEarth	<1	13	<1	<1	<0.2
	MW26-20200626	06/26/20	SoundEarth	<1	13	<1	<1	<0.2
MW26-20201211	12/11/20	SoundEarth	<1	4.0	<1	<1	<0.2	
MW26-20210624	06/24/21	SoundEarth	<1	6.6	<1	<1	<0.2	
MW32	MW32-20191009	10/09/19	SoundEarth	<1	<1	<1	<1	<0.2
	MW32-20191205	12/05/19	SoundEarth	<1	<1	<1	<1	<0.2
	MW32-20200626	06/26/20	SoundEarth	<1	<1	<1	<1	<0.2
	MW32-20201212	12/12/20	SoundEarth	<1	<1	<1	<1	<0.2
	MW32-20210624	06/24/21	SoundEarth	<1	<1	<1	<1	<0.2
MW33	MW33-20191009	10/09/19	SoundEarth	<1	<1	<1	<1	<0.2
	MW33-20191205	12/05/19	SoundEarth	<1	<1	<1	<1	<0.2
	--	06/26/20	SoundEarth	WELL DRY, UNABLE TO SAMPLE				
	--	12/10/20	SoundEarth	WELL DRY, UNABLE TO SAMPLE				
	MW33-20210624	06/24/21	SoundEarth	<1	<1	<1	<1	<0.2
SMW06	SMW06-20130910	09/10/13	SoundEarth	<1	<1	<1	<1	<0.2
<b>Westlake Avenue North</b>								
SMW09	SMW09-20130910	09/10/13	SoundEarth	<1	<1	<1	<1	<0.2
<b>South-Adjoining Property</b>								
MW29	MW29-20191008	10/08/19	SoundEarth	8.6	9.4	52	<1	0.64
	MW29-20191204	12/04/19	SoundEarth	16	12	26	<1	0.40
	MW29-20200626	06/26/20	SoundEarth	18	13	16	<1	0.20
	MW29-20201210	12/10/20	SoundEarth	18	13	18	<1	<0.2
	MW29-20210622	06/22/21	SoundEarth	14	11	16	<1	<0.2
MW30	MW30-20191008	10/08/19	SoundEarth	<1	3.6	24	<1	<0.2
	MW30-20191204	12/04/19	SoundEarth	<1	2.0	11	<1	<0.2
	MW30-20200626	06/26/20	SoundEarth	<1	1.0	3.6	<1	<0.2
	MW30-20201210	12/10/20	SoundEarth	<1	2.4	13	<1	<0.2
	MW30-20210623	06/23/21	SoundEarth	<1	2.0	7.4	<1	<0.2
ONNI-MW-4	ONNI-MW-4-20191208	12/08/19	SoundEarth	<1	<1	<1	<1	<0.2
	ONNI-MW-4-20200625	06/25/20	SoundEarth	<1	<1	<1	<1	<0.2
	ONNI-MW-4-20201210	12/10/20	SoundEarth	<1	<1	<1	<1	<0.2
	ONNI-MW-4-20210622	06/22/21	SoundEarth	<1	<1	<1	<1	<0.2
ONNI-MW-5	ONNI-MW-5-20191208	12/08/19	SoundEarth	<1	<1	<1	<1	0.28
	ONNI-MW-5-20200206	02/06/20	SoundEarth	<1	<1	<1	<1	<0.2
	ONNI-MW-5-20200625	06/25/20	SoundEarth	<1	<1	<1	<1	<0.2
	ONNI-MW-5-20201209	12/09/20	SoundEarth	<1	<1	<1	<1	<0.2
	ONNI-MW-5-20210623	06/23/21	SoundEarth	<1	<1	<1	<1	<0.2



**Table 3**  
**Groundwater Analytical Results for CVOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Sample Location	Sample Identification	Sample Date	Sampled By	PCE <sup>(1)</sup> (µg/L)	TCE <sup>(1)</sup> (µg/L)	cis-1-2-DCE <sup>(1)</sup> (µg/L)	trans-1-2-DCE <sup>(1)</sup> (µg/L)	Vinyl Chloride <sup>(1)</sup> (µg/L)
<b>North-Adjoining Property</b>								
SLU-MW01	MW01-20120229	02/29/12 <sup>(4)</sup>	SoundEarth	<1	<1	<1	<1	<0.2
	DECOMMISSIONED 2013							
SLU-MW02	MW02-20120229	02/29/12 <sup>(4)</sup>	SoundEarth	<1	<1	<1	<1	<0.2
	DECOMMISSIONED 2013							
<b>MTCA Cleanup Level</b>				<b>5<sup>(2)</sup></b>	<b>5<sup>(2)</sup></b>	<b>16<sup>(3)</sup></b>	<b>160<sup>(3)</sup></b>	<b>0.2<sup>(2)</sup></b>

**NOTES:**

**Red** denotes concentrations exceeding the MTCA Method cleanup level for groundwater.

<sup>(1)</sup>Analyzed by EPA Method 8260C, 8021B, or 8240.

<sup>(2)</sup>MTCA Method A Cleanup Levels, Table 720-1 of Section 900 of Chapter 173-340 of WAC, revised November 2007.

<sup>(3)</sup>MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Groundwater, Method B, Non-Carcinogen, Standard Formula Value, CLARC Website <<https://fortress.wa.gov/ecy/clarc/CLARHome.aspx>>.

<sup>(4)</sup>Sample data compiled from reports on file at the Washington State Department of Ecology.

**Laboratory Notes:**

<sup>a</sup>The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

<sup>c</sup>The sample was centrifuged prior to analysis.

<sup>v</sup>Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

\* The sample was collected with a passive diffusion bag.

< = not detected at a concentration exceeding laboratory reporting limit

µg/L = micrograms per liter

CLARC = Cleanup Levels and Risk Calculations

CVOC = chlorinated volatile organic compound

DCE = dichloroethene

EPA = US Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

PCE = tetrachloroethene

SoundEarth = SoundEarth Strategies, Inc.

TCE = trichloroethene

WAC = Washington Administrative Code



**Table 3A**  
**Groundwater CVOCs Results Summary**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Sampling Event		Groundwater CVOCs Analytical Results <sup>(1)</sup>																																							
		On-Property Wells															Boren Avenue North					Terry Avenue North	Thomas Street		Harrison Street				South-Adjoining Property		ONNI Property										
Year	Quarter	MW17	MW18	MW19	MW20	MW21	MW22	MW23	MW24	MW25	IW04	IW06	IW50	IW61	IW91	MW04	MW07	MW13	MW27	MW31	MW15	MW16 <sup>(3)</sup>	MW28 <sup>(3)</sup>	MW01	MW26	MW32	MW33	MW29	MW30	ONNI-MW-4	ONNI-MW-5										
		PCE	TCE	DCE <sup>(2)</sup>	VC	PCE	TCE	DCE <sup>(2)</sup>	VC	PCE	TCE	DCE <sup>(2)</sup>	VC	PCE	TCE	DCE <sup>(2)</sup>	VC	PCE	TCE	DCE <sup>(2)</sup>	VC	PCE	TCE	DCE <sup>(2)</sup>	VC	PCE	TCE	DCE <sup>(2)</sup>	VC	PCE	TCE	DCE <sup>(2)</sup>	VC								
2015	2																																								
2015	3																																								
2015	4																																								
2016	1																																								
2016	3																																								
2016	4																																								
2017	1																																								
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2019	4																																								
2020	2																																								
2020	4																																								
2021	2																																								
2021	4																																								

NOTES:

Denotes CVOC concentration does not exceed the Applicable MTCA cleanup level.  
 Denotes CVOC concentration exceeds the applicable MTCA cleanup level.  
 Denotes well not sampled and/or inaccessible.

Sample analyses conducted by Friedman & Bruya, Inc. of Seattle, Washington.  
 No trans-1,2-DCE has been detected above the reporting limit for samples collected at this site.  
<sup>(1)</sup>Samples analyzed by EPA Method 8260C.

<sup>(2)</sup>DCE refers to the greater concentration of cis-1,2-DCE.

<sup>(3)</sup>Monitoring well MW16 destroyed during ROW construction in 2018, and replacement well MW28 installed.

CVOC = chlorinated volatile organic compound  
 DCE = dichloroethene  
 EPA = US Environmental Protection Agency  
 MTCA = Washington State Model Toxics Control Act  
 PCE = tetrachloroethene

ROW = right-of-way  
 TCE = trichloroethene  
 VC = vinyl chloride  
 VOC = volatile organic compound



**Table 4**  
**Groundwater Analytical Results for Petroleum Hydrocarbons**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH <sup>(1)</sup> (µg/L)	ORPH <sup>(1)</sup> (µg/L)	GRPH <sup>(2)</sup> (µg/L)	Benzene <sup>(3)</sup> (µg/L)	Toluene <sup>(3)</sup> (µg/L)	Ethylbenzene <sup>(3)</sup> (µg/L)	Total Xylenes <sup>(3)</sup> (µg/L)
<b>Troy Laundry Property</b>										
MW06	MW06-20110531	05/31/11	SoundEarth	330 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW06-20111011	10/10/11	SoundEarth	83 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW06-20130909	09/09/13	SoundEarth	150 <sup>x</sup>	<250	<100	<1	<1	<1	<3
DECOMMISSIONED 2013										
MW08	MW08-20111013	10/13/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW08-20130910	09/10/13	SoundEarth	120 <sup>x</sup>	<250	<100	<1	<1	<1	<3
DECOMMISSIONED 2013										
MW09	MW09-20111013	10/13/11	SoundEarth	240 <sup>x</sup>	<250	1,400	<1	<1	2.7	10
	MW09-20130910	09/10/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
DECOMMISSIONED 2013										
MW10	MW10-20111012	10/12/11	SoundEarth	68 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW10-20130909	09/09/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
DECOMMISSIONED 2013										
MW11	MW11-20111013	10/13/11	SoundEarth	110 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW11-20130909	09/09/13	SoundEarth	97 <sup>x</sup>	<250	<100	<1	<1	<1	<3
DECOMMISSIONED 2013										
MW12	MW12-20111017	10/17/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW12-20130909	09/09/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
DECOMMISSIONED 2013										
MW17	MW17-20150506	05/06/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20150804	08/04/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20151207	12/07/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20160308	03/08/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20160714	07/14/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20161020	10/20/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20170126	01/26/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20170601	06/01/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20170923	09/23/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20171216	12/16/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20180310	03/10/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW17-20180630	06/30/18	SoundEarth	<60	<300	<100	<1	<1	<1	<3
	MW17-20180922	09/22/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW17-20181215	12/15/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW17-20190615	06/15/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW17-20191207	12/07/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
MW17-20200627	06/27/20	SoundEarth	<50	<250	<100	<1	<1	<1	<3	
MW17-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--	
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4) (5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>



**Table 4**  
**Groundwater Analytical Results for Petroleum Hydrocarbons**  
**Troy Laundry Seattle Site**  
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Sample Location	Sample Identification	Sample Date	Sampled By	DRPH <sup>(1)</sup> (µg/L)	ORPH <sup>(1)</sup> (µg/L)	GRPH <sup>(2)</sup> (µg/L)	Benzene <sup>(3)</sup> (µg/L)	Toluene <sup>(3)</sup> (µg/L)	Ethylbenzene <sup>(3)</sup> (µg/L)	Total Xylenes <sup>(3)</sup> (µg/L)
MW18	MW18-20150506	05/06/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW18-20150803	08/03/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW18-20151208	12/08/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW18-20160308	03/08/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW18-20160714	07/14/16	SoundEarth	31,000 <sup>x, ip</sup>	5,100 <sup>x, ip</sup>	<100	<0.35	<1	<1	<3
	MW18-20161020	10/20/16	SoundEarth	61,000 <sup>x, ip</sup>	<8,400 <sup>x, ip</sup>	1,100 <sup>x</sup>	<0.35	<1	<1	<3
	MW18-20170126	01/26/17	SoundEarth	22,000 <sup>x, ip</sup>	3,500 <sup>x, ip</sup>	840	<0.35	<1	<1	<3
	MW18-20170601	06/01/17	SoundEarth	77,000 <sup>x, ip</sup>	1,600 <sup>x, ip</sup>	470	<0.35	<1	<1	<3
	MW18-20170923	09/23/17	SoundEarth	34,000 <sup>x</sup>	<3,500	210	<0.35	<1	<1	<3
	MW18-20171216	12/16/17	SoundEarth	18,000 <sup>x, ip</sup>	<2,500 <sup>ip</sup>	380	<0.35	<1	<1	<3
	MW18-20180310	03/10/18	SoundEarth	6,000 <sup>x</sup>	<2,500	390	<1	1.3	<1	<3
	MW18-20180630	06/30/18	SoundEarth	12,000 <sup>x</sup>	1,600 <sup>x</sup>	230	<1	1.3	<1	12
	MW18-20180922	09/22/18	SoundEarth	1,400 <sup>x, ip</sup>	<2,500 <sup>ip</sup>	290	<1	<1	<1	6.9
	MW18-20181215	12/15/18	SoundEarth	1,600 <sup>x</sup>	490 <sup>x</sup>	<100	<1	<1	<1	<3
	MW18-20190615	06/15/19	SoundEarth	1,100 <sup>x</sup>	830 <sup>x</sup>	<100	<1	<1	<1	<3
	MW18-20191207	12/07/19	SoundEarth	830 <sup>x</sup>	480 <sup>x</sup>	<100	<1	<1	<1	<3
MW18-20200627	06/27/20	SoundEarth	260 <sup>x</sup>	<250	<100	<1	<1	<1	<3	
MW18-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--	
MW19	MW19-20150507	05/07/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW19-20150803	08/03/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW19-20151207	12/07/15	SoundEarth	85 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW19-20160308	03/08/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW19-20160713	07/13/16	SoundEarth	21,000 <sup>x, ip</sup>	4,100 <sup>x, ip</sup>	<100	<0.35	<1	<1	<3
	MW19-20161021	10/21/16	SoundEarth	18,000 <sup>x, ip</sup>	2,300 <sup>x, ip</sup>	<100	<0.35	<1	<1	<3
	MW19-20170125	01/25/17	SoundEarth	29,000 <sup>x</sup>	4,400 <sup>x</sup>	210 <sup>x</sup>	<0.35	<1	<1	<3
	MW19-20170601	06/01/17	SoundEarth	31,000 <sup>x, ip</sup>	3,400 <sup>x, ip</sup>	180	<0.35	<1	<1	<3
	MW19-20170923	09/23/17	SoundEarth	27,000 <sup>x, ip</sup>	<3,000 <sup>ip</sup>	150	<0.35	<1	<1	<3
	MW19-20171216	12/16/17	SoundEarth	9,700 <sup>x, ip</sup>	<2,500 <sup>ip</sup>	470	<0.35	<1	<1	<3
	MW19-20180310	03/10/18	SoundEarth	1,600 <sup>x</sup>	<2,500	250	<1	<1	<1	<3
	MW19-20180630	06/30/18	SoundEarth	13,000 <sup>x</sup>	820 <sup>x</sup>	310	<1	<1	<1	9.6
	MW19-20180922	09/22/18	SoundEarth	3,300 <sup>x, ip</sup>	<2,500 <sup>ip</sup>	300	<1	<1	<1	5.0
	MW19-20190615	06/15/19	SoundEarth	650 <sup>x</sup>	430 <sup>x</sup>	<100	<1	<1	<1	<3
	MW19-20191207	12/07/19	SoundEarth	610 <sup>x</sup>	690 <sup>x</sup>	<100	<1	<1	<1	<3
	MW19-20200627	06/27/20	SoundEarth	150 <sup>x</sup>	380 <sup>x</sup>	<100	<1	<1	<1	<3
MW19-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--	
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4) (5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>



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Sample Location	Sample Identification	Sample Date	Sampled By	DRPH <sup>(1)</sup> (µg/L)	ORPH <sup>(1)</sup> (µg/L)	GRPH <sup>(2)</sup> (µg/L)	Benzene <sup>(3)</sup> (µg/L)	Toluene <sup>(3)</sup> (µg/L)	Ethylbenzene <sup>(3)</sup> (µg/L)	Total Xylenes <sup>(3)</sup> (µg/L)
MW20	MW20-20150506	05/06/15	SoundEarth	120 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW20-20150803	08/03/15	SoundEarth	140 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW20-20151207	12/07/15	SoundEarth	84 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW20-20160309	03/09/16	SoundEarth	130 <sup>x</sup>	<300	<100	<0.35	<1	<1	<3
	MW20-20160715	07/15/16	SoundEarth	150 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW20-20161020	10/20/16	SoundEarth	110 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW20-20170125	01/25/17	SoundEarth	64 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW20-20170601	06/01/17	SoundEarth	94 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW20-20170924	09/24/17	SoundEarth	130 <sup>x</sup>	<300	<100	<0.35	<1	<1	<3
	MW20-20171216	12/16/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW20-20180310	03/10/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW20-20180630	06/30/18	SoundEarth	120 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW20-20180922	09/22/18	SoundEarth	100 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW20-20181215	12/15/18	SoundEarth	72 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW20-20190615	06/15/19	SoundEarth	140 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW20-20191207	12/07/19	SoundEarth	80 <sup>x</sup>	<250	<100	<1	<1	<1	<3
MW20-20200627	06/27/20	SoundEarth	91 <sup>x</sup>	<250	<100	<1	<1	<1	<3	
MW20-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--	
MW21	MW21-20150506	05/06/15	SoundEarth	160 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW21-20150804	08/04/15	SoundEarth	150 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW21-20151208	12/08/15	SoundEarth	110 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW21-20160309	03/09/16	SoundEarth	120 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW21-20160713	07/13/16	SoundEarth	12,000 <sup>x</sup>	2,700 <sup>x</sup>	<100	<0.35	<1	<1	<3
	MW21-20161020	10/20/16	SoundEarth	77,000 <sup>x, ip</sup>	8,600 <sup>x, ip</sup>	<100	<0.35	<1	<1	<3
	MW21-20170126	01/26/17	SoundEarth	16,000 <sup>x, ip</sup>	10,000 <sup>x, ip</sup>	<100	<0.35	<1	<1	<3
	MW21-20170601	06/01/17	SoundEarth	48,000 <sup>x, ip</sup>	18,000 <sup>x, ip</sup>	130	<0.35	<1	<1	<3
	MW21-20170923	09/23/17	SoundEarth	67,000 <sup>x, ip</sup>	7,700 <sup>x, ip</sup>	220	<0.35	<1	<1	<3
	MW21-20171216	12/16/17	SoundEarth	27,000 <sup>x</sup>	<2,500	390	<0.35	<1	<1	<3
	MW21-20180310	03/10/18	SoundEarth	23,000 <sup>x</sup>	<2,500	130	<1	<1	<1	<3
	MW21-2018630	06/30/18	SoundEarth	65,000 <sup>x, ip</sup>	5,200 <sup>x, ip</sup>	670	<1	3.0	11	11
	MW21-20180922	09/22/18	SoundEarth	53,000 <sup>x, ip</sup>	8,600 <sup>x, ip</sup>	400	<1	<1	<1	3.4
	MW21-20181215	12/15/18	SoundEarth	47,000 <sup>x</sup>	2,100 <sup>x</sup>	180	<1	<1	<1	6.5
	MW21-20190615	06/15/19	SoundEarth	6,400 <sup>x</sup>	<2,500	<100	<1	<1	<1	3.8
	MW21-20191207	12/07/19	SoundEarth	21,000 <sup>x</sup>	2,100 <sup>x</sup>	300	<1	<1	<1	4.8
MW21-20200627	06/27/20	SoundEarth	120,000 <sup>x</sup>	3,500 <sup>x, ip</sup>	1,100	1.8	5.9	<1	19	
MW21-20201212	12/12/20	SoundEarth	36,000 <sup>x</sup>	6,500 <sup>x</sup>	460	--	--	--	--	
MW21-20210625	6/25/21	SoundEarth	74,000 <sup>x, ve</sup>	5,400 <sup>x</sup>	1,000	--	--	--	--	
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4) (5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>





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Sample Location	Sample Identification	Sample Date	Sampled By	DRPH <sup>(1)</sup> (µg/L)	ORPH <sup>(1)</sup> (µg/L)	GRPH <sup>(2)</sup> (µg/L)	Benzene <sup>(3)</sup> (µg/L)	Toluene <sup>(3)</sup> (µg/L)	Ethylbenzene <sup>(3)</sup> (µg/L)	Total Xylenes <sup>(3)</sup> (µg/L)
MW22	MW22-20150506	05/06/15	SoundEarth	97 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW22-20150804	08/05/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW22-20151208	12/08/15	SoundEarth	69 <sup>x</sup>	<300	<100	<0.35	<1	<1	<3
	MW22-20160308	03/08/16	SoundEarth	110 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW22-20160713	07/13/16	SoundEarth	8,000 <sup>x, ip</sup>	2,100 <sup>x, ip</sup>	140	<0.35	<1	<1	<3
	MW22-20161020	10/20/16	SoundEarth	29,000 <sup>x, ip</sup>	7,500 <sup>x, ip</sup>	130	<0.35	<1	<1	<3
	MW22-20170126	01/26/17	SoundEarth	13,000 <sup>x, ip</sup>	13,000 <sup>x, ip</sup>	730	<0.35	<1	<1	<3
	MW22-20170601	06/01/17	SoundEarth	59,000 <sup>x</sup>	8,700 <sup>x</sup>	660	<0.35	<1	<1	<3
	MW22-20170923	09/23/17	SoundEarth	85,000 <sup>x, ip</sup>	<2,500 <sup>ip</sup>	390	<0.35	<1	<1	<3
	MW22-20171216	12/16/17	SoundEarth	58,000 <sup>x, ip</sup>	<3,000 <sup>ip</sup>	1,800	<0.35	<1	<1	<3
	MW22-20180310	03/10/18	SoundEarth	50,000 <sup>x</sup>	<2,500	530	<0.35	<1	<1	10
	MW22-20180630	06/30/18	SoundEarth	86,000 <sup>x, ip</sup>	4,500 <sup>x, ip</sup>	620	<1	<1	<1	34
	MW22-20180922	09/22/18	SoundEarth	73,000 <sup>x, ip</sup>	6,800 <sup>x, ip</sup>	320	<1	<1	<1	21
	MW22-20181215	12/15/18	SoundEarth	49,000 <sup>x</sup>	7,700 <sup>x</sup>	180	<1	<1	<1	14
	MW22-20190615	06/15/19	SoundEarth	24,000 <sup>x</sup>	4,600 <sup>x</sup>	170	<1	<1	<1	21
	MW22-20191207	12/07/19	SoundEarth	40,000 <sup>x</sup>	3,400 <sup>x</sup>	810	<1	<1	<1	74
	MW22-20200627	06/27/20	SoundEarth	25,000 <sup>x</sup>	1,100 <sup>x</sup>	340	<1	<1	<1	4.3
MW22-20201212	12/12/20	SoundEarth	12,000 <sup>x</sup>	4,100 <sup>x</sup>	570	--	--	--	--	
MW22-20210625	06/25/21	SoundEarth	20,000 <sup>x</sup>	1,800 <sup>x</sup>	540	--	--	--	--	
MW23	MW23-20150507	05/07/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW23-20150804	08/04/15	SoundEarth	520 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW23-20151208	12/08/15	SoundEarth	190 <sup>x</sup>	<300	<100	<0.35	<1	<1	<3
	MW23-20160308	03/08/16	SoundEarth	410 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW23-20160714	07/14/16	SoundEarth	26,000 <sup>x, ip</sup>	1,500 <sup>x, ip</sup>	190	<0.35	<1	<1	<3
	MW23-20161020	10/20/16	SoundEarth	80,000 <sup>x, ip</sup>	<5,000 <sup>ip</sup>	350	<0.35	<1	<1	<3
	MW23-20170126	01/26/17	SoundEarth	14,000 <sup>x, ip</sup>	5,600 <sup>x, ip</sup>	240	<0.35	<1	<1	<3
	MW23-20170601	06/01/17	SoundEarth	140,000 <sup>x, ip</sup>	4,000 <sup>x, ip</sup>	210	<0.35	<1	<1	<3
	MW23-20170923	09/23/17	SoundEarth	140,000 <sup>x</sup>	<2,500	170	<0.35	<1	<1	<3
	MW23-20171216	12/16/17	SoundEarth	110,000 <sup>x, ip</sup>	<2,500 <sup>ip</sup>	2,200	<0.35	<1	<1	<3
	MW23-20180310	03/10/18	SoundEarth	11,000 <sup>x</sup>	<2,500	600	<1	<1	<1	4.6
	MW23-20180630	06/30/18	SoundEarth	30,000 <sup>x</sup>	1,000 <sup>x</sup>	540	<1	<1	<1	31
	MW23-20180922	09/22/18	SoundEarth	19,000 <sup>x, ip</sup>	<2,600 <sup>ip</sup>	150	<1	<1	<1	11
	MW23-20181215	12/15/18	SoundEarth	14,000 <sup>x</sup>	500 <sup>x</sup>	180	<1	<1	<1	7.1
	MW23-20190615	06/15/19	SoundEarth	3,400 <sup>x</sup>	<2,500	260	<1	<1	<1	7.1
	MW23-20191207	12/07/19	SoundEarth	1,400 <sup>x</sup>	790 <sup>x</sup>	<100	<1	<1	<1	<3
	MW23-20200627	06/27/20	SoundEarth	360 <sup>x</sup>	<250	<100	<1	<1	<1	<3
MW23-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--	
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4) (5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>



**Table 4**  
**Groundwater Analytical Results for Petroleum Hydrocarbons**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH <sup>(1)</sup> (µg/L)	ORPH <sup>(1)</sup> (µg/L)	GRPH <sup>(2)</sup> (µg/L)	Benzene <sup>(3)</sup> (µg/L)	Toluene <sup>(3)</sup> (µg/L)	Ethylbenzene <sup>(3)</sup> (µg/L)	Total Xylenes <sup>(3)</sup> (µg/L)
MW24	MW24-20150506	05/06/15	SoundEarth	93 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW24-20150804	08/04/15	SoundEarth	94 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW24-20151208	12/08/15	SoundEarth	240 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW24-20160309	03/09/16	SoundEarth	130 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW24-20160715	07/15/16	SoundEarth	13,000 <sup>x, ip</sup>	1,400 <sup>x, ip</sup>	<100	<0.35	<1	<1	<3
	MW98-20160715 (DUP)		SoundEarth	11,000 <sup>x, ip</sup>	1,900 <sup>x, ip</sup>	<100	<0.35	<1	<1	<3
	MW24-20161020	10/20/16	SoundEarth	3,200 <sup>x, ip</sup>	1,900 <sup>x, ip</sup>	<100	<0.35	<1	<1	<3
	MW24-20170125	01/25/17	SoundEarth	12,000 <sup>x</sup>	2,000 <sup>x</sup>	<100	<0.35	<1	<1	<3
	MW24-20170601	06/01/17	SoundEarth	510,000 <sup>x, ip</sup>	27,000 <sup>x, ip</sup>	<100	<0.35	<1	<1	<3
	MW24-20170601	09/24/17	SoundEarth	39,000 <sup>x, ip</sup>	<3,000 <sup>ip</sup>	250	<0.35	<1	<1	<3
	MW24-20171216	12/16/17	SoundEarth	10,000 <sup>x</sup>	<3,000	990	<0.35	<1	<1	<3
	MW24-20180310	03/10/18	SoundEarth	990 <sup>x</sup>	<2,500	460	<1	<1	<1	3.7
	MW24-20180630	06/30/18	SoundEarth	75,000 <sup>x, ip</sup>	7,700 <sup>x, ip</sup>	2,700	<1	3.6	6.5	110
	MW24-20180922	09/22/18	SoundEarth	7,800 <sup>x, ip</sup>	<2,500 <sup>ip</sup>	190	<1	<1	<1	7.5
	MW24-20181215	12/15/18	SoundEarth	20,000 <sup>x</sup>	2,700 <sup>x</sup>	<100	<1	<1	<1	<3
	MW24-20190615	06/15/19	SoundEarth	6,400 <sup>x</sup>	<2,500	<100	<1	<1	<1	<3
	MW24-20191207	12/07/19	SoundEarth	7,100 <sup>x</sup>	1,400 <sup>x</sup>	<100	<1	<1	<1	<3
MW24-20200627	06/27/20	SoundEarth	700 <sup>x, ip</sup>	570 <sup>x, ip</sup>	<100	<1	<1	<1	<3	
MW24-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--	
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4) (5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>



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Sample Location	Sample Identification	Sample Date	Sampled By	DRPH <sup>(1)</sup> (µg/L)	ORPH <sup>(1)</sup> (µg/L)	GRPH <sup>(2)</sup> (µg/L)	Benzene <sup>(3)</sup> (µg/L)	Toluene <sup>(3)</sup> (µg/L)	Ethylbenzene <sup>(3)</sup> (µg/L)	Total Xylenes <sup>(3)</sup> (µg/L)
MW25	MW25-20150507	05/07/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW99-20150507 (DUP)			<50	<250	<100	<0.35	<1	<1	<3
	MW25-20150805	08/05/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW99-20150805 (DUP)			<50	<250	<100	<0.35	<1	<1	<3
	MW25-20151209	12/09/15	SoundEarth	86 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW99-20151209 (DUP)			100 <sup>x</sup>	<300	<100	<0.35	<1	<1	<3
	MW25-20160308	03/08/16	SoundEarth	190 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW99-20160308(DUP)			160 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW25-20160713	07/13/16	SoundEarth	43,000 <sup>x</sup>	5,000 <sup>x</sup>	110	<0.35	<1	<1	<3
	MW25-20161019	10/19/16	SoundEarth	26,000 <sup>x</sup>	1,500 <sup>x</sup>	160	--	--	--	--
	MW99-20161019(DUP)			29,000 <sup>x</sup>	1,600 <sup>x</sup>	160	--	--	--	--
	MW25-20170125	01/25/17	SoundEarth	8,200 <sup>x</sup>	340 <sup>x</sup>	120 <sup>x</sup>	<0.35	<1	<1	<3
	MW99-20170125(DUP)			6,900 <sup>x</sup>	350 <sup>x</sup>	150 <sup>x</sup>	<0.35	<1	<1	<3
	MW25-20170601	06/01/17	SoundEarth	50,000 <sup>x, ip</sup>	<1,000 <sup>ip</sup>	370	<0.35	<1	<1	<3
	MW99-20170601(DUP)			46,000 <sup>x, ip</sup>	<1,000 <sup>ip</sup>	410	<0.35	<1	<1	<3
	MW25-20170923	09/23/17	SoundEarth	12,000 <sup>x, ip</sup>	<2,500 <sup>ip</sup>	270	<0.35	<1	<1	<3
	MW99-20170923(DUP)			13,000 <sup>x, ip</sup>	<2,500 <sup>ip</sup>	220	<0.35	<1	<1	<3
	MW25-20171216	12/16/17	SoundEarth	4,000 <sup>x, ip</sup>	<3,000 <sup>ip</sup>	580	<0.35	<1	<1	<3
	MW99-20171216 (DUP)			4,000 <sup>x, ip</sup>	<3,000 <sup>ip</sup>	700	<0.35	<1	<1	<3
	MW25-20180310	03/10/18	SoundEarth	3,300 <sup>x</sup>	<2,500	490	<1	<1	<1	4.7
	MW99-20180310 (DUP)			3,800 <sup>x</sup>	<2,500	510	<1	<1	<1	4.5
	MW25-20180630	06/30/18	SoundEarth	5,300 <sup>x, ip</sup>	630 <sup>x, ip</sup>	490	<1	<1	<1	31
	MW99-20180630 (DUP)			5,500 <sup>x, ip</sup>	410 <sup>x, ip</sup>	340	<1	<1	<1	26
	MW25-20180922	09/22/18	SoundEarth	1,500 <sup>x, ip</sup>	<2,500 <sup>ip</sup>	300	<1	<1	<1	17
	MW99-20180922 (DUP)			1,900 <sup>x, ip</sup>	<2,500 <sup>ip</sup>	160	<1	<1	<1	13
	MW25-20181215	12/15/18	SoundEarth	1,100 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW99-20181215 (DUP)			960 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW25-20190615	06/15/19	SoundEarth	1,000 <sup>x</sup>	<2,500	<100	<1	<1	<1	<3
	MW99-20190615 (DUP)			1,100 <sup>x</sup>	<2,500	<100	<1	<1	<1	<3
	MW25-20191207	12/07/19	SoundEarth	240 <sup>x</sup>	<250	<100	<1	<1	<1	<3
MW99-20191207 (DUP)	300 <sup>x</sup>			<250	<100	<1	<1	<1	<3	
MW25-20200627	06/27/20	SoundEarth	130 <sup>x</sup>	<250	<100	<1	<1	<1	<3	
MW99-20200627 (DUP)			190 <sup>x</sup>	<250	<100	<1	<1	<1	<3	
MW25-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--	
MW99-20201212 (DUP)			--	--	--	--	--	--	--	
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4)(5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>



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**Troy Laundry Seattle Site**  
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Draft

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH <sup>(1)</sup> (µg/L)	ORPH <sup>(1)</sup> (µg/L)	GRPH <sup>(2)</sup> (µg/L)	Benzene <sup>(3)</sup> (µg/L)	Toluene <sup>(3)</sup> (µg/L)	Ethylbenzene <sup>(3)</sup> (µg/L)	Total Xylenes <sup>(3)</sup> (µg/L)
IW04	IW04-20150508	05/08/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW04-20170601	06/01/17	SoundEarth	--	--	--	<0.35	<1	<1	<3
IW06	IW06-20150507	05/07/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
IW50	IW50-20150803	08/03/15	SoundEarth	5,000 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	IW50-20160715	07/15/16	SoundEarth	39,000 <sup>x</sup>	1,900 <sup>x</sup>	640	<0.35	<1	<1	<3
IW91	IW91-20150506	05/06/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20150804	08/04/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20151208	12/08/15	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	IW91-20160309	03/09/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20160714	07/14/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20161020	10/20/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20170126	01/26/17	SoundEarth	200 <sup>x</sup>	<300	<100	<0.35	<1	<1	<3
	IW91-20170601	06/01/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20170923	09/23/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20171216	12/16/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20180310	03/10/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	IW91-20180630	06/30/18	SoundEarth	<60	<300	<100	<1	<1	<1	<3
	IW91-20180922	09/22/18	SoundEarth	<60	<300	<100	<1	<1	<1	<3
	IW91-20181215	12/15/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	IW91-20190615	06/15/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
IW91-20191207	12/07/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3	
IW91-20200627	6/27/2020	SoundEarth	60 <sup>x</sup>	<250	<100	<1	<1	<1	<3	
IW91-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--	
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4)(5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>



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Sample Location	Sample Identification	Sample Date	Sampled By	DRPH <sup>(1)</sup> (µg/L)	ORPH <sup>(1)</sup> (µg/L)	GRPH <sup>(2)</sup> (µg/L)	Benzene <sup>(3)</sup> (µg/L)	Toluene <sup>(3)</sup> (µg/L)	Ethylbenzene <sup>(3)</sup> (µg/L)	Total Xylenes <sup>(3)</sup> (µg/L)
<b>Boren Avenue North</b>										
MW04	MW04-20110527	05/27/11	SoundEarth	<50	<250	<100	<1	1.3	<1	<3
	MW04-20111012	10/12/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20130909	09/09/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20150508	05/08/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW04-20150806	08/06/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW04-20151209	12/09/15	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW04-20160308	03/08/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW04-20160713	07/13/16	SoundEarth	<56	<280	<100	<0.35	<1	<1	<3
	MW04-20161019	10/19/16	SoundEarth	<50	<250	<100	--	--	--	--
	MW04-20170124	01/24/17	SoundEarth	150 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW04-20170531	05/31/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW04-20170921	09/21/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW04-20171214	12/14/17	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW04-20180309	03/09/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20180629	06/29/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20190614	06/14/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
MW04-20191205	12/05/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3	
MW04-20200626	06/26/20	SoundEarth	130 <sup>x</sup>	<250	<100	<1	<1	<1	<3	
MW04-20201211	12/11/20	SoundEarth	--	--	--	--	--	--	--	
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4)(5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>
MW05	MW05-20110527	05/27/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW05-20111012	10/12/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW05-20130910	09/10/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
DECOMMISSIONED 2015										
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4)(5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>





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Sample Location	Sample Identification	Sample Date	Sampled By	DRPH <sup>(1)</sup> (µg/L)	ORPH <sup>(1)</sup> (µg/L)	GRPH <sup>(2)</sup> (µg/L)	Benzene <sup>(3)</sup> (µg/L)	Toluene <sup>(3)</sup> (µg/L)	Ethylbenzene <sup>(3)</sup> (µg/L)	Total Xylenes <sup>(3)</sup> (µg/L)
MW07	MW07-20110531	05/31/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW07-20111012	10/12/11	SoundEarth	240 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW07-20130909	09/09/13	SoundEarth	120 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW07-20150508	05/08/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW07-20150805	08/05/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW07-20151209	12/09/15	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW07-20160308	03/08/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW07-20160713	07/13/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW07-20161019	10/19/16	SoundEarth	76 <sup>x</sup>	<250	<100	--	--	--	--
	MW07-20170124	01/24/17	SoundEarth	120 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW07-20170531	05/31/17	SoundEarth	54 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW07-20180308	03/08/18	SoundEarth	<50	<250	<100	<1	<1	<1	<1
	MW07-20180629	06/29/18	SoundEarth	<60	<300	<100	<1	<1	<1	<3
	MW07-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW07-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW07-20190614	06/14/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW07-20191205	12/05/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
MW07-20200630	06/30/20	SoundEarth	<50	<250	<100	<1	<1	<1	<3	
MW07-20201210	12/10/20	SoundEarth	--	--	--	--	--	--	--	
MW13	MW13-20111020	10/20/11	SoundEarth	150 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW13-20130910	09/10/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20150511	05/11/15	SoundEarth	<70	<350	<100	<0.35 <sup>cf</sup>	<1 <sup>cf</sup>	<1 <sup>cf</sup>	<3 <sup>cf</sup>
	MW13-20150805	08/05/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20151215	12/15/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20160307	03/07/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20160712	07/12/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20161019	10/19/16	SoundEarth	<50	<250	<100	--	--	--	--
	MW13-20170124	01/24/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20170531	05/31/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20170921	09/21/17	SoundEarth	120 <sup>x</sup>	<300	<100	<0.35	<1	<1	<3
	MW13-20171214	12/14/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20180308	03/08/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20180629	06/29/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20190614	06/14/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20191205	12/05/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
MW13-20200626	06/26/20	SoundEarth	<50	<250	<100	<1	<1	<1	<3	
MW13-20201210	12/10/20	SoundEarth	80 <sup>x</sup>	<250	<100	<1	<1	<1	<3	
MW13-20210623	06/23/21	SoundEarth	100 <sup>x</sup>	<300	<100	<1	<1	<1	<3	
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4) (5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>



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**Seattle, Washington**

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Sample Location	Sample Identification	Sample Date	Sampled By	DRPH <sup>(1)</sup> (µg/L)	ORPH <sup>(1)</sup> (µg/L)	GRPH <sup>(2)</sup> (µg/L)	Benzene <sup>(3)</sup> (µg/L)	Toluene <sup>(3)</sup> (µg/L)	Ethylbenzene <sup>(3)</sup> (µg/L)	Total Xylenes <sup>(3)</sup> (µg/L)
MW27	MW27-20151210	12/10/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW27-20160307	03/07/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW27-20160713	07/13/16	SoundEarth	<52	<260	<100	<0.35	<1	<1	<3
	MW27-20161019	10/19/16	SoundEarth	<50	<250	<100	--	--	--	--
	MW27-20170124	01/24/17	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW27-20170531	05/31/17	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW27-20170921	09/21/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW27-20171214	12/14/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW27-20180308	03/08/18	SoundEarth	540 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW27-20180628	06/28/18	SoundEarth	<60	<300	<100	<1	<1	<1	<3
	MW27-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW27-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW27-20190614	06/14/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW27-20191205	12/05/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
MW27-20200626	6/26/2020	SoundEarth	<50	<250	<100	<1	<1	<1	<3	
MW27-20201210	12/10/2020	SoundEarth	--	--	--	--	--	--	--	
<b>Terry Avenue North</b>										
MW15	MW15-20121211	12/11/12	SoundEarth	--	--	<100	<0.35	<1	<1	<3
	MW15-20130910	09/10/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW15-20150508	05/08/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20150805	08/05/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20151209	12/09/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20160308	03/08/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20160713	07/13/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20161018	10/18/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20170125	01/25/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20170531	05/31/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20170922	09/22/17	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW15-20171215	12/15/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20180309	03/09/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW15-20180629	06/29/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW15-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW15-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW15-20190613	06/13/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW15-20191205	12/05/19	SoundEarth	78 <sup>x</sup>	<250	<100	<1	<1	<1	<3
MW15-20200626	06/26/20	SoundEarth	<52	<250	<100	<1	<1	<1	<3	
MW15-20201211	12/11/2020	SoundEarth	--	--	--	--	--	--	--	
Well Damaged 2021										
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4) (5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>



**Table 4**  
**Groundwater Analytical Results for Petroleum Hydrocarbons**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

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Sample Location	Sample Identification	Sample Date	Sampled By	DRPH <sup>(1)</sup> (µg/L)	ORPH <sup>(1)</sup> (µg/L)	GRPH <sup>(2)</sup> (µg/L)	Benzene <sup>(3)</sup> (µg/L)	Toluene <sup>(3)</sup> (µg/L)	Ethylbenzene <sup>(3)</sup> (µg/L)	Total Xylenes <sup>(3)</sup> (µg/L)
<b>Thomas Street</b>										
MW14	MW14-20111020	10/20/11	SoundEarth	160 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW14-20130911	09/11/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
DECOMMISSIONED										
MW16	MW16-20121211	12/11/12	SoundEarth	420 <sup>x</sup>	<250	640	<0.35	<1	<1	1.1
	MW16-20130911	09/11/13	SoundEarth	170 <sup>x</sup>	<250	110	<1	<1	<1	<3
	MW16-20150508	05/08/15	SoundEarth	150 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW16-20150805	08/05/15	SoundEarth	210 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW16-20151210	12/10/15	SoundEarth	420 <sup>x</sup>	<250	110	<0.35	<1	<1	<3
	MW16-20160308	03/08/16	SoundEarth	410 <sup>x</sup>	<250	140	<0.35	<1	<1	<3
	MW16-20160712	07/12/16	SoundEarth	510 <sup>x</sup>	<250	130	<0.35	<1	<1	<3
	MW16-20161019	10/19/16	SoundEarth	310 <sup>x</sup>	<250	<100	--	--	--	--
	MW16-20170125	01/25/17	SoundEarth	140 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW16-20170531	05/31/17	SoundEarth	740 <sup>x</sup>	<250	140	<0.35	<1	<1	<3
	MW16-20170922	09/22/17	SoundEarth	570	<250	130	<0.35	<1	<1	<3
	MW16-20171229	12/29/17	SoundEarth	160 <sup>x</sup>	<250	120	<0.35	<1	<1	<3
MW16-20180309	03/09/18	SoundEarth	260 <sup>x</sup>	<250	120	<1	<1	<1	<3	
WELL DAMAGED 2018										
MW28	MW28-20190613	06/13/19	SoundEarth	140 <sup>x</sup>	<250	160	<1	<1	<1	<3
	MW28-20191205	12/05/19	SoundEarth	98 <sup>x</sup>	<250	150	<1	<1	<1	<3
	MW28-20200626	6/26/2020	SoundEarth	120 <sup>x</sup>	<250	140	<1	<1	<1	<3
	MW28-20201211	12/11/2020	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW28-20210623	6/23/2021	SoundEarth	120 <sup>x</sup>	<250	<100	<1	<1	<1	<3
<b>Fairview Avenue North</b>										
MW-C	MW-C-20130911	09/11/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4) (5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>



**Table 4**  
**Groundwater Analytical Results for Petroleum Hydrocarbons**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH <sup>(1)</sup> (µg/L)	ORPH <sup>(1)</sup> (µg/L)	GRPH <sup>(2)</sup> (µg/L)	Benzene <sup>(3)</sup> (µg/L)	Toluene <sup>(3)</sup> (µg/L)	Ethylbenzene <sup>(3)</sup> (µg/L)	Total Xylenes <sup>(3)</sup> (µg/L)
<b>Harrison Street</b>										
MW01	MW01-20110525	05/25/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20111011	10/11/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20130910	09/10/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20150806	08/06/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW01-20160308	03/08/16	SoundEarth	<65	<330	<100	<0.35	<1	<1	<3
	MW01-20160712	07/12/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW01-20161018	10/18/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW01-20170124	01/24/17	SoundEarth	<25	<125	<100	<0.35	<1	<1	<3
	MW01-20170531	05/31/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW01-20171214	12/14/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW01-20180309	03/09/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20180628	06/28/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20190614	06/14/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
MW01-20191205	12/05/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3	
MW01-20200626	06/26/20	SoundEarth	57 <sup>x</sup>	<250	<100	<1	<1	<1	<3	
MW01-20201211	12/11/20	SoundEarth	--	--	--	--	--	--	--	
MW02	MW02-20110525	05/25/11	SoundEarth	100 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW02-20111011	10/11/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW02-20130911	09/11/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
DECOMMISSIONED 2015										
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4) (5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>
MW03	MW03-20110527	05/27/11	SoundEarth	130 <sup>x</sup>	<250	<100	<1	<1	<1	<3
	MW03-20111011	10/11/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW03-20130911	09/11/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
DECOMMISSIONED 2015										
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4) (5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>



**Table 4**  
**Groundwater Analytical Results for Petroleum Hydrocarbons**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH <sup>(1)</sup> (µg/L)	ORPH <sup>(1)</sup> (µg/L)	GRPH <sup>(2)</sup> (µg/L)	Benzene <sup>(3)</sup> (µg/L)	Toluene <sup>(3)</sup> (µg/L)	Ethylbenzene <sup>(3)</sup> (µg/L)	Total Xylenes <sup>(3)</sup> (µg/L)
MW26	MW26-20151210	12/10/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW26-20160307	03/07/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW26-20160712	07/12/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW26-20161018	10/18/16	SoundEarth	59 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW26-20170124	01/24/17	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW26-20170531	05/31/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW26-20170921	09/21/17	SoundEarth	130 <sup>x</sup>	<250	<100	<0.35	<1	<1	<3
	MW26-20171214	12/14/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW26-20180309	03/09/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW26-20180628	06/28/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW26-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW26-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW26-20190614	06/14/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW26-20191205	12/05/19	SoundEarth	680 <sup>x</sup>	<250	<100	<1	<1	<1	<3
MW26-20200626	06/26/20	SoundEarth	<50	<250	<100	<1	<1	<1	<3	
MW26-20201211	12/11/20	SoundEarth	--	--	--	--	--	--	--	
SMW06	SMW06-20130910	09/10/13	SoundEarth	130 <sup>x</sup>	<250	400	<1	<1	3.5	3.7
<b>Westlake Avenue North</b>										
SMW09	SMW09-20130910	09/10/13	SoundEarth	79 <sup>x</sup>	<250	<100	<1	<1	<1	<3
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4)(5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>
<b>North-Adjoining Property</b>										
SLU-MW01	MW01-20120229	02/29/12 <sup>(6)</sup>	SoundEarth	150	<250	--	--	--	--	--
	DECOMMISSIONED 2013									
SLU-MW02	MW02-20120229	02/29/12 <sup>(6)</sup>	SoundEarth	<50	<250	--	--	--	--	--
	DECOMMISSIONED 2013									
<b>MTCA Cleanup Level</b>				<b>500<sup>(4)</sup></b>	<b>500<sup>(4)</sup></b>	<b>1,000/800<sup>(4)(5)</sup></b>	<b>5<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>	<b>700<sup>(4)</sup></b>	<b>1,000<sup>(4)</sup></b>

**NOTES:**

**Red** denotes concentrations exceeding the MTCA Method cleanup level for groundwater.

<sup>(1)</sup>Analyzed by Method NWTPH-Dx. The supply well samples collected in August 2010 were passed through a silica gel column prior to analysis to remove organic interference.

<sup>(2)</sup>Analyzed by EPA Method 418.1 or Method NWTPH-Gx.

<sup>(3)</sup>Analyzed by EPA Method 8260C, 8021B or 8240.

<sup>(4)</sup>MTCA Method A Cleanup Levels, Table 720-1 of Section 900 of Chapter 173-340 of WAC, revised November 2007.

<sup>(5)</sup>1,000 µg/L when benzene is not present and 800 µg/L when benzene is present.

<sup>(6)</sup>Sample data compiled from reports on file at the Washington State Department of Ecology.

**Laboratory Notes:**

<sup>cf</sup>The sample was centrifuged prior to analysis.

<sup>ip</sup>Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

<sup>x</sup>The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

-- = not analyzed, measured, or calculated

< = not detected at a concentration exceeding laboratory reporting limit

µg/L = micrograms per liter

DRPH = diesel-range petroleum hydrocarbons

EPA = US Environmental Protection Agency

GRPH = gasoline-range petroleum hydrocarbons

MTCA = Washington State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = heavy oil-range petroleum hydrocarbons

SoundEarth = SoundEarth Strategies, Inc.

WAC = Washington Administrative Code





**Table 5**  
**Groundwater Analytical Results for Natural Attenuation Parameters**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

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Well Identification	Sample Identification	Sample Date	Analytical Results										
			Dissolved Oxygen <sup>(1)</sup> (mg/L)	Chloride <sup>(2)</sup> (mg/L)	Nitrate <sup>(2)</sup> (mg/L)	Total Manganese <sup>(3)</sup> (µg/L)	Total Iron <sup>(3)</sup> (mg/L)	Ferrous Iron <sup>(4)</sup> (mg/L)	Ferric Iron <sup>(5)</sup> (mg/L)	Sulfate <sup>(2)</sup> (mg/L)	Methane <sup>(6)</sup> (µg/L)	Ethane <sup>(6)</sup> (µg/L)	Ethene <sup>(6)</sup> (µg/L)
<b>Troy Laundry Property</b>													
MW18	MW18-20150506	05/06/15	1.99	16.2	5.44	83.7	0.0919	0.0400	0.0519	47.0	<5	<10	<10
	MW18-20150803	08/03/15	2.66	--	--	--	--	--	--	--	--	--	--
	MW18-20151208	12/08/15	1.64	--	--	--	--	--	--	43.6	<5	<10	<10
	MW18-20160714	07/14/16	0.47	--	--	--	--	--	--	1.54	170	<10	<10
	MW18-20170126	01/26/17	1.50	--	--	--	--	--	--	--	2,200	<10	<10
	MW18-20170601	06/01/17	0.58	19.2 <sup>D</sup>	--	--	--	--	--	--	3,500	<10	<10
	MW18-20170923	09/23/17	0.48	15.4 <sup>D</sup>	--	--	--	--	--	--	3,900	<10	<10
	MW18-20171216	12/16/17	0.77	21.5 <sup>D</sup>	--	--	--	--	--	--	2,400	<10	<10
	MW18-20180310	03/10/18	0.38	19.0 <sup>D</sup>	--	--	--	--	--	--	4,700	<10	<10
	MW18-20180630	06/30/18	0.68	17.0 <sup>D</sup>	--	--	--	--	--	--	6,300	<10	<10
	MW18-20180922	09/22/18	0.19	17.4 <sup>D</sup>	--	--	--	--	--	--	4,200 <sup>ve</sup>	<10	<10
	MW18-20181215	12/15/18	0.62	--	<1.00 <sup>D,H</sup>	10,800	12.300	<0.0500 <sup>H</sup>	--	<3.00 <sup>D</sup>	6,400	<10	<10
	MW18-20190615	06/15/19	0.30	--	<0.100 <sup>H</sup>	10,100	13.500	8.35 <sup>DH</sup>	--	0.422 <sup>H</sup>	5,290 <sup>D</sup>	<809 <sup>D</sup>	<757 <sup>D</sup>
	MW18-20191207	12/07/19	0.69	--	<0.100 <sup>H</sup>	9,660	13.800	15.6 <sup>DH</sup>	--	<0.300	2,230 <sup>D</sup>	<16.2	<15.1
	MW18-20200627	06/27/20	0.18	--	<0.100 <sup>H</sup>	8,960	14.300	19.9 <sup>DH</sup>	--	0.479	5,520 <sup>D</sup>	<16.2	<15.1
MW18-20201212	12/12/20	2.98	--	<0.100 <sup>H</sup>	7,980	12.900	17.6 <sup>DH</sup>	--	6.23	8,780 <sup>D</sup>	<16.2	<15.1	
MW18-20210625	06/25/21	0.91	--	--	8,900	13.900	16.3 <sup>DH</sup>	--	<3.00 <sup>D</sup>	5,190 <sup>D</sup>	<15.1	<14.6	
MW19	MW19-20150507	05/07/15	1.75	15.9	4.98	71.6	0.156	<0.0300	0.156	50.3	<5	<10	<10
	MW19-20150803	08/03/15	2.33	--	--	--	--	--	--	--	--	--	--
	MW19-20190615	06/15/19	0.28	--	<0.100 <sup>H</sup>	11,400	10.000	7.81 <sup>DH</sup>	--	0.380 <sup>H</sup>	2,530 <sup>D</sup>	<324 <sup>D</sup>	<303 <sup>D</sup>
	MW19-20191207	12/07/19	0.54	--	<0.100 <sup>H</sup>	9,030	13.300	12.6 <sup>DH</sup>	--	<0.300	6,520 <sup>D</sup>	<16.2	<15.1
	MW19-20200627	06/27/20	0.27	--	<0.100 <sup>H</sup>	14,000	18.100	24.3 <sup>DH</sup>	--	0.550	3,410 <sup>D</sup>	<16.2	<15.1
	MW19-20201212	12/12/20	11.88*	--	<0.100 <sup>H</sup>	14,400	16.700	22.3 <sup>DH</sup>	--	1.15	9,010 <sup>D</sup>	<16.2	<15.1
	MW19-20210625	06/25/21	0.81	--	--	15,200	18.200	14.5 <sup>DH</sup>	--	<2.40 <sup>D</sup>	5,840 <sup>D</sup>	<15.1	<14.6
MW21	MW21-20170601	06/01/17	0.54	26.2 <sup>D</sup>	--	--	--	--	--	--	3,500	<10	<10
	MW21-20170923	09/23/17	0.69	33.5 <sup>D</sup>	--	--	--	--	--	--	4,000	<10	<10
	MW21-20171216	12/16/17	2.67	85.7 <sup>D</sup>	--	--	--	--	--	--	4,800	<10	<10
	MW21-20180310	03/10/18	0.71	89.2 <sup>D</sup>	--	--	--	--	--	--	5,400	<10	<10
	MW21-20180630	06/30/18	0.34	124 <sup>D</sup>	--	--	--	--	--	--	4,400	<10	<10
	MW21-20180922	09/22/18	0.33	97.8 <sup>D</sup>	--	--	--	--	--	--	2,800 <sup>ve</sup>	<10	<10
	MW21-20181215	12/15/18	1.57	--	--	--	--	--	--	--	4,800	<10	<10
	MW21-20190615	06/15/19	0.19	--	--	--	--	--	--	--	2,460 <sup>D</sup>	<809 <sup>D</sup>	<757 <sup>D</sup>
	MW21-20191207	12/07/19	0.77	--	--	--	--	--	--	--	3,980 <sup>D</sup>	<16.2	<15.1
	MW21-20200627	06/27/20	0.17	--	--	--	--	--	--	--	1,790 <sup>D</sup>	<16.2	<15.1
	MW21-20201212	12/12/20	0.20	--	--	--	--	--	--	--	7,520 <sup>D</sup>	<16.2	<15.1
MW21-20210625	6/25/21	0.49	--	--	--	--	--	--	--	4,970 <sup>D</sup>	<15.1	<14.6	



**Table 5**  
**Groundwater Analytical Results for Natural Attenuation Parameters**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

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Well Identification	Sample Identification	Sample Date	Analytical Results										
			Dissolved Oxygen <sup>(1)</sup> (mg/L)	Chloride <sup>(2)</sup> (mg/L)	Nitrate <sup>(2)</sup> (mg/L)	Total Manganese <sup>(3)</sup> (µg/L)	Total Iron <sup>(3)</sup> (mg/L)	Ferrous Iron <sup>(4)</sup> (mg/L)	Ferric Iron <sup>(5)</sup> (mg/L)	Sulfate <sup>(2)</sup> (mg/L)	Methane <sup>(6)</sup> (µg/L)	Ethane <sup>(6)</sup> (µg/L)	Ethene <sup>(6)</sup> (µg/L)
MW23	MW23-20150507	05/07/15	2.19	30.9	8.84	173	0.262	0.0800	0.182	49.2	<5	<10	<10
	MW23-20150804	08/04/15	0.73	--	--	--	--	--	--	--	--	--	--
	MW23-20170601	06/01/17	0.49	25.8 <sup>D</sup>	--	--	--	--	--	--	2,600	<10	<10
	MW23-20170923	09/23/17	0.46	10.5 <sup>D</sup>	--	--	--	--	--	--	1,700	<10	<10
	MW23-20171216	12/16/17	0.84	30.9 <sup>D</sup>	--	--	--	--	--	--	3,700	<10	<10
	MW23-20180310	03/10/18	2.25	26.1 <sup>D</sup>	--	--	--	--	--	--	3,900	<10	<10
	MW23-20180630	06/30/18	0.70	21.1 <sup>D</sup>	--	--	--	--	--	--	3,400	<10	<10
	MW23-20180922	09/22/18	0.31	20.3 <sup>D</sup>	--	--	--	--	--	--	4,600 <sup>ve</sup>	<10	<10
	MW23-20181215	12/15/18	0.79	--	<1.00 <sup>D,H</sup>	32,300	14.300	3.95 <sup>D,H</sup>	--	<3.00 <sup>D</sup>	3,800	<10	<10
	MW23-20190615	06/15/19	0.50	--	<0.100 <sup>H</sup>	26,700	12.300	13.0 <sup>DH</sup>	--	0.378 <sup>H</sup>	2,900 <sup>D</sup>	<809 <sup>D</sup>	<757 <sup>D</sup>
	MW23-20191207	12/07/19	2.12	--	<0.200 <sup>DH</sup>	22,100	14.600	7.41 <sup>DH</sup>	--	0.762 <sup>D</sup>	5,370 <sup>D</sup>	<16.2	<15.1
	MW23-20200627	06/27/20	0.18	--	<0.100 <sup>H</sup>	16,500	9.070	12.6 <sup>DH</sup>	--	0.508	4,590 <sup>D</sup>	<16.2	<15.1
	MW23-20201212	12/12/20	0.29	--	<0.200 <sup>DH</sup>	15,200	12.700	16.8 <sup>DH</sup>	--	0.634 <sup>D</sup>	10,100 <sup>D</sup>	<16.2	<15.1
MW23-20210625	06/25/21	0.29	--	--	14,600	10.400	13.6 <sup>DH</sup>	--	<3.00 <sup>D</sup>	3,840 <sup>D</sup>	<15.1	<14.6	
MW24	MW24-20150506	05/06/15	1.04	16.7	1.93	18.2	0.0714	0.0300	0.0414	16.3	<5	<10	<10
	MW24-20150804	08/04/15	0.45	--	--	--	--	--	--	--	--	--	--
	MW24-20151208	12/08/15	1.00	--	--	--	--	--	--	15.8	<5	<10	<10
	MW24-20160715	07/15/16	0.29	--	--	--	--	--	--	1.56	13 <sup>j</sup>	<10	<10
	MW24-20170125	01/25/17	1.10	--	--	--	--	--	--	<1.50	2,100	<10	<10
	MW24-20170601	06/01/17	0.38	16.0 <sup>D</sup>	--	--	--	--	--	--	4,500	<10	<10
	MW24-20170924	09/24/17	0.27	19.4 <sup>D</sup>	--	--	--	--	--	--	2,800	<10	<10
	MW24-20171216	12/16/17	2.69	22.4 <sup>D</sup>	--	--	--	--	--	--	3,600	<10	<10
	MW24-20180310	03/10/18	0.70	20.2 <sup>D</sup>	--	--	--	--	--	--	3,900 <sup>ve</sup>	<10	<10
	MW24-20180630	06/30/18	0.44	13.6 <sup>D</sup>	--	--	--	--	--	--	1,800	<10	<10
	MW24-20180630	06/30/18	3.20	30.4 <sup>D</sup>	--	--	--	--	--	--	1,300	<10	<10
	MW24-20181215	12/15/18	0.44	--	<1.00 <sup>D,H</sup>	17,400	11.300	1.53 <sup>H</sup>	--	<3.00 <sup>D</sup>	3,600	<10	<10
	MW24-20190615	06/15/19	0.29	--	<0.100 <sup>H</sup>	21,900	11.600	11.1 <sup>DH</sup>	--	0.348 <sup>H</sup>	2,660 <sup>D</sup>	<809 <sup>D</sup>	<757 <sup>D</sup>
	MW24-20191207	12/07/19	0.66	--	<0.100 <sup>H</sup>	20,700	10.700	10.6 <sup>DH</sup>	--	<0.300	3,960 <sup>D</sup>	<16.2	<15.1
	MW24-20200627	06/27/20	0.26	--	<0.100 <sup>H</sup>	21,900	9.830	15.9 <sup>DH</sup>	--	0.309	5,460 <sup>D</sup>	<16.2	<15.1
MW24-20201212	12/12/20	2.03	--	<0.100 <sup>H</sup>	20,900	13.500	17.8 <sup>DH</sup>	--	0.300	4,170 <sup>D</sup>	<16.2	<15.1	
MW24-20210625	06/25/21	0.93	--	--	24,500	18.300	21.9 <sup>DH</sup>	--	<3.00 <sup>D</sup>	6,190 <sup>D</sup>	<15.1	<14.6	



**Table 5**  
**Groundwater Analytical Results for Natural Attenuation Parameters**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

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Well Identification	Sample Identification	Sample Date	Analytical Results										
			Dissolved Oxygen <sup>(1)</sup> (mg/L)	Chloride <sup>(2)</sup> (mg/L)	Nitrate <sup>(2)</sup> (mg/L)	Total Manganese <sup>(3)</sup> (µg/L)	Total Iron <sup>(3)</sup> (mg/L)	Ferrous Iron <sup>(4)</sup> (mg/L)	Ferric Iron <sup>(5)</sup> (mg/L)	Sulfate <sup>(2)</sup> (mg/L)	Methane <sup>(6)</sup> (µg/L)	Ethane <sup>(6)</sup> (µg/L)	Ethene <sup>(6)</sup> (µg/L)
MW25	MW25-20150507	05/07/15	2.87	21.8	8.32	190	1.850	0.190 <sup>RA</sup>	1.66	56.7	<5	<10	<10
	MW25-20150805	08/06/15	1.47	--	--	--	--	--	--	--	--	--	--
	MW25-20181215	12/15/18	0.69	--	<1.00 <sup>D,H</sup>	14,600	9.970	<0.0500 <sup>H</sup>	--	<3.00 <sup>D</sup>	8,900	<10	<10
	MW25-20190615	06/15/19	0.59	--	<0.100 <sup>H</sup>	9,560	12.300	7.60 <sup>DH</sup>	--	0.380 <sup>H</sup>	9,670 <sup>DE</sup>	<324 <sup>D</sup>	<303 <sup>D</sup>
	MW25-20191207	12/07/19	0.63	--	<0.100 <sup>H</sup>	6,850	13.500	13.8 <sup>DH</sup>	--	<0.300	7,480 <sup>D</sup>	<16.2	<15.1
	MW25-20200627	06/27/20	0.23	--	<0.100 <sup>H</sup>	5,290	15.100	20.1 <sup>DH</sup>	--	0.473	10,200 <sup>D</sup>	<16.2	<15.1
	MW25-20201212	12/12/20	23.36*	--	<0.100 <sup>H</sup>	7,390	16.200	21.6 <sup>DH</sup>	--	0.342	5,690 <sup>D</sup>	<16.2	<15.1
MW25-20210625	06/25/21	0.82	--	--	8,010	19.300	25.6 <sup>DH</sup>	--	<3.00 <sup>D</sup>	7,390 <sup>D</sup>	<15.1	<14.6	
IW04	IW04-20150508	05/08/15	6.28*	10.8	3.75	12.0	0.230	<0.0300	0.230	34.1	<5	<10	<10
	IW04-20181215	12/15/18	0.64	--	1.03 <sup>D,H</sup>	11,800	19.700	0.169 <sup>H</sup>	--	8.89 <sup>D</sup>	--	--	--
	IW04-20190615	06/15/19	0.24	--	<0.100 <sup>H</sup>	12,900	17.900	0.0865 <sup>H</sup>	--	0.759	--	--	--
	IW04-20191207	12/07/19	0.98	--	<0.200 <sup>DH</sup>	11,700	15.600	<0.0500	--	0.912 <sup>D</sup>	--	--	--
	IW04-20200627	06/27/20	5.31*	--	<0.100 <sup>H</sup>	10,600	16.400	25.3 <sup>DH</sup>	--	0.492	--	--	--
	IW04-20201212	12/12/20	2.00	--	<0.100 <sup>H</sup>	11,100	16.500	18.5 <sup>DH</sup>	--	0.347	--	--	--
	IW04-20210625	06/25/21	0.76	--	--	11,200	16.800	23.3 <sup>DH</sup>	--	<3.00 <sup>D</sup>	--	--	--
IW50	IW50-20170602	06/02/17	0.60	29.9 <sup>D</sup>	--	--	--	--	--	--	3,700	<10	<10
	IW50-20170924	09/24/17	0.24	16.1 <sup>D</sup>	--	--	--	--	--	--	3,200	<10	<10
	IW50-20171216	12/16/17	2.71	20.5 <sup>D</sup>	--	--	--	--	--	--	5,900	<10	<10
	IW50-20180310	03/10/18	0.40	20.5 <sup>D</sup>	--	--	--	--	--	--	5,100	<10	<10
	IW50-20180630	06/30/18	0.31	23.8 <sup>D</sup>	--	--	--	--	--	--	2,700	<10	<10
	IW50-20180922	09/22/18	0.66	22.3 <sup>D</sup>	--	--	--	--	--	--	4,000 <sup>ve</sup>	<10	<10
	IW50-20181215	12/15/18	1.28	--	<1.00 <sup>D,H</sup>	11,900	10.300	1.88 <sup>H</sup>	--	12.1 <sup>D</sup>	6,100	<10	<10
	IW50-20190615	06/15/19	0.38	--	<0.100 <sup>H</sup>	9,670	7.550	7.08 <sup>DH</sup>	--	11.0	3,110 <sup>D</sup>	<324 <sup>D</sup>	<303 <sup>D</sup>
	IW50-20191207	12/07/19	1.02	--	<0.100 <sup>H</sup>	8,090	7.170	7.46 <sup>DH</sup>	--	11.0	4,120 <sup>D</sup>	<16.2	<15.1
	IW50-20200627	06/27/20	8.61*	--	0.232 <sup>H</sup>	15,800	16.900	25.0 <sup>DH</sup>	--	2.47	3,690 <sup>D</sup>	<16.2	<15.1
	IW50-20201212	12/12/20	0.24	--	<0.400 <sup>DH</sup>	13,200	18.000	24.2 <sup>DH</sup>	--	1.34 <sup>D</sup>	13,500 <sup>D</sup>	<16.2	<15.1
IW50-20210625	06/25/21	0.17	--	--	13,400	16.400	24.8 <sup>DH</sup>	--	<3.00 <sup>D</sup>	3,920 <sup>D</sup>	<15.1	<14.6	
IW61	IW61-20170602	06/02/17	0.49	7.18 <sup>D</sup>	--	--	--	--	--	--	4,900	<10	<10
	IW61-20170923	09/23/17	0.79	9.25 <sup>D</sup>	--	--	--	--	--	--	4,400	<10	<10
	IW61-20171216	12/16/17	0.79	11.0 <sup>D</sup>	--	--	--	--	--	--	3,000	<10	<10
	IW61-20180310	03/10/18	1.28	17.8 <sup>D</sup>	--	--	--	--	--	--	3,400	<10	<10
	IW61-20180630	06/30/18	0.39	15.3 <sup>D</sup>	--	--	--	--	--	--	2,900	<10	<10
	IW61-20180922	09/22/18	0.17	11.4 <sup>D</sup>	--	--	--	--	--	--	5,400 <sup>ve</sup>	<10	<10
	IW61-20181215	12/15/18	0.73	--	<1.00 <sup>D,H</sup>	20,100	50.500	8.83 <sup>D,H</sup>	--	<3.00 <sup>D</sup>	5,500	<10	<10
	IW61-20190615	06/15/19	0.32	--	<0.100 <sup>H</sup>	11,800	25.500	30.5 <sup>DH</sup>	--	0.338	2,440 <sup>D</sup>	<324 <sup>D</sup>	<303 <sup>D</sup>
	IW61-20191207	12/07/19	0.82	--	<0.100 <sup>H</sup>	11,000	22.300	24.8 <sup>DH</sup>	--	<0.300	3,860 <sup>D</sup>	<16.2	<15.1
	IW61-20200627	06/27/20	0.23	--	<0.100 <sup>H</sup>	10,300	24.400	38.1 <sup>DH</sup>	--	0.615	3,100 <sup>D</sup>	<16.2	<15.1
	IW61-20201212	12/12/20	0.34	--	<0.100 <sup>H</sup>	12,600	25.700	32.8 <sup>DH</sup>	--	<0.300	4,580 <sup>D</sup>	<16.2	<15.1
	IW61-20210625	06/25/21	0.25	--	--	13,000	24.500	31.5 <sup>DH</sup>	--	<3.00 <sup>D</sup>	2,430 <sup>D</sup>	<15.1	<14.6



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**Troy Laundry Seattle Site**  
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Well Identification	Sample Identification	Sample Date	Analytical Results										
			Dissolved Oxygen <sup>(1)</sup> (mg/L)	Chloride <sup>(2)</sup> (mg/L)	Nitrate <sup>(2)</sup> (mg/L)	Total Manganese <sup>(3)</sup> (µg/L)	Total Iron <sup>(3)</sup> (mg/L)	Ferrous Iron <sup>(4)</sup> (mg/L)	Ferric Iron <sup>(5)</sup> (mg/L)	Sulfate <sup>(2)</sup> (mg/L)	Methane <sup>(6)</sup> (µg/L)	Ethane <sup>(6)</sup> (µg/L)	Ethene <sup>(6)</sup> (µg/L)
<b>Boren Avenue North</b>													
MW04	MW04-20110527	05/27/11	6.24	--	--	--	--	--	--	--	--	--	--
	MW04-20111012	10/12/11	6.17	--	--	--	--	--	--	--	--	--	--
	MW04-20130909	09/09/13	5.49	--	--	--	--	--	--	--	--	--	--
	MW04-20150508	05/08/15	0.433	29.9	16.7	3.32	0.0667	<0.0300	0.0667	45.6	<5	<10	<10
	MW04-20150806	08/06/15	6.09	--	--	--	--	--	--	--	--	--	--
	MW04-20181214	12/14/18	4.83	--	17.9 <sup>D,H</sup>	22.9	0.506	0.0677 <sup>H</sup>	--	43.2 <sup>D</sup>	<5	<10	<10
	MW04-20190614	06/14/19	4.15	--	14.8 <sup>D,H</sup>	15.9	0.327	0.129	--	46.7 <sup>D</sup>	<8.63	<16.2	<15.1
	MW04-20191205	12/05/19	7.97	--	24.4 <sup>D,H</sup>	7.59	0.254	<0.0500	--	41.4 <sup>D</sup>	<8.63	<16.2	<15.1
	MW04-20200626	06/26/20	7.78	--	6.32 <sup>D,H</sup>	3.63	0.158	<0.0500 <sup>H</sup>	--	40.7 <sup>D</sup>	107	<16.2	<15.1
	MW04-20201211	12/11/20	6.63	--	7.14 <sup>D,H</sup>	11.6	0.388	<0.0500 <sup>H</sup>	--	40.0 <sup>D</sup>	<8.63	<16.2	<15.1
MW04-20210623	06/23/21	2.23	--	4.86 <sup>D</sup>	24.1	1.630	<0.100 <sup>H</sup>	--	41.9 <sup>D</sup>	<6.75	<15.1	<14.6	
MW07	MW07-20110531	05/31/11	5.70	--	--	--	--	--	--	--	--	--	--
	MW07-20111012	10/12/11	2.92	--	--	--	--	--	--	--	--	--	--
	MW07-20130909	09/09/13	2.71	--	--	--	--	--	--	--	--	--	--
	MW07-20150508	05/08/15	4.79	34.5	30.1	18.2	0.0825	<0.0300	0.0825	41.1	<5	<10	<10
	MW07-20150805	08/05/15	4.65	--	--	--	--	--	--	--	--	--	--
	MW07-20170531	05/31/17	4.45	27.9 <sup>D</sup>	--	--	--	--	--	--	<5	<10	<10
	MW07-20180308	03/08/18	7.75	23.3 <sup>D</sup>	--	--	--	--	--	--	<5	<10	<10
	MW07-20180629	06/29/18	7.38	32.5 <sup>D</sup>	--	--	--	--	--	--	<5	<10	<10
	MW07-20180920	09/20/18	8.76	28.7 <sup>D</sup>	--	--	--	--	--	--	<5	<10	<10
	MW07-20181214	12/14/18	7.57	--	26.5 <sup>D,H</sup>	13.5	0.117	0.0959 <sup>H</sup>	--	56.1 <sup>D</sup>	<5	<10	<10
	MW07-20190614	06/14/19	7.91	--	29.1 <sup>D,H</sup>	9.26	0.225	0.0818	--	51.0 <sup>D</sup>	<8.63	<16.2	<15.1
	MW07-20191205	12/05/19	6.85	--	34.9 <sup>D,H</sup>	5.89	203	0.0654 <sup>H</sup>	--	49.6 <sup>D</sup>	<8.63	<16.2	<15.1
	MW07-20200630	06/30/20	4.95	--	--	6.24	0.111	<0.0500 <sup>H</sup>	--	41.7 <sup>D</sup>	<8.63	<16.2	<15.1
MW07-20201210	12/10/20	1.39	--	13.4 <sup>D,H</sup>	3.91	0.0926	<0.0500 <sup>H</sup>	--	30.7 <sup>D</sup>	328 <sup>D</sup>	<16.2	<15.1	
MW07-20210623	06/23/21	4.91	--	14.0 <sup>D,H</sup>	15.2	0.166	<0.100 <sup>H</sup>	--	32.0 <sup>D</sup>	317 <sup>D</sup>	<15.1	<14.6	
MW13	MW13-20111020	10/20/11	2.12	--	--	--	--	--	--	--	--	--	--
	MW13-20130910	09/10/13	3.67	--	--	--	--	--	--	--	--	--	--
	MW13-20150511	05/11/15	4.71	32.9	5.07	2.770	73.200	4.60	68.60	44.5	<5	<10	<10
	MW13-20150805	08/05/15	3.91	--	--	--	--	--	--	--	--	--	--



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Well Identification	Sample Identification	Sample Date	Analytical Results										
			Dissolved Oxygen <sup>(1)</sup> (mg/L)	Chloride <sup>(2)</sup> (mg/L)	Nitrate <sup>(2)</sup> (mg/L)	Total Manganese <sup>(3)</sup> (µg/L)	Total Iron <sup>(3)</sup> (mg/L)	Ferrous Iron <sup>(4)</sup> (mg/L)	Ferric Iron <sup>(5)</sup> (mg/L)	Sulfate <sup>(2)</sup> (mg/L)	Methane <sup>(6)</sup> (µg/L)	Ethane <sup>(6)</sup> (µg/L)	Ethene <sup>(6)</sup> (µg/L)
<b>Thomas Street</b>													
MW16	MW16-20130911	09/11/13	3.64	--	--	--	--	--	--	--	--	--	--
	MW16-20150508	05/08/15	0.68	27.6	0.694	484	0.488	0.0700	0.4180	7.28	<5	<10	<10
	MW16-20150805	08/05/15	0.40	--	--	--	--	--	--	--	--	--	--
	MW16-20151210	12/10/15	0.73	--	--	--	--	--	--	8.09	<5	<10	<10
	MW16-20160712	07/12/16	0.47	--	--	--	--	--	--	4.57	2,500 <sup>ve</sup>	<10	<10
	MW16-20170125	01/25/17	0.46	--	--	--	--	--	--	14.2	530	<10	<10
	MW16-20170531	05/31/17	0.65	11.6 <sup>D</sup>	--	--	--	--	--	--	25	<10	<10
	MW16-20170922	09/22/17	0.72	10.2 <sup>D</sup>	--	--	--	--	--	--	8	<10	<10
	MW16-20171229	12/29/17	2.13	15.2 <sup>D</sup>	--	--	--	--	--	--	340	<10	<10
MW16-20180309	03/09/18	0.23	11.8 <sup>D</sup>	--	--	--	--	--	--	6.5	<10	<10	
<b>WELL DAMAGED 2018</b>													
MW28	MW28-20190613	06/13/19	1.08	--	<0.500 <sup>D,H</sup>	1,140	1.100	1.02 <sup>H</sup>	--	2.10 <sup>D</sup>	15.3	<16.2	<15.1
	MW28-20191204	12/04/19	0.24	--	<0.200 <sup>D,H</sup>	651	1.550	1.26 <sup>H</sup>	--	<0.600 <sup>D</sup>	59	<16.2	<15.1
	MW28-20200626	06/26/20	0.55	--	<0.200 <sup>D,H</sup>	452	1.450	1.48 <sup>H</sup>	--	0.391	43.8	<16.2	<15.1
	MW28-20201211	12/11/20	1.47	--	<0.200 <sup>D,H</sup>	470	0.576	0.359 <sup>H</sup>	--	0.748 <sup>D</sup>	72.3	<16.2	<15.1
	MW28-20210623	06/23/21	--	--	<0.100 <sup>H</sup>	617	1.340	1.28 <sup>H</sup>	--	9.58	53.2	<15.1	<14.6
MW26	MW26-20181214	12/14/18	0.62	--	5.06 <sup>D,H</sup>	35.4	0.134	0.133 <sup>H</sup>	--	34.2 <sup>D</sup>	1,500	<10	<10
	MW26-20190614	06/14/19	0.59	--	7.10 <sup>D,H</sup>	62.1	0.29	0.136	--	45.0 <sup>D</sup>	4,120 <sup>D</sup>	<324 <sup>D</sup>	<303 <sup>D</sup>
	MW26-20191205	12/05/19	0.7	--	1.74 <sup>D</sup>	906	4.830	6.12 <sup>D,H</sup>	--	27.8 <sup>D</sup>	3.80 <sup>D</sup>	<16.2	<15.1
	MW26-20200626	06/26/20	0.19	--	0.208 <sup>H</sup>	806	0.656	0.595 <sup>H</sup>	--	37.4 <sup>D</sup>	1,340 <sup>D</sup>	<16.2	<15.1
	MW26-20201211	12/11/20	0.64	--	<0.100 <sup>H</sup>	605	0.230	0.195 <sup>H</sup>	--	19.5 <sup>D</sup>	263 <sup>D</sup>	<16.2	<15.1
MW26-20210623	06/23/21	--	--	<0.400 <sup>D,H</sup>	579	0.497	0.382 <sup>H</sup>	--	32.5 <sup>D</sup>	12.9	<15.1	<14.6	





**Table 5**  
**Groundwater Analytical Results for Natural Attenuation Parameters**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

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Well Identification	Sample Identification	Sample Date	Analytical Results										
			Dissolved Oxygen <sup>(1)</sup> (mg/L)	Chloride <sup>(2)</sup> (mg/L)	Nitrate <sup>(2)</sup> (mg/L)	Total Manganese <sup>(3)</sup> (µg/L)	Total Iron <sup>(3)</sup> (mg/L)	Ferrous Iron <sup>(4)</sup> (mg/L)	Ferric Iron <sup>(5)</sup> (mg/L)	Sulfate <sup>(2)</sup> (mg/L)	Methane <sup>(6)</sup> (µg/L)	Ethane <sup>(6)</sup> (µg/L)	Ethene <sup>(6)</sup> (µg/L)
MW22	MW22-20181215	12/15/18	0.67	--	1.09 <sup>D,H</sup>	13,000	6.010	4.06 <sup>D,H</sup>	--	<3.00 <sup>D</sup>	4,900	<10	<10
	MW22-20190615	06/15/19	0.38	--	<1.00 <sup>H</sup>	11,400	11.200	11.6 <sup>D,H</sup>	--	<0.300 <sup>H</sup>	3,090 <sup>D</sup>	<809 <sup>D</sup>	<757 <sup>D</sup>
	MW22-20191207	12/07/19	2.02	--	<0.200 <sup>DH</sup>	10,900	8.010	7.41	--	0.762 <sup>D</sup>	5,370 <sup>D</sup>	<16.2	<15.1
	MW22-20200627	06/27/20	0.40	--	<0.200 <sup>DH</sup>	9,810	8.000	11.0 <sup>DH</sup>	--	<0.600 <sup>D</sup>	1,780 <sup>D</sup>	<16.2	<15.1
	MW22-20201212	12/12/20	0.31	--	<0.200 <sup>DH</sup>	10,800	15.000	22.0 <sup>DH</sup>	--	<0.600 <sup>D</sup>	6,290 <sup>D</sup>	<16.2	<15.1
	MW22-20210625	06/25/21	0.55	--	--	11,000	11.700	14.9 <sup>DH</sup>	--	<6.00 <sup>D</sup>	2,560 <sup>D</sup>	<15.1	<14.6

**NOTES:**

Analyses performed by Friedman & Bruya, Inc. or Fremont Analytical Inc. of Seattle, Washington.

<sup>(1)</sup>Parameter is measured in the field using water quality meter with flow-through cell. The reported value is the last reading prior to sampling groundwater.

<sup>(2)</sup>Analyzed by EPA Method 300.0.

<sup>(3)</sup>Analyzed by EPA Method 200.8.

<sup>(4)</sup>Analyzed by Standard Method 3500-Fe B.

<sup>(5)</sup>Ferric iron concentration = total iron concentration – ferrous iron concentration.

<sup>(6)</sup>Analyzed by Method RSK-175.

**Laboratory Notes:**

<sup>D</sup>Dilution was required.

<sup>H</sup>Holding times for preparation or analysis exceeded.

<sup>J</sup>The analyte result in the laboratory control sample is out of control limits. The reported concentrations is an estimate.

<sup>RA</sup>Indicates reanalysis with background correction for turbidity.

<sup>ve</sup>They analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

\* Anomalous reading, attributed to meter error.

-- = not measured/ not applicable

< = not detected at a concentration exceeding the laboratory reporting limit

µg/L = micrograms per liter

EPA = US Environmental Protection Agency

mg/L = milligrams per liter

**Table 6**  
**Groundwater Geochemical and Water Quality Parameters**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	pH <sup>(1)</sup>	ORP <sup>(1)</sup> (mV)	Dissolved Oxygen <sup>(1)</sup> (mg/L)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	Alkalinity <sup>(2)</sup> (mg/L CaCO <sub>3</sub> )	Total Organic Carbon <sup>(3)</sup> (mg/L)
<b>Troy Laundry Property</b>										
MW17	MW17-20150506	05/06/15	6.87	169.0	3.30	0.387	1.01	14.53	--	--
	MW17-20150804	08/04/15	6.17	129.0	4.45	0.477	2.61	15.52	--	--
	MW17-20151207	12/07/15	6.89	221.5	4.12	0.398	3.3	14.60	--	--
	MW17-20160308	03/08/16	6.67	160	1.39	0.365	0.8	14.30	--	--
	MW17-20160714	07/14/16	6.62	51.1	3.59	0.355	1.19	14.36	--	--
	MW17-20161020	10/20/16	6.75	203.3	0.84	0.384	2.72	14.44	--	--
	MW17-20170126	01/26/17	6.66	-40.7	0.57	0.386	2.24	14.14	--	--
	MW17-20170601	06/01/17	6.50	-147.6	0.54	0.375	12.61	14.48	--	--
	MW17-20170923	09/23/17	6.34	170.4	0.31	0.509	3.96	15.13	--	--
	MW17-20171216	12/16/17	6.82	22.3	0.26	0.501	3.37	12.60	--	--
	MW17-20180310	03/10/18	6.82	22.3	0.26	0.501	3.37	12.60	--	--
	MW17-20180630	06/30/18	6.85	14.8	1.07	0.723	8.60	14.87	--	--
	MW17-20180922	09/22/18	6.79	16.9	0.17	0.71	9.38	15.20	--	--
	MW17-20181215	12/15/18	6.58	18.8	0.41	0.677	6.70	14.77	--	--
	MW17-20190615	06/15/19	6.67	83.8	0.36	0.634	3.81	14.90	--	--
MW17-20191207	12/07/19	6.62	-9.8	1.34	0.581	2.12	11.32	--	--	
MW17-20200627	06/27/20	6.68	-82.3	3.82	0.537	9.64	15.00	--	--	
MW17-20201212	12/12/20	6.58	-19.6	1.09	0.526	9.28	14.38	--	--	
MW17-20210625	06/25/21	6.67	-110.6	0.94	0.507	1.42	14.71	--	--	
MW18	MW18-20150506	05/06/15	6.52	172.5	1.99	0.480	0.88	14.34	142	<0.500
	MW18-20150803	08/03/15	5.75	82.2	2.66	0.598	2.74	15.70	--	--
	MW18-20151208	12/08/15	7.74	115.6	1.64	0.594	1.85	14.08	--	--
	MW18-20160308	03/08/16	6.41	156.7	1.30	0.469	1.3	14.26	--	1.01
	MW18-20160608	06/08/16	6.66	8.8	1.5	--	--	--	--	--
	MW18-20160616	06/16/16	6.2	0.8	1.4	--	--	--	--	--
	MW18-20160623	06/23/16	5.87	-57.9	0.43	--	--	--	--	--
	MW18-20160629	06/29/16	5.43	-33	1.08	--	--	--	--	--
	MW18-20160706	07/06/16	5.29	-33.7	1.8	--	--	--	--	--
	MW18-20160714	07/14/16	5.43	8.7	0.47	0.883	9.3	14.89	--	2,300
	MW18-20160825	08/25/16	4.97	38.9	0.55	--	--	--	--	--
	MW18-20161020	10/20/16	5.46	65.5	0.79	1.220	7.69	14.83	--	1,900
	MW18-20170126	01/26/17	5.65	7.2	1.50	0.956	8.1	13.85	--	823
	MW18-20170601	06/01/17	6.19	-167.3	0.58	1.284	6.02	15.21	--	1,090 <sup>D</sup>
	MW18-20170923	09/23/17	6.13	48.1	0.48	1.014	55.7	16.37	--	253 <sup>D</sup>
	MW18-20171216	12/16/17	6.52	-21.2	0.77	0.911	40.9	12.04	--	173 <sup>D</sup>
	MW18-20180310	03/10/18	6.18	-8.0	0.38	0.833	27.1	14.73	--	108 <sup>D</sup>
	MW18-20180630	06/30/18	6.30	-31.9	0.68	1.008	12.4	15.49	--	47.2 <sup>D</sup>
	MW18-20180922	09/22/18	6.31	-18.7	0.19	1.000	20.8	16.10	--	37.8 <sup>D</sup>
	MW18-20181215	12/15/18	6.6	-4.0	0.62	0.980	9.34	15.39	533	16.9
MW18-20190615	06/15/19	6.23	69.2	0.30	1.043	10.98	15.71	531	10.6	
MW18-20191207	12/07/19	5.82	-137.4	0.69	0.870	15.0	15.00	497	9.61 <sup>B</sup>	
MW18-20200627	06/27/20	6.41	-85.1	0.18	0.950	9.46	15.70	536	5.95	
MW18-20201212	12/12/20	6.21	-88.1	2.98	0.889	4.65	14.98	451	4.30	
MW18-20210625	06/25/21	6.29	-86.0	0.91	0.873	7.91	15.35	454 <sup>H</sup>	6.85	

**Table 6**  
**Groundwater Geochemical and Water Quality Parameters**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	pH <sup>(1)</sup>	ORP <sup>(1)</sup> (mV)	Dissolved Oxygen <sup>(1)</sup> (mg/L)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	Alkalinity <sup>(2)</sup> (mg/L CaCO <sub>3</sub> )	Total Organic Carbon <sup>(3)</sup> (mg/L)
MW19	MW19-20150507	05/07/15	6.68	156.1	1.75	0.502	1.27	14.44	144	<0.500
	MW19-20150803	08/03/15	5.67	222.2	2.33	0.523	5.8	15.47	--	--
	MW19-20151207	12/07/15	7.08	95.6	0.99	0.685	4.29	14.64	--	--
	MW19-20160308	03/08/16	6.27	154.7	1.29	0.613	0.84	14.73	--	--
	MW19-20160713	07/13/16	5.62	5.7	0.32	0.821	1017	15.59	--	--
	MW19-20160825	08/25/16	4.82	31.4	0.73	--	--	--	--	--
	MW19-20161021	10/21/16	5.62	27.0	0.15	1.404	3.00	15.59	--	--
	MW19-20170125	01/25/17	5.40	-10.4	0.40	1.120	7.98	14.40	--	--
	MW19-20170601	06/01/17	5.34	-148.6	0.53	0.963	4.02	15.99	--	--
	MW19-20170923	09/23/17	5.47	169.2	0.77	0.816	17.8	18.07	--	--
	MW19-20171216	12/16/17	6.39	-30.9	0.58	0.602	4.92	13.43	--	--
	MW19-20180310	03/10/18	6.06	-14.3	0.26	0.542	14.0	15.36	--	--
	MW19-20180630	06/30/18	6.15	-22.7	0.86	0.744	9.95	16.54	--	--
	MW19-20180922	09/22/18	6.23	-26.7	0.16	0.800	37.30	16.90	--	--
	MW19-20190615	06/15/19	6.24	40.6	0.28	1.060	11.4	16.41	556	--
MW19-20191207	12/07/19	5.57	-134.0	0.54	0.785	--	15.75	473	--	
MW19-20200627	06/27/20	6.40	-70.4	0.27	1.000	39.1	16.60	570	--	
MW19-20201212	12/12/20	9.26	-275.8	11.88*	0.100	4.9	15.79	412	--	
MW19-20210625	06/25/21	6.33	-67.2	0.81	0.964	26.2	16.19	520 <sup>H</sup>	--	
MW20	MW20-20150506	05/06/15	6.91	287.1	0.59	0.678	0.00	13.68	--	--
	MW20-20150803	08/03/15	6.11	175.6	1.11	0.784	9.4	14.45	--	--
	MW20-20151207	12/07/15	6.86	228.5	0.85	0.716	9.0	13.81	--	--
	MW20-20160309	03/09/16	6.72	66.1	0.41	0.711	1.2	13.81	--	--
	MW20-20160715	07/15/16	6.71	201.4	0.64	0.726	2.14	14.28	--	--
	MW20-20161020	10/20/16	6.96	92.0	0.92	0.731	1.90	14.30	--	--
	MW20-20170125	01/25/17	6.82	-0.1	0.67	0.732	0.56	0.67	--	--
	MW20-20170601	06/01/17	6.68	-175.7	0.85	0.735	3.07	14.38	--	--
	MW20-20170924	09/24/17	6.63	177.6	0.57	0.779	2.12	15.25	--	--
	MW20-20171216	12/16/17	6.36	47.0	0.27	0.895	2.14	12.31	--	--
	MW20-20180310	03/10/18	6.71	61.4	0.26	0.855	6.07	14.16	--	--
	MW20-20180630	06/30/18	6.71	21.7	1.64	0.884	3.18	15.06	--	--
	MW20-20180922	09/22/18	6.80	13.9	0.19	0.85	3.18	15.10	--	--
	MW20-20181215	12/15/18	6.61	28.0	0.37	0.827	0.73	14.56	--	--
	MW20-20190615	06/15/19	6.72	95.1	0.50	0.928	1.70	14.94	--	--
	MW20-20191207	12/07/19	6.66	-14.9	1.23	0.883	0.99	11.37	--	--
	MW20-20200627	06/27/20	6.66	-58.2	1.60	0.97	2.15	14.90	--	--
MW20-20201212	12/12/20	6.79	135.9	0.42	1.131	1.63	14.39	--	--	
MW20-20210625	06/25/21	6.54	-46.0	1.20	0.984	1.07	14.71	--	--	



**Table 6**  
**Groundwater Geochemical and Water Quality Parameters**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Well Identification	Sample Identification	Sample Date	pH <sup>(1)</sup>	ORP <sup>(1)</sup> (mV)	Dissolved Oxygen <sup>(1)</sup> (mg/L)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	Alkalinity <sup>(2)</sup> (mg/L CaCO <sub>3</sub> )	Total Organic Carbon <sup>(3)</sup> (mg/L)
MW21	MW21-20150506	05/06/15	6.58	295.0	0.45	0.675	0.00	14.06	--	--
	MW21-20150804	08/04/15	6.09	77.5	0.68	0.98	2.61	15.13	--	--
	MW21-20151208	12/08/15	7.91	96.8	0.78	1.486	0.83	14.03	--	--
	MW21-20160309	03/09/16	5.03	137.3	1.84	0.879	1.28	14.19	--	2.29
	MW21-20160608	06/08/16	6.28	-0.5	2.46	--	--	--	--	--
	MW21-20160616	06/16/16	--	--	--	--	--	--	--	--
	MW21-20160623	06/23/16	--	--	--	--	--	--	--	--
	MW21-20160629	06/29/16	5.5	52.6	1.95	--	--	--	--	--
	MW21-20160706	07/06/16	5.27	47.1	2.16	--	--	--	--	--
	MW21-20160713	07/13/16	5.41	61.2	0.45	1.104	10.3	14.73	--	1,800
	MW21-20160825	08/25/16	4.97	67.9	0.48	--	--	--	--	--
	MW21-20161020	10/20/16	5.64	71.7	1.26	1.268	>2000	14.61	--	1,800
	MW21-20170126	01/26/17	5.78	-22.0	0.50	0.846	3.59	13.78	--	884
	MW21-20170601	06/01/17	5.69	246.8	0.54	0.920	5.90	14.94	--	755 <sup>D</sup>
	MW21-20170923	09/23/17	5.36	14.9	0.69	1.180	4.42	14.67	--	871 <sup>D</sup>
	MW21-20171216	12/16/17	5.54	26.3	2.67	1.146	6.00	14.81	--	722 <sup>D</sup>
	MW21-20180310	03/10/18	5.27	58.1	0.71	1.102	4.29	14.43	--	466 <sup>D</sup>
	MW21-20180630	06/30/18	5.18	49.5	0.34	1.546	4.05	14.94	--	718 <sup>D</sup>
	MW21-20180922	09/22/18	5.72	97.2	0.33	1.090	6.84	16.00	--	549 <sup>D</sup>
	MW21-20181215	12/15/18	5.67	-20.1	1.57	1.041	6.10	15.41	--	124 <sup>D</sup>
MW21-20190615	6/15/19	5.84	1.0	0.19	1.023	2.81	15.27	--	163 <sup>D</sup>	
MW21-20191207	12/7/19	5.55	-142.2	0.77	0.913	7.64	14.81	--	110 <sup>BE</sup>	
MW21-20200627	6/27/20	5.26	83.0	0.17	0.930	61.80	15.80	--	--	
MW21-20201212	12/12/20	5.8	157.2	0.20	0.934	15.30	14.84	--	191 <sup>D</sup>	
MW21-20210625	6/25/21	5.57	12.9	0.49	0.836	4.84	15.20	--	349 <sup>D</sup>	
MW22	MW22-20150506	05/06/15	6.34	280.6	0.30	0.707	0.00	14.4	--	--
	MW22-20150804	08/04/15	6.29	103.9	0.96	0.794	6.8	15.05	--	--
	MW22-20151208	12/08/15	5.91	212.8	2.18	0.702	0.4	14.49	--	--
	MW22-20160308	03/08/16	6.34	153.8	0.54	0.579	0.81	14.46	--	--
	MW22-20160608	06/08/16	6	-3.2	1.55	--	--	--	--	--
	MW22-20160616	06/16/16	4.99	95.2	1.65	--	--	--	--	--
	MW22-20160623	06/23/16	5.1	64	0.68	--	--	--	--	--
	MW22-20160629	06/29/16	5.22	84.8	1.85	--	--	--	--	--
	MW22-20160706	07/06/16	5.17	26.1	1.88	--	--	--	--	--
	MW22-20160713	07/13/16	5.55	88.1	0.42	1.276	7.26	14.85	--	--
	MW22-20160825	08/25/16	5.06	21.2	0.42	--	--	--	--	--
	MW22-20161020	10/20/16	5.48	108.8	0.24	1.408	8.66	14.86	--	--
	MW22-20170126	1/26/2017	5.55	21.2	0.27	1.19	4.83	14.23	--	--
	MW22-20170601	06/01/17	5.67	239.2	0.62	1.118	5.32	15.32	--	--
	MW22-20170923	09/23/17	5.38	104.1	0.27	1.29	3.52	15.12	--	--
	MW22-20171216	12/16/17	5.44	84.2	0.64	1.186	7.21	14.83	--	--
	MW22-20180310	03/10/18	5.32	82	6.61	0.868	4.57	14.44	--	--
	MW22-20180630	06/30/18	5.47	41.9	0.23	1.128	5.12	15.74	--	--
	MW22-20180922	09/22/18	5.94	73.1	0.38	0.82	5.67	17.00	--	--
	MW22-20181215	12/15/18	5.67	18.4	0.67	0.817	8.6	15.50	269	388 <sup>D</sup>
MW22-20190615	06/15/19	5.68	106.8	0.38	0.858	7.40	15.63	273	286 <sup>D</sup>	
MW22-20191207	12/07/19	5.69	-76.4	2.02	0.803	71.20	12.14	283	255 <sup>BE</sup>	
MW22-20200627	06/27/20	5.82	3.4	0.40	0.72	83.30	15.90	182	206 <sup>D</sup>	
MW22-20201212	12/12/20	6.01	154.5	0.31	0.817	25.80	14.97	500	95.5 <sup>D</sup>	
MW22-20210625	06/25/21	5.91	-4.9	0.55	0.679	8.34	15.30	243 <sup>H</sup>	150 <sup>D</sup>	

**Table 6**  
**Groundwater Geochemical and Water Quality Parameters**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	pH <sup>(1)</sup>	ORP <sup>(1)</sup> (mV)	Dissolved Oxygen <sup>(1)</sup> (mg/L)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	Alkalinity <sup>(2)</sup> (mg/L CaCO <sub>3</sub> )	Total Organic Carbon <sup>(3)</sup> (mg/L)
MW23	MW23-20150507	05/07/15	6.09	223.7	2.19	0.452	0.00	14.65	106	<0.500
	MW23-20150804	08/04/15	6.40	105.5	0.73	0.582	6.8	15.42	--	--
	MW23-20151208	12/08/15	5.80	197	2.12	0.548	12.6	15.10	--	--
	MW23-20160308	03/08/16	6.30	92.5	0.49	0.575	1.2	14.78	--	3.14
	MW23-20160608	06/08/16	5.14	66.9	3.15	--	--	--	--	--
	MW23-20160616	06/16/16	4.77	109.5	2.00	--	--	--	--	--
	MW23-20160623	06/23/16	4.75	58.8	0.94	--	--	--	--	--
	MW23-20160629	06/29/16	4.73	92.3	2.40	--	--	--	--	--
	MW23-20160706	07/06/16	4.74	42	2.04	--	--	--	--	--
	MW23-20160714	07/14/16	5.26	38	0.23	1.339	8.0	15.06	--	2,300
	MW23-20160825	08/25/16	4.68	64.2	0.69	--	--	--	--	--
	MW23-20161020	10/20/16	5.38	45.5	0.20	1.637	2.53	15.12	--	2,300
	MW23-20170126	01/26/17	5.71	-43.40	14.39	0.88	8.03	14.39	--	520.00
	MW23-20170601	06/01/17	5.80	232.1	0.49	1.542	5.60	15.60	--	1,620 <sup>D</sup>
	MW23-20170923	09/23/17	5.69	-4.4	0.46	1.362	7.30	15.45	--	1,160 <sup>D</sup>
	MW23-20171216	12/16/17	5.96	-6.3	0.84	0.973	18.0	15.23	--	865 <sup>D</sup>
	MW23-20180310	03/10/18	5.85	-1.4	2.25	0.802	34.1	14.92	--	127 <sup>D</sup>
	MW23-20180630	06/30/18	6.15	-82.6	0.70	1.228	178.0	15.80	--	198 <sup>D</sup>
	MW23-20180922	09/22/18	6.52	11.1	0.31	0.950	17.5	17.00	--	159 <sup>D</sup>
	MW23-20181215	12/15/18	6.30	-72.9	0.79	1.118	40.8	15.89	600	148 <sup>D</sup>
MW23-20190615	06/15/19	6.20	89.0	0.50	1.219	20.0	15.96	639	60.7 <sup>D</sup>	
MW23-20191207	12/07/19	6.24	-42.8	2.12	1.070	33.3	12.50	614	17.4 <sup>B</sup>	
MW23-20200627	06/27/20	6.13	-21.8	0.18	0.950	7.24	16.00	481	6.41	
MW23-20201212	12/12/20	6.33	136.3	0.29	0.885	12.60	15.16	436	7.90	
MW23-20210625	06/25/21	6.29	-43.7	0.29	0.763	6.04	15.80	382 <sup>H</sup>	6.65	
MW24	MW24-20150506	05/06/15	6.03	182.9	1.04	0.454	1.81	14.91	172	1.12
	MW24-20150804	08/04/15	5.80	83.7	0.45	0.563	2.89	16.05	--	--
	MW24-20151208	12/08/15	7.62	120.8	1.00	0.685	1.29	15.10	--	--
	MW24-20160309	03/09/16	6.27	113.7	0.38	0.589	1	15.07	--	2.19
	MW24-20160608	06/08/16	6.73	-69.2	2.34	--	--	--	--	--
	MW24-20160616	06/16/16	5.92	-3	1.59	--	--	--	--	--
	MW24-20160623	06/23/16	5.83	-20	0.87	--	--	--	--	--
	MW24-20160629	06/29/16	5.83	36.1	1.54	--	--	--	--	--
	MW24-20160706	07/06/16	5.67	19.7	1.54	--	--	--	--	--
	MW24-20160715	07/15/16	6.00	31.9	0.29	1.142	8	15.39	--	1,000
	MW24-20160825	08/25/16	5.30	30.5	0.24	--	--	--	--	--
	MW24-20161020	10/20/16	5.93	27.5	0.94	1.440	3.56	15.22	--	640
	MW24-20170125	01/25/17	5.49	-33.5	1.10	0.917	589	14.56	--	375
	MW24-20170601	06/01/17	5.75	240.7	0.38	0.998	3034	15.38	--	1,470 <sup>D</sup>
	MW24-20170924	09/24/17	5.54	76.3	0.27	0.641	122	16.06	--	390 <sup>D</sup>
	MW24-20171216	12/16/17	5.93	-33.4	2.69	0.579	50.2	14.83	--	233 <sup>D</sup>
	MW24-20180310	03/10/18	5.73	17.4	0.70	0.614	72.4	14.77	--	22.1 <sup>D</sup>
	MW24-20180630	06/30/18	5.60	-43.1	0.44	1.393	15.1	15.81	--	770 <sup>D</sup>
	MW24-20180922	09/22/18	6.08	18.9	3.20	0.760	92.4	17.10	--	45.5 <sup>D</sup>
	MW24-20181215	12/15/18	6.08	-0.7	0.44	0.735	72.8	15.44	358	52.2 <sup>D</sup>
MW24-20190615	06/15/19	5.93	-2.8	0.29	0.798	7.68	16.00	414	20.5	
MW24-20191207	12/07/19	5.66	-139.0	0.66	0.779	20.4	15.21	434	12.6 <sup>B</sup>	
MW24-20200627	06/27/20	6.24	-47.0	0.26	0.86	15.9	15.90	468	8.44	
MW24-20201212	12/12/20	6.08	-26.1	2.03	0.809	4.85	15.09	436	6.95	
MW24-20210625	06/25/21	6.16	-56.4	0.93	0.862	6.98	15.50	401 <sup>H</sup>	7.52	



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**Groundwater Geochemical and Water Quality Parameters**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	pH <sup>(1)</sup>	ORP <sup>(1)</sup> (mV)	Dissolved Oxygen <sup>(1)</sup> (mg/L)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	Alkalinity <sup>(2)</sup> (mg/L CaCO <sub>3</sub> )	Total Organic Carbon <sup>(3)</sup> (mg/L)
MW25	MW25-20150507	05/07/15	6.31	140.5	2.87	0.498	76.5	14.54	112	<0.500
	MW25-20150805	08/05/15	5.67	158.1	1.47	0.667	2.3	15.16	--	--
	MW25-20151209	12/09/15	7.94	114.9	1.55	0.881	7.6	15.12	--	--
	MW25-20160308	03/08/16	6.25	171.8	0.79	0.524	1.2	15.05	--	--
	MW25-20160713	07/13/16	5.60	-13.5	0.29	0.933	>2,000	15.39	--	--
	MW25-20161019	10/19/16	5.40	22.2	0.18	1.304	9.14	15.48	--	--
	MW25-20170125	01/25/17	5.77	-134.5	0.37	0.712	4.18	14.68	--	--
	MW25-20170601	06/01/17	5.81	-136.3	0.31	1.140	4.82	15.67	--	--
	MW25-20170923	09/23/17	6.17	66.3	0.37	1.103	14.6	16.86	--	--
	MW25-20171216	12/16/17	6.61	-35.3	0.50	1.052	8.68	13.67	--	--
	MW25-20180310	03/10/18	6.22	-19.9	0.32	0.890	9.10	15.52	--	--
	MW25-20180630	06/30/18	6.48	-55.4	0.67	1.381	13.10	16.15	--	--
	MW25-20180922	09/22/18	6.48	-51.4	0.09	1.380	17.50	16.20	--	--
	MW25-20181215	12/15/18	6.42	-2.4	0.69	1.306	5.21	15.84	745	18.4
	MW25-20190615	06/15/19	6.22	-48.1	0.59	1.067	3.92	16.27	575	25.8
MW25-20191207	12/07/19	6.16	-16.5	0.63	0.810	7.61	17.58	424	6.87 <sup>B</sup>	
MW25-20200627	06/27/20	6.2	-37.5	0.23	0.657	14.6	16.20	322	5.21	
MW25-20201212	12/12/20	6.25	-52.3	23.36*	0.806	15.0	15.50	412	9.57	
MW25-20210625	06/25/21	6.19	-113.2	0.82	0.799	7.0	15.90	377 <sup>H</sup>	7.50	
IW04	IW04-20150508	05/08/15	6.58	160.2	6.28*	0.322	15.1	14.80	88.0	<0.500
	IW04-20160309	03/09/16	6.08	-18.6	0.55	0.579	3.5	14.18	--	--
	IW04-20160714	07/14/16	5.17	58.2	0.43	1.401	19.8	14.76	--	--
	IW04-20161021	10/21/16	5.30	27.5	0.10	1.575	7.71	15.01	--	--
	IW04-20170126	01/26/17	5.40	-18.0	0.71	1.288	17.7	14.11	--	--
	IW04-20170601	06/01/17	5.78	-151.8	0.62	0.809	12.7	14.99	--	--
	IW04-20170923	09/23/17	5.99	2.7	0.84	1.189	21.7	18.00	--	--
	IW04-20171216	12/16/17	6.37	-47.8	0.37	0.940	18.8	13.01	--	--
	IW04-20180310	03/10/18	6.22	-40.3	0.82	0.792	56.3	14.77	--	--
	IW04-20180630	06/30/18	6.29	-59.3	0.89	0.914	18	15.59	--	--
	IW04-20180922	09/22/18	6.13	26.1	0.21	0.318	5.1	16.20	--	--
	IW04-20181215	12/15/18	6.32	-26.6	0.64	0.969	14.7	15.27	478	157 <sup>D</sup>
	IW04-20190615	06/15/19	6.32	-60.8	0.24	1.112	13.2	15.48	611	148 <sup>D</sup>
	IW04-20191207	12/07/19	6.41	-24.1	0.98	1.059	22.6	11.91	595	94.8 <sup>BE</sup>
	IW04-20200627	06/27/20	6.12	-0.8	5.31*	0.960	9.17	15.40	517	88.7 <sup>D</sup>
IW04-20201212	12/12/20	9.08	-194.2	2.00	0.910	11.48	15.07	500	90.3 <sup>D</sup>	
IW04-20210625	06/25/21	6.39	-93	0.76	0.865	24.4	15.23	450 <sup>H</sup>	93.1 <sup>D</sup>	



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**Troy Laundry Seattle Site**  
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Well Identification	Sample Identification	Sample Date	pH <sup>(1)</sup>	ORP <sup>(1)</sup> (mV)	Dissolved Oxygen <sup>(1)</sup> (mg/L)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	Alkalinity <sup>(2)</sup> (mg/L CaCO <sub>3</sub> )	Total Organic Carbon <sup>(3)</sup> (mg/L)
IW06	IW06-20150507	05/07/15	6.70	262.1	7.55*	0.224	17.83	15.02	--	--
	IW06-20180310	03/10/18	5.97	-162.5	0.34	0.284	8.41	14.84	--	--
	IW06-20180630	06/30/18	6.25	-95.9	0.67	0.312	6.99	15.87	--	--
	IW06-20180922	09/22/18	6.35	-55.9	0.17	0.92	43.3	16.20	--	--
	IW06-20181215	12/15/18	6.20	-9.7	0.43	0.297	5.60	15.51	--	--
	IW06-20190615	06/15/19	5.96	67.7	0.58	0.471	11.50	15.81	--	--
	IW06-20191207	12/07/19	6.45	-4.5	0.88	0.446	0.21	12.05	--	--
	IW06-20200627	06/27/20	6.07	-41.9	5.72*	0.749	12.1	15.50	--	--
IW06-20201212	12/12/20	8.35	-201.9	1.95	0.541	3.66	15.24	--	--	
IW06-20210625	06/25/21	6.09	-98.5	1.16	0.656	11.90	15.38	--	--	
IW07	IW07-20160825	08/25/16	5.15	-11.4	0.61	--	--	--	--	--
IW15	IW15-20160608	06/08/16	5.19	86.6	2.75	--	--	--	--	--
	IW15-20160616	06/16/16	7.59	70.1	1.95	--	--	--	--	--
	IW15-20160623	06/23/16	5.07	16.6	1.05	--	--	--	--	--
	IW15-20160629	06/29/16	5.11	47.3	1.38	--	--	--	--	--
	IW15-20160706	07/06/16	5.09	28.6	1.55	--	--	--	--	--
	IW15-20160825	08/25/16	4.96	35.9	0.58	--	--	--	--	--
	IW15-20161021	10/21/16	5.42	-16.6	0.12	2.065	3.75	15.46	--	--
IW15-20170602	06/02/17	5.65	-217.5	0.49	1.00	9.42	15.68	--	--	
IW38	IW38-20160608	06/08/16	5.53	57.9	2.4	--	--	--	--	--
	IW38-20160616	06/16/16	5.05	91.4	2	--	--	--	--	--
	IW38-20160623	06/23/16	5.1	39	0.73	--	--	--	--	--
	IW38-20160629	06/29/16	5.13	80.6	1.45	--	--	--	--	--
	IW38-20160706	07/06/16	5.06	49.1	1.65	--	--	--	--	--
	IW38-20160825	08/25/16	4.8	73.4	0.29	--	--	--	--	--
	IW38-20161021	10/21/16	5.06	77.7	0.59	2.07	2.19	15.40	--	--
IW38-20170602	06/02/17	5.72	-234.3	0.46	0.838	2.80	15.69	--	--	
IW50	IW50-20151208	12/08/15	7.44	122.1	0.56	0.984	2.68	14.71	--	--
	IW50-20160309	03/09/16	3.46	149.7	0.70	0.726	3.01	14.52	--	115
	IW50-20160715	07/15/16	5.45	40.6	0.44	1.35	4.77	14.80	--	1,100
	IW50-20161021	10/21/16	5.69	43.7	0.83	2.055	11.8	14.79	--	1,600
	IW50-20170126	01/26/17	6.43	-59.5	0.80	1.058	43.2	14.46	--	391
	IW50-20170602	06/02/17	6.34	198.5	0.60	0.688	17.4	14.98	--	85.2 <sup>D</sup>
	IW50-20170923	09/23/17	6.29	-103.0	0.24	1.004	24.1	15.29	--	214 <sup>D</sup>
	IW50-20171216	12/16/17	6.30	-72.4	2.71	1.048	106	14.99	--	224 <sup>D</sup>
	IW50-20180310	03/10/18	6.34	-43.1	0.40	1.038	76.8	14.81	--	55.0 <sup>D</sup>
	IW50-20180630	06/30/18	6.41	-115.4	0.31	1.204	11.35	15.21	--	41.9 <sup>D</sup>
	IW50-20180922	09/22/18	6.65	-37.4	0.66	0.76	5.81	17.40	--	29.6 <sup>D</sup>
	IW50-20181215	12/15/18	6.35	-120.3	1.28	0.681	4.74	15.50	338	12.2
	IW50-20190615	06/15/19	6.26	65.8	0.38	0.670	5.18	15.86	299	7.56
	IW50-20191207	12/07/19	6.24	-30.3	1.02	0.618	5.33	12.31	288	6.72 <sup>B</sup>
IW50-20200627	06/27/20	6.08	-13.8	8.61*	0.939	4.91	15.70	497	18.2	
IW50-20201212	12/12/20	6.43	91.8	0.24	1.071	14.1	15.24	544	13.7	
IW50-20210625	06/25/21	6.5	-92.6	0.17	1.016	9.79	15.40	449 <sup>H</sup>	16.1	



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Well Identification	Sample Identification	Sample Date	pH <sup>(1)</sup>	ORP <sup>(1)</sup> (mV)	Dissolved Oxygen <sup>(1)</sup> (mg/L)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	Alkalinity <sup>(2)</sup> (mg/L CaCO <sub>3</sub> )	Total Organic Carbon <sup>(3)</sup> (mg/L)
IW57	IW57-20160608	06/08/16	4.46	138.7	5.59	--	--	--	--	--
	IW57-20160616	06/16/16	4.51	109.9	2.28	--	--	--	--	--
	IW57-20160623	06/23/16	4.48	56.2	1.88	--	--	--	--	--
	IW57-20160629	06/29/16	4.45	105.5	2.41	--	--	--	--	--
	IW57-20160706	07/06/16	4.56	41.7	2.68	--	--	--	--	--
	IW57-20160825	08/25/16	4.52	38.0	1.01	--	--	--	--	--
	IW57-20161021	10/21/16	5.44	28.9	0.81	2.085	4.16	14.85	--	--
	IW57-20170602	06/02/17	5.76	-242.1	0.33	0.808	22.5	15.25	--	--
IW61	IW61-20151208	12/08/16	4.27	200.3	3.34	0.655	24.2	14.25	--	--
	IW61-20160309	03/09/16	6.12	-17.9	1.40	0.65	30.1	14.35	--	114
	IW61-20160714	07/14/16	5.31	39.7	0.56	1.624	52.4	15.38	--	2,900
	IW61-20161021	10/21/16	5.63	48.5	0.81	2.283	4.53	15.09	--	3,000
	IW61-20170126	01/26/17	5.89	-47.9	0.41	1.326	1.96	14.27	--	1,300
	IW61-20170602	06/02/17	6.00	219.6	0.49	0.812	7.57	15.42	--	908 <sup>D</sup>
	IW61-20170923	09/23/17	5.28	-9.6	0.79	2.264	7.67	15.55	--	1,490 <sup>D</sup>
	IW61-20171216	12/16/17	6.07	-66.1	0.79	1.158	510	15.28	--	765 <sup>D</sup>
	IW61-20180310	03/10/18	5.80	-1.5	1.28	0.911	185	14.39	--	432 <sup>D</sup>
	IW61-20180630	06/30/18	6.02	-92.1	0.39	1.127	22.0	15.72	--	406 <sup>D</sup>
	IW61-20180922	09/22/18	6.38	-3.8	0.17	0.75	13.5	16.50	--	228 <sup>D</sup>
	IW61-20181215	12/15/18	6.82	-45.1	0.73	1.171	22.0	15.96	494	628 <sup>D</sup>
	IW61-20190615	06/15/19	5.94	-21.1	0.32	0.913	12.60	15.97	429	140 <sup>D</sup>
	IW61-20191207	12/07/19	5.61	-131.0	0.82	0.819	37.2	15.39	444	103 <sup>BE</sup>
IW61-20200627	06/27/20	6.09	-45.1	0.23	0.859	13.2	16.20	419	55.4 <sup>D</sup>	
IW61-20201212	12/12/20	6.22	115.9	0.34	0.960	60.0	15.01	471	60.6 <sup>D</sup>	
IW61-20210625	06/25/21	6.32	-72.2	0.25	0.866	64.0	15.80	423 <sup>H</sup>	66.2 <sup>D</sup>	
IW64	IW64-20160608	06/08/16	5.22	69.8	3.25	--	--	--	--	--
	IW64-20160616	06/16/16	4.97	94.3	2.27	--	--	--	--	--
	IW64-20160623	06/23/16	5.04	41.5	1.15	--	--	--	--	--
	IW64-20160629	06/29/16	5.09	80.3	2.25	--	--	--	--	--
	IW64-20160706	07/06/16	5.03	36.4	2.05	--	--	--	--	--
	IW64-20160825	08/25/16	5.03	37.0	0.87	--	--	--	--	--
	IW64-20161021	10/21/16	5.70	33.2	0.99	1.980	32.0	15.22	--	--
	IW64-20170602	06/02/17	5.86	-242.4	0.34	0.981	12.6	15.10	--	--



**Table 6**  
**Groundwater Geochemical and Water Quality Parameters**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

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Well Identification	Sample Identification	Sample Date	pH <sup>(1)</sup>	ORP <sup>(1)</sup> (mV)	Dissolved Oxygen <sup>(1)</sup> (mg/L)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	Alkalinity <sup>(2)</sup> (mg/L CaCO <sub>3</sub> )	Total Organic Carbon <sup>(3)</sup> (mg/L)
IW91	IW91-20150506	05/06/15	6.54	171.4	1.57	0.300	0.19	14.35	--	--
	IW91-20150804	08/04/15	6.11	143.7	2.26	0.363	1.91	14.66	--	--
	IW91-20151208	12/08/15	5.88	218.9	5.23	0.342	8.2	14.18	--	--
	IW91-20160309	03/09/16	6.87	209.2	3.99	0.325	2.98	14.15	--	--
	IW91-20160714	07/14/16	6.79	118	5.51	0.299	0.81	14.60	--	--
	IW91-20161020	10/20/16	6.62	143.2	0.25	0.509	6.69	14.68	--	--
	IW91-20170126	01/26/17	6.93	-65.2	0.35	0.461	3.99	14.17	--	--
	IW91-20170601	06/01/17	6.92	192.4	1.90	0.442	3.57	14.54	--	--
	IW91-20170923	09/23/17	6.92	173.0	2.21	0.433	5.16	14.64	--	--
	IW91-20171216	12/16/17	7.09	223.6	2.10	0.337	23.0	14.49	--	--
	IW91-20180310	03/10/18	6.68	196.6	5.81	0.385	20.1	14.55	--	--
	IW91-20180630	06/30/18	6.67	22.4	12.00	0.563	2.52	14.34	--	--
	IW91-20180922	09/22/18	7.00	199.8	5.59	0.462	2.17	15.70	--	--
	IW91-20181215	12/15/18	6.94	12.5	6.43	0.524	0.97	14.99	--	--
	IW91-20190615	06/15/19	6.51	25.1	9.86	0.557	2.27	15.30	--	--
IW91-20191207	12/07/19	6.63	-131.6	4.45	0.585	1.98	14.62	--	--	
IW91-20200627	06/27/20	6.72	11.7	22.14*	0.457	4.02	15.30	--	--	
IW91-20201212	12/12/20	7.39	177.9	10.84*	0.553	12.70	15.02	--	--	
IW91-20210625	06/25/21	7.35	99.0	17.23	0.433	4.13	14.90	--	--	
AIW02	AIW02-20160825	08/25/16	4.88	15.3	0.77	--	--	--	--	--
AIW05	AIW05-20160825	08/25/16	4.89	31.5	1.77	--	--	--	--	--
MW31	MW31-20191009	10/09/19	9.75	100.2	4.02	0.2	16.2	15.02	--	--
	MW31-20191205	12/05/19	6.45	4.1	6.75	0.2	13.6	11.29	--	--
	MW31-20200630	6/30/2020	6.12	232.7	4.32	0.311	2,491 <sup>(4)</sup>	16.06	--	--
	MW31-20201211	12/11/20	6.77	146.9	3.77	0.343	2,950 <sup>(4)</sup>	12.14	--	--
	MW31-20210624	06/24/21	6.39	-13.1	8.62	0.286	24.1	16.59	--	--
<b>Boren Avenue North</b>										
MW04	MW04-20110527	05/27/11	6.93	11	6.24	0.330	122	15.09	--	--
	MW04-20111012	10/12/11	6.46	201.6	6.17	0.252	25.1	15.0	--	--
	MW04-20130909	09/09/13	6.15	-136.0	5.49	0.305	>200	17.6	--	--
	MW04-20150508	05/08/15	6.76	287.3	0.433	0.433	0.00	17.03	54.0	<0.500
	MW04-20150806	08/06/15	6.39	111.2	6.09	0.350	0.9	18.01	--	--
	MW04-20151209	12/09/15	6.49	221.3	7.48	0.344	1.1	16.74	--	--
	MW04-20160308	03/08/16	6.60	136.4	3.56	0.292	1.46	16.11	--	--
	MW04-20160713	07/13/16	6.48	-1.3	0.99	0.392	1.06	16.78	--	--
	MW04-20161019	10/19/16	7.18	190.7	3.15	0.300	4.06	15.98	--	--
	MW04-20170124	01/24/17	6.91	-1.1	2.95	0.237	3.22	14.74	--	--
	MW04-20170531	05/31/17	6.93	219.6	7.11	0.453	6.06	15.70	--	--
	MW04-20170921	09/21/17	6.71	120.3	8.65	0.460	6.82	15.49	--	--
	MW04-20171214	12/14/17	7.13	237.0	8.36	0.465	3.01	13.12	--	--
	MW04-20180309	03/09/18	6.60	159.4	1.80	0.290	3.01	14.96	--	--
	MW04-20180629	06/29/18	6.61	132.9	4.55	0.351	1.50	15.78	--	--
	MW04-20180920	09/20/18	6.55	189.1	7.07	0.387	1.27	15.80	--	--
	MW04-20181214	12/14/18	6.47	38.2	4.83	0.388	0.73	14.58	41.0	--
	MW04-20190614	06/14/19	6.58	100.0	4.15	0.386	3.98	16.50	66.3	--
	MW04-20191205	12/05/19	6.68	-64.1	7.97	0.463	2.67	14.07	45.8	--
	MW04-20200626	06/26/20	6.37	185.2	7.78	0.391	7.72	16.70	115	--
MW04-20201211	12/11/20	9.57	-11.2	6.63	0.409	4.75	12.10	103	--	
MW04-20210623	06/23/21	6.35	-16.3	2.23	0.48	6.14	15.96	137	--	

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**Groundwater Geochemical and Water Quality Parameters**  
**Troy Laundry Seattle Site**  
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**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	pH <sup>(1)</sup>	ORP <sup>(1)</sup> (mV)	Dissolved Oxygen <sup>(1)</sup> (mg/L)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	Alkalinity <sup>(2)</sup> (mg/L CaCO <sub>3</sub> )	Total Organic Carbon <sup>(3)</sup> (mg/L)
MW07	MW07-20110531	05/31/11	6.63	26	5.70	0.281	--	14.71	--	--
	MW07-20111012	10/12/11	6.36	166.4	2.92	0.181	14.9	15.2	--	--
	MW07-20130909	09/09/13	6.48	124.5	2.71	0.373	17.1	18.0	--	--
	MW07-20150508	05/08/15	5.94	304.5	4.79	0.491	5.34	17.19	39.0	<0.500
	MW07-20150805	08/05/15	6.22	84.4	4.65	0.597	0.96	18.43	--	--
	MW07-20151209	12/09/15	6.59	210.8	3.10	0.446	4.4	16.86	--	--
	MW07-20160308	03/08/16	6.42	252.3	3.78	0.375	8.12	15.00	--	0.862
	MW07-20160713	07/13/16	6.44	222.8	0.77	0.330	1.01	16.82	--	0.83
	MW07-20161019	10/19/16	6.79	120.8	2.96	0.328	4.00	16.24	--	1.70
	MW07-20170124	01/24/17	6.68	-36.8	4.92	0.275	12.21	13.47	--	4.25
	MW07-20170531	05/31/17	6.32	-76.4	4.45	0.474	7.21	15.95	--	4.58
	MW07-20180308	03/08/18	6.47	124.4	7.75	0.374	2.75	14.33	--	0.877
	MW07-20180629	06/29/18	6.32	176.2	7.38	0.509	1.43	16.31	--	1.80
	MW07-20180920	09/20/18	6.42	198.7	8.76	0.486	6.50	16.30	--	0.963
	MW07-20181214	12/14/18	6.32	55.0	7.57	0.465	3.86	15.59	25.5	0.942
	MW07-20190614	06/14/19	6.12	115.9	7.91	0.469	5.23	15.86	23.4	0.869
MW07-20191205	12/05/19	6.41	-71.1	6.85	0.531	6.35	14.45	20.5	0.736	
MW07-20200630	06/30/20	6.41	125.4	4.95	0.414	4.14	15.88	--	0.789	
MW07-20201210	12/10/20	6.41	131.6	1.39	0.439	3.36	15.00	83.3	0.969	
MW07-20210623	06/23/21	6.39	-40.6	4.91	0.504	3.48	16.11	99.4	0.949	
MW13	MW13-20111020	10/20/11	7.10	138.0	2.12	1.04	21.8	15.9	--	--
	MW13-20130910	09/10/13	6.50	34.9	3.67	0.256	>200	18.4	--	--
	MW13-20150511	05/11/15	6.83	107.0	4.71	0.367	131.0	17.13	40.0	<0.500
	MW13-20150805	08/05/15	6.50	97.7	3.91	0.400	>200	17.82	--	--
	MW13-20151215	12/15/15	8.72	91.8	3.61	0.384	51.2	15.53	--	--
	MW13-20160307	03/07/16	6.80	190.3	2.94	0.348	4.06	15.83	--	--
	MW13-20160712	07/12/16	6.67	82.4	4.29	0.386	6.65	17.75	--	--
	MW13-20161019	10/19/16	6.50	161.4	4.95	0.339	33.4	16.74	--	--
	MW13-20170124	01/24/17	6.78	-58.5	4.44	0.359	8.68	14.96	--	--
	MW13-20170531	05/31/17	6.59	-84.5	2.38	0.353	8.31	16.32	--	--
	MW13-20170921	09/21/17	6.27	351.8	6.20	0.337	89.7	15.74	--	--
	MW13-20171214	12/14/17	6.83	122.5	3.81	0.363	OVER RANGE	12.39	--	--
	MW13-20180308	03/08/18	6.57	186.2	5.98	0.331	40.5	15.22	--	--
	MW13-20180629	06/29/18	6.68	76.4	3.66	0.396	18.2	16.34	--	--
	MW13-20180920	09/20/18	6.64	157.6	4.38	312.500	26.7	16.20	--	--
	MW13-20181214	12/14/18	6.49	22.2	3.30	0.320	38.0	14.93	--	--
	MW13-20190614	06/14/19	6.41	106.2	4.31	0.315	9.63	15.83	--	--
MW13-20191205	12/05/19	6.28	-0.2	7.31	0.214	18.60	11.38	--	--	
MW13-20200626	06/26/20	6.57	211.1	7.12	0.334	26.40	15.70	--	--	
MW13-20201210	12/10/20	6.65	194.4	5.39	0.354	9.24	14.63	--	--	
MW13-20210623	06/23/21	6.73	203.9	2.82	0.294	9.16	16.50	--	--	



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**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	pH <sup>(1)</sup>	ORP <sup>(1)</sup> (mV)	Dissolved Oxygen <sup>(1)</sup> (mg/L)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	Alkalinity <sup>(2)</sup> (mg/L CaCO <sub>3</sub> )	Total Organic Carbon <sup>(3)</sup> (mg/L)
MW27	MW27-20151210	12/10/15	6.75	217.6	5.56	0.417	4.5	16.74	--	--
	MW27-20160309	03/07/16	6.51	214.9	3.31	0.406	3.12	16.09	--	114
	MW27-20160713	07/13/16	6.47	78.8	2.60	0.414	5.17	17.36	--	--
	MW27-20161019	10/19/16	6.66	97.6	0.89	0.420	0.77	16.82	--	--
	MW27-20170124	01/24/17	6.55	113.9	0.68	0.617	4.01	0.68	--	--
	MW27-20170531	05/31/17	6.89	195.9	1.96	0.377	1.98	16.42	--	--
	MW27-20170921	09/21/17	6.51	126.3	2.39	0.365	2.27	15.64	--	--
	MW27-20171214	12/14/17	6.42	92.3	0.32	0.532	0.41	15.82	--	--
	MW27-20180308	03/08/18	6.46	-24.8	0.54	0.289	12.4	14.35	--	--
	MW27-20180628	06/28/18	6.32	-12.8	0.77	0.455	1.30	16.40	--	--
	MW27-20180920	09/20/18	6.42	40.9	0.21	0.388	1.34	16.80	--	--
	MW27-20181214	12/14/18	6.32	39.7	1.58	0.359	0.85	15.52	--	--
	MW27-20190614	06/14/19	6.44	49.6	3.22	0.360	1.47	15.92	--	--
	MW27-20191205	12/05/19	6.75	-69.3	5.25	0.372	1.68	14.20	--	--
MW27-20200626	6/26/2020	6.20	197.9	0.32	0.442	3.42	16.10	--	--	
MW27-20201210	12/10/20	6.37	163.2	2.04	0.475	4.18	15.13	--	--	
MW27-20210623	06/23/21	6.55	12.7	0.22	0.535	6.11	16.70	--	--	
<b>Terry Avenue North</b>										
MW15	MW15-20150508	05/08/15	6.09	167.7	8.25	0.135	4.07	15.35	--	--
	MW15-20150805	08/05/15	6.16	134.1	8.64	0.163	0.5	15.90	--	--
	MW15-20151209	12/09/15	7.33	164.8	7.53	0.169	2.57	14.58	--	--
	MW15-20160308	03/08/16	6.19	181.1	7.26	0.197	2.63	14.44	--	--
	MW15-20160713	07/13/16	6.28	196.9	4.62	0.341	1.28	15.40	--	--
	MW15-20161018	10/18/16	6.41	192.6	4.75	0.289	6.48	15.35	--	--
	MW15-20170125	01/25/17	6.14	70.2	4.21	0.159	1.78	1.88	--	--
	MW15-20170531	05/31/17	5.67	-48.0	9.71	0.126	7.01	15.22	--	--
	MW15-20170922	09/22/17	5.81	382.3	7.69	0.156	1.72	15.06	--	--
	MW15-20171215	12/15/17	6.50	117.0	5.31	0.251	4.84	12.66	--	--
	MW15-20171215	12/15/17	6.50	117.0	5.31	0.251	4.84	12.66	--	--
	MW15-20180309	03/09/18	6.30	44.5	0.36	0.359	6.01	14.13	--	--
	MW15-20180629	06/29/18	6.14	36.2	4.13	0.228	11.55	14.39	--	--
	MW15-20180920	09/20/18	5.88	169.7	7.66	0.273	14.3	15.70	--	--
	MW15-20181214	12/14/18	6.00	46.7	6.24	0.238	5.61	14.60	--	--
	MW15-20190613	06/13/19	5.97	128.9	5.70	0.154	5.95	16.27	--	--
	MW15-20191205	12/05/19	6.84	-85.7	4.43	0.235	29.20	13.62	--	--
MW15-20200626	6/26/2020	6.17	134.0	3.24	0.433	3.86	15.90	--	--	
MW15-20201211	12/11/20	6.35	102.6	4.9	0.599	3.13	14.02	--	--	
WELL DAMAGED 2021										



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<b>Thomas Street</b>										
MW16	MW16-20130911	09/11/13	7.22	48.0	3.64	0.686	162.0	19.04	--	--
	MW16-20150508	05/08/15	6.40	145.4	0.68	0.676	22.1	15.59	266	0.961
	MW16-20150805	08/05/15	6.10	34.4	0.40	0.771	1.45	16.37	--	--
	MW16-20151210	12/10/15	7.80	114.5	0.73	0.789	1.34	14.90	--	--
	MW16-20160308	03/08/16	6.60	15.7	0.89	0.753	0.72	14.65	--	--
	MW16-20160712	07/12/16	6.68	-90.8	0.47	0.928	0.47	17.38	--	--
	MW16-20161019	10/19/16	6.49	-56.3	0.41	0.788	8.32	15.66	--	9.4
	MW16-20170125	01/25/17	6.57	112.90	0.46	0.70	1.98	14.20	--	13.50
	MW16-20170531	05/31/17	6.71	-106.2	0.65	0.985	3.81	16.63	--	46.0 <sup>D</sup>
	MW16-20170922	09/22/17	6.62	189.4	0.72	0.995	1.35	16.96	--	92.1 <sup>D</sup>
MW16-20171229	12/29/17	6.87	96.9	2.13	0.830	1.95	14.11	--	93.5 <sup>D</sup>	
MW16-20180309	03/09/18	6.70	68.4	0.23	0.941	7.98	15.28	--	1.87	
<b>WELL DAMAGED 2018</b>										
MW28	MW28-20190613	6/13/2019	6.62	81.3	1.08	0.867	4.22	18.72	424	--
	MW28-20191009	10/9/2019	8.1	87.4	1.58	0.789	5.72	16.13	--	--
	MW28-20191204	12/4/2019	6.68	161.5	0.24	0.79	7.72	15.49	391	--
	MW28-20200626	6/26/2020	6.70	-71.0	0.55	0.734	6.51	16.60	351	--
	MW28-20201211	12/11/2020	6.89	158.9	1.47	0.634	18.9	14.37	304	--
	MW28-20210623	6/23/2021	6.69	-48.1	3.67	0.723	7.71	19.66	292	--
<b>Harrison Street</b>										
MW01	MW01-20150806	08/06/15	5.71	126.9	9.20	0.308	3.41	21.37	--	--
	MW01-20160308	03/08/16	6.63	157.2	7.20	0.215	--	13.07	--	--
	MW01-20160712	07/12/16	6.69	157.7	7.48	0.225	24.9	17.28	--	--
	MW01-20161018	10/18/16	6.73	125.0	8.01	0.228	3.90	15.31	--	--
	MW01-20170124	01/24/17	6.72	144.0	8.00	0.222	2.27	13.25	--	--
	MW01-20170531	05/31/17	6.15	-30.9	8.24	0.262	8.66	15.17	--	--
	MW01-20171214	12/14/17	6.23	73.1	4.89	0.253	26.8	11.21	--	--
	MW01-20180309	03/09/18	6.34	185.7	5.40	0.219	5.27	12.87	--	--
	MW01-20180628	06/28/18	6.37	112.2	3.85	0.255	2.32	15.93	--	--
	MW01-20180920	09/20/18	6.35	179.8	5.91	0.260	2.82	16.10	--	--
	MW01-20181214	12/14/18	6.45	114.3	6.46	0.244	2.90	14.44	--	--
	MW01-20190614	06/14/19	6.30	111.2	8.19	0.288	1.73	15.45	--	--
	MW01-20191205	12/05/19	6.65	-80.8	7.20	0.325	2.61	13.81	--	--
	MW01-20200626	06/26/20	6.29	170.2	6.86	0.381	23.7	16.60	--	--
	MW01-20201211	12/11/20	6.36	187.7	11.11	0.442	4.37	14.11	--	--
MW01-20210624	06/24/21	6.12	12.8	7.96	0.467	7.13	16.94	--	--	



**Table 6**  
**Groundwater Geochemical and Water Quality Parameters**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Well Identification	Sample Identification	Sample Date	pH <sup>(1)</sup>	ORP <sup>(1)</sup> (mV)	Dissolved Oxygen <sup>(1)</sup> (mg/L)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	Alkalinity <sup>(2)</sup> (mg/L CaCO <sub>3</sub> )	Total Organic Carbon <sup>(3)</sup> (mg/L)
MW26	MW26-20151210	12/10/15	8.26	142.3	4.58	0.359	34.8	14.39	--	--
	MW26-20160307	03/07/16	6.54	108.6	0.93	0.234	3.21	14.20	--	--
	MW26-20160712	07/12/16	6.28	101.8	5.39	0.313	1.30	16.08	--	--
	MW26-20161018	10/18/16	6.39	181.0	5.55	0.312	7.52	14.69	--	--
	MW26-20170124	01/24/17	6.49	75.0	0.88	0.316	2.67	13.80	--	--
	MW26-20170531	05/31/17	6.50	213.1	0.86	0.23	2.97	14.82	--	--
	MW26-20170921	09/21/17	6.15	182.7	0.35	0.268	5.98	14.91	--	--
	MW26-20171214	12/14/17	6.06	163.4	0.32	0.354	2.66	12.65	--	--
	MW26-20180309	03/09/18	6.39	166.2	0.28	0.281	8.47	13.37	--	--
	MW26-20180628	06/28/18	6.21	68.0	0.28	0.379	8.52	15.44	--	--
	MW26-20180920	09/20/18	6.23	174.5	0.28	0.359	3.98	15.90	--	--
	MW26-20181214	12/14/18	6.23	23.8	0.62	0.196	5.96	13.96	103	1.23
	MW26-20190614	06/14/19	6.27	83.0	0.59	0.370	6.41	15.73	78.0	1.13
	MW26-20191205	12/05/19	6.58	-107.00	0.70	0.279	7.07	14.04	103	21.2 <sup>B</sup>
MW26-20200626	06/26/20	6.17	10.50	0.19	0.369	7.84	15.50	124	1.39	
MW26-20201211	12/11/20	6.46	184.90	0.64	0.196	4.67	13.27	93.1	1.02	
MW26-20210623	06/23/21	6.6	14.90	0.33	0.303	7.36	16.10	114	1.30	
MW32	MW32-20191009	10/09/19	6.16	-39.9	2.22	0.208	9.71	13.35	--	--
	MW32-20191205	12/05/19	5.92	-9.0	2.26	0.167	23.6	10.44	--	--
	MW32-20200626	06/26/20	5.98	118.9	3.54	0.251	6.92	15.20	--	--
	MW32-20201212	12/12/20	6.48	169.0	5.04	0.334	36.6	14.48	--	--
	MW32-20210624	06/24/21	6.37	156.4	2.79	0.271	14.9	15.80	--	--
MW33	MW33-20191009	10/09/19	8.03	97.2	4	0.257	7.3	15.85	--	--
	MW33-20191205	12/05/19	6.38	-25.6	6	0.170	3.43	11.28	--	--
	--	06/26/20	WELL DRY, UNABLE TO SAMPLE							
	--	12/10/20	WELL DRY, UNABLE TO SAMPLE							
	MW33-20110624	06/24/21	6.91	181.6	8	0.387	22.8	16.7	--	--



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Well Identification	Sample Identification	Sample Date	pH <sup>(1)</sup>	ORP <sup>(1)</sup> (mV)	Dissolved Oxygen <sup>(1)</sup> (mg/L)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	Alkalinity <sup>(2)</sup> (mg/L CaCO <sub>3</sub> )	Total Organic Carbon <sup>(3)</sup> (mg/L)
<b>South-Adjoining Property</b>										
MW29	MW29-20191008	10/08/19	6.55	-146.2	1.67	0.777	32	14.09	--	--
	MW29-20191204	12/04/19	6.28	155.3	0.56	0.937	9.23	15.10	--	--
	MW29-20200625	06/25/20	6.59	33.2	0.70	0.960	9.70	16.70	--	--
	MW29-20201210	12/10/20	6.69	81.3	1.58	0.872	5.87	15.03	--	--
MW30	MW29-20210622	06/22/21	6.59	45.5	4.96	0.870	3.10	17.99	--	--
	MW30-20191008	10/08/19	2.98	133.8	2.30	0.495	158	15.29	--	--
	MW30-20191204	12/04/19	5.88	173.1	0.4	0.440	13.9	14.30	--	--
	MW30-20200625	06/25/20	6.12	61.9	5.92	0.488	22.7	20.10	--	--
	MW30-20201210	12/10/20	6.17	125	2.18	0.475	38.0	14.36	--	--
ONNI-MW-4	MW30-20210623	06/23/21	6.30	136.3	1.29	0.419	113.0	17.90	--	--
	ONNI-MW-4-20191208	12/08/19	6.46	-157.2	1.40	0.469	49.0	13.69	--	--
	ONNI-MW-4-20200625	06/25/20	6.97	-12.1	4.20	0.507	91.0	16.70	--	--
	ONNI-MW-4-20201210	12/10/20	7.06	182	1.99	0.472	245.0	13.15	--	--
ONNI-MW-5	ONNI-MW-4-20210622	06/22/21	7.18	180.9	1.84	0.53	3713.0	23.30	--	--
	ONNI-MW-5-20191208	12/08/19	6.92	-176.5	1.7	0.423	45.0	12.75	--	--
	ONNI-MW-5-20200206	02/06/20	7.11	-38.1	1.17	0.368	20.5	14.79	--	--
	ONNI-MW-5-20200625	06/25/20	7.24	33.1	2.12	0.436	39.3	15.70	--	--
	ONNI-MW-5-20201209	12/09/20	7.21	131.6	0.38	0.405	15.0	14.81	--	--
	ONNI-MW-5-20210623	06/23/21	7.43	27.9	1.74	0.412	OVER RANGE	17.53	--	--

**NOTES:**

Analyses performed by Friedman & Bruya, Inc., Fremont Analytical Inc., or Aquatic Research Inc., of Seattle, Washington; or Amtest Inc. of Kirkland, Washington.

<sup>(1)</sup>Parameter is measured in the field using water quality meter with flow-through cell. The reported value is the last reading prior to sampling groundwater.

<sup>(2)</sup>Analyzed by SM 2320B.

<sup>(3)</sup>Analyzed by SM 5310C.

<sup>(4)</sup>Elevated turbidity measurement as groundwater was purged from the base of the well.

**Laboratory Notes:**

<sup>D</sup>Dilution was required.

<sup>B</sup>Analyte detected in the associated Method Blank.

\*Anomalous reading, attributed to meter error.

-- = not measured/ not applicable

< = not detected at a concentration exceeding the laboratory reporting limit

°C = degrees Celsius

CaCO<sub>3</sub> = calcium carbonate

mg/L = milligrams per liter

mV = millivolts

NTU = nephelometric turbidity unit

ORP = oxidation-reduction potential

SM = Standard Method

**Table 7**  
**Groundwater Analytical Results for Volatile Fatty Acids**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	Lactate <sup>(1)</sup> (mg/L)	Acetate <sup>(1)</sup> (mg/L)	Propionate <sup>(1)</sup> (mg/L)	Formate <sup>(1)</sup> (mg/L)	Butyrate <sup>(1)</sup> (mg/L)	Pyruvate <sup>(1)</sup> (mg/L)	Lactic <sup>(2)</sup> (mg/L)	Acetic <sup>(3)</sup> (mg/L)	Total Organic Carbon <sup>(4)</sup> (mg/L)
MW07	MW07-20160308	03/08/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	0.862
	MW07-20160713	07/16/16	--	--	--	--	--	--	<20	<20 <sup>X,D</sup>	0.83
	MW07-20161019	10/19/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	1.7
	MW07-20170124	01/24/17	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	4.25
	MW07-20170531	05/31/17	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	4.58
	MW07-20180308	03/08/18	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	0.877
	MW07-20180629	06/29/18	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	1.80
	MW07-20180920	09/20/18	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	0.963
	MW07-20190614	06/14/19	--	--	--	--	--	--	--	--	0.869
MW07-20201210	12/10/20	--	--	--	--	--	--	--	--	0.969	
MW16	MW16-20161019	10/19/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	9.4
	MW16-20170125	01/25/17	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	13.5
	MW16-20170531	05/31/17	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	46.0 <sup>D</sup>
	MW16-20170922	09/22/17	<0.39	1.1	<0.31	2	<0.41	<0.69	--	--	92.1 <sup>D</sup>
	MW16-20171229	12/29/17	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	93.5 <sup>D</sup>
	MW16-20180309	03/09/18	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	1.87
WELL DAMAGED 2018											
MW18	MW18-20150506	05/06/15	--	--	--	--	--	--	--	--	<0.500
	MW18-20160308	03/08/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	1.01
	MW18-20160714	07/14/16	--	--	--	--	--	--	<100	64 <sup>X,D</sup>	2,300
	MW18-20161020	10/20/16	<7.8	959	494	<4.4	131	<14	--	--	1,900
	MW18-20170126	01/26/17	<7.8	830	200	<4.4	121	<14	--	--	823
	MW18-20170601	06/01/17	<7.8	512	300	<4.4	115	<14	--	--	1,090 <sup>D</sup>
	MW18-20170923	09/23/17	<0.39	25	232	<0.22	<0.41	2	--	--	253 <sup>D</sup>
	MW18-20171216	12/16/17	<0.39	<0.54	81	0.79	<0.41	<0.69	--	--	173 <sup>D</sup>
	MW18-20180310	03/10/18	<0.39	193	79	0.55	1.6	1.7	--	--	108 <sup>D</sup>
	MW18-20180630	06/30/18	<0.39	28	53	<0.22	<0.41	<0.69	--	--	47.2 <sup>D</sup>
	MW18-20180922	09/22/18	<0.39	26	5.4	<0.22	<0.41	<0.69	--	--	37.8 <sup>D</sup>
	MW18-20190615	06/15/19	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	11
	MW18-20191207	12/07/19	<0.39	10	<0.31	<0.22	<0.41	<0.69	--	--	--
	MW18-20200627	06/27/20	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	5.95
MW18-20201212	12/12/20	<0.69	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	4.30	
MW18-20210625	06/25/21	<0.39	1.8	<0.31	<0.22	<0.41	<0.69	--	--	6.85	



**Table 7**  
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**Troy Laundry Seattle Site**  
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Well Identification	Sample Identification	Sample Date	Lactate <sup>(1)</sup> (mg/L)	Acetate <sup>(1)</sup> (mg/L)	Propionate <sup>(1)</sup> (mg/L)	Formate <sup>(1)</sup> (mg/L)	Butyrate <sup>(1)</sup> (mg/L)	Pyruvate <sup>(1)</sup> (mg/L)	Lactic <sup>(2)</sup> (mg/L)	Acetic <sup>(3)</sup> (mg/L)	Total Organic Carbon <sup>(4)</sup> (mg/L)
MW21	MW21-20160309	03/09/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	2.29
	MW21-20160713	07/13/16	--	--	--	--	--	--	<100	<100 <sup>x,D</sup>	1,800
	MW21-20161020	10/20/16	<7.8	509	1,032	<4.4	43	<14	--	--	1,800
	MW21-20170126	01/26/17	<0.39	201	311	1.1	31	0.91	--	--	884
	MW21-20170601	06/01/17	<7.8	682	393	<4.4	88	<14	--	--	755 <sup>D</sup>
	MW21-20170924	09/24/17	<7.8	880	507	<4.4	148	<14	--	--	871 <sup>D</sup>
	MW21-20171216	12/16/17	<7.8	630	151	45	148	13	--	--	722 <sup>D</sup>
	MW21-20180310	03/10/18	<0.39	490	124	1.0	73	16	--	--	466 <sup>D</sup>
	MW21-20180630	06/30/18	<7.8	811	278	<4.4	151	28	--	--	718 <sup>D</sup>
	MW21-20180922	09/22/18	<0.39	460	173	<0.22	114	<0.69	--	--	549 <sup>D</sup>
	MW21-20190615	06/15/19	<0.39	140	66	<0.22	12	4	--	--	163 <sup>D</sup>
	MW21-20191207	12/07/19	<0.39	116	7.2	<0.22	13	12	--	--	--
	MW21-20200627	06/27/20	<0.39	249	144	20	79	19	--	--	--
	MW21-20201212	12/12/20	<0.69	157	89	0.72	36	9.1	--	--	191 <sup>D</sup>
MW21-20210625	06/25/21	<0.39	189	85	<0.22	50	15	--	--	349 <sup>D</sup>	
MW22	MW22-20190615	06/15/19	<0.39	270	150	<0.22	39	13	--	--	286 <sup>D</sup>
	MW22-20191207	12/07/19	<0.39	418	134	<0.22	42	13	--	--	--
	MW22-20200627	06/27/20	<0.39	283	56	<0.22	21	7.3	--	--	206 <sup>D</sup>
	MW22-20201212	12/12/20	<0.69	142	22	<0.22	8.8	1.2	--	--	95.5 <sup>D</sup>
	MW22-20210625	06/25/21	<0.39	254	14	<0.22	36	2.4	--	--	349 <sup>D</sup>
MW23	MW23-20150507	05/07/15	--	--	--	--	--	--	--	--	<0.500
	MW23-20160308	03/08/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	3.14
	MW23-20160714	07/14/16	--	--	--	--	--	--	<100	<100 <sup>x</sup>	2,300
	MW23-20161020	10/20/16	<7.8	986	1,229	<4.4	144	<14	--	--	2,300
	MW23-20170126	01/26/17	<7.8	613	256	<4.4	57	<14	--	--	520
	MW23-20170601	06/01/17	<7.8	1,300	656	<4.4	280	<14	--	--	1,620 <sup>D</sup>
	MW23-20170923	09/23/17	<7.8	705	388	<4.4	295	59	--	--	1,160 <sup>D</sup>
	MW23-20171216	12/16/17	<0.39	131	176	8.0	106	31	--	--	865 <sup>D</sup>
	MW23-20180310	03/10/18	<0.39	25	151	2.8	<0.41	7.2	--	--	127 <sup>D</sup>
	MW23-20180630	06/30/18	<0.39	52	213	<0.22	<0.41	8.5	--	--	198 <sup>D</sup>
	MW23-20180922	09/22/18	<0.39	26	230	<0.22	<0.41	<0.69	--	--	159 <sup>D</sup>
	MW23-20190615	06/15/19	<0.39	19	86	<0.22	0.42	1.8	--	--	60.7 <sup>D</sup>
	MW23-20191207	12/07/19	<0.39	24	<0.31	2.7	<0.41	<0.69	--	--	--
	MW23-20200627	06/27/20	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	6.41
MW23-20201212	12/12/20	<0.69	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	7.90	
MW23-20210625	06/25/21	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	6.65	

**Table 7**  
**Groundwater Analytical Results for Volatile Fatty Acids**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	Lactate <sup>(1)</sup> (mg/L)	Acetate <sup>(1)</sup> (mg/L)	Propionate <sup>(1)</sup> (mg/L)	Formate <sup>(1)</sup> (mg/L)	Butyrate <sup>(1)</sup> (mg/L)	Pyruvate <sup>(1)</sup> (mg/L)	Lactic <sup>(2)</sup> (mg/L)	Acetic <sup>(3)</sup> (mg/L)	Total Organic Carbon <sup>(4)</sup> (mg/L)
MW24	MW24-20150506	05/06/15	--	--	--	--	--	--	--	--	1.12
	MW24-20160309	03/09/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	2.19
	MW24-20160715	07/15/16	--	--	--	--	--	--	<100	56.7 <sup>x,D</sup>	1,000
	MW24-20161020	10/20/16	<7.8	1,431	143	<4.4	20	<14	--	--	640
	MW24-20170126	01/26/17	<7.8	901	133	<4.4	34	<14	--	--	375
	MW24-20170601	06/01/17	<7.8	1,036	204	78	251	<14	--	--	1,470 <sup>D</sup>
	MW24-20170924	09/24/17	<0.39	28	140	4.2	38	7.9	--	--	390 <sup>D</sup>
	MW24-20171216	12/16/17	<0.39	12	70	1.2	2.0	0.80	--	--	233 <sup>D</sup>
	MW24-20180310	03/10/18	<0.39	8.0	10	<0.22	<0.41	<0.69	--	--	22.1 <sup>D</sup>
	MW24-20180630	06/30/18	<7.8	681	164	<4.4	123	<13.8	--	--	770 <sup>D</sup>
	MW24-20180922	09/22/18	<0.39	26	10	<0.22	1	<0.69	--	--	45.5 <sup>D</sup>
	MW24-20190615	06/15/19	<0.39	39	5.6	<0.22	0.46	<0.69	--	--	20.5
	MW24-20191207	12/07/19	5.7	29	<0.31	3.0	<0.41	<0.69	--	--	--
	MW24-20200627	06/27/20	<0.39	<0.54	0.60	<0.22	<0.41	<0.69	--	--	8.44
MW24-20201212	12/12/20	<0.69	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	6.95	
MW24-20210625	06/25/21	<0.69	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	7.52	
MW25	MW25-20150507	05/07/15	--	--	--	--	--	--	--	--	<0.500
	MW25-20190615	06/15/19	<0.39	45	1.3	<0.22	1.3	<0.69	--	--	25.80
	MW25-20191207	12/07/19	<0.39	21	<0.31	2.9	<0.41	<0.69	--	--	--
	MW25-20200627	06/27/20	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	5.21
	MW25-20201212	12/12/20	<0.69	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	9.57
	MW25-20210625	06/25/21	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	7.50
IW04	IW04-20150508	05/08/15	--	--	--	--	--	--	--	--	<0.500
	IW04-20190615	06/15/19	<0.39	31	6.1	<0.22	3.2	0.42	--	--	148 <sup>D</sup>
	IW04-20191207	12/07/19	<0.39	25	<0.31	3.3	<0.41	<0.69	--	--	--
	IW04-20200627	06/27/20	<0.39	8.2	1.5	<0.22	1.5	<0.69	--	--	88.7 <sup>D</sup>
	IW04-20201212	12/12/20	<0.69	6.2	3.1	<0.22	2.1	<0.69	--	--	90.3 <sup>D</sup>
	IW04-20210625	06/25/21	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	93.1 <sup>D</sup>

**Table 7**  
**Groundwater Analytical Results for Volatile Fatty Acids**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	Lactate <sup>(1)</sup> (mg/L)	Acetate <sup>(1)</sup> (mg/L)	Propionate <sup>(1)</sup> (mg/L)	Formate <sup>(1)</sup> (mg/L)	Butyrate <sup>(1)</sup> (mg/L)	Pyruvate <sup>(1)</sup> (mg/L)	Lactic <sup>(2)</sup> (mg/L)	Acetic <sup>(3)</sup> (mg/L)	Total Organic Carbon <sup>(4)</sup> (mg/L)
IW50	IW50-20160309	03/09/16	<0.39	358	82	1.1	22	<0.69	--	--	115
	IW50-20160715	07/15/16	--	--	--	--	--	--	<100	<100 <sup>X,D</sup>	1,100
	IW50-20161021	10/21/16	<7.8	1,492	683	8.2	476	<14	--	--	1,600
	IW50-20170126	01/26/17	<0.39	73	102	4.0	61	9.4	--	--	391
	IW50-20170602	06/02/17	<0.39	39	5.2	<0.22	1.3	<0.69	--	--	85.2 <sup>D</sup>
	IW50-20170924	09/24/17	<0.39	87	108	<0.22	4.2	2.5	--	--	214 <sup>D</sup>
	IW50-20171216	12/16/17	--	43	8.0	<0.22	<0.41	<0.69	--	--	224 <sup>D</sup>
	IW50-20180310	03/10/18	<0.39	41	3.1	<0.22	0.79	<0.69	--	--	55.0 <sup>D</sup>
	IW50-20180630	06/30/18	<0.39	4.9	<0.31	<0.22	<0.41	<0.69	--	--	41.9 <sup>D</sup>
	IW50-20180922	09/22/18	<0.39	2.3	<0.31	<0.22	<0.41	<0.69	--	--	29.6 <sup>D</sup>
	IW50-20190615	06/15/19	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	7.56
	IW50-20191207	12/07/19	<0.39	18	<0.31	3.3	<0.41	<0.69	--	--	--
	IW50-20200627	06/27/20	<0.39	2.8	<0.31	<0.22	<0.41	<0.69	--	--	18.2
	IW50-20201212	12/12/20	<0.69	1.6	<0.31	<0.22	<0.41	<0.69	--	--	13.7
IW50-20210625	06/25/21	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	16.1	
IW61	IW61-20160309	03/09/16	<0.39	368	51	0.69	28	<0.69	--	--	114
	IW61-20160713	07/13/16	--	--	--	--	--	--	<100	217 <sup>X,D</sup>	2,900
	IW61-20161021	10/21/16	<7.8	1,543	538	122	837	<14	--	--	3,000
	IW61-20170126	01/26/17	<7.8	612	253	38	363	<14	--	--	1,300
	IW61-20170602	06/02/17	<0.39	171	118	<0.22	189	<0.69	--	--	908 <sup>D</sup>
	IW61-20170923	09/23/17	<7.8	2,589	231	37	705	19	--	--	1,490 <sup>D</sup>
	IW61-20171216	12/16/17	<0.39	235	151	45	148	13	--	--	765 <sup>D</sup>
	IW61-20180310	03/10/18	<0.39	184	176	31	92	16	--	--	432 <sup>D</sup>
	IW61-20180630	06/30/18	<0.39	111	200	<0.22	44	14	--	--	406 <sup>D</sup>
	IW61-20180922	09/22/18	<0.39	71	170	14	21	<0.69	--	--	228 <sup>D</sup>
	IW61-20190615	06/15/19	<0.39	88	72	<0.22	4.4	0.58	--	--	140 <sup>D</sup>
	IW61-20191207	12/07/19	<0.39	98	7.2	1.8	5	<0.69	--	--	--
	IW61-20200627	06/27/20	<0.39	13	0.62	<0.22	<0.41	<0.69	--	--	55.4 <sup>D</sup>
	IW61-20201212	12/12/20	<0.69	5.1	<0.31	0.60	<0.41	<0.69	--	--	60.6 <sup>D</sup>
IW61-20210625	06/25/21	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	66.2 <sup>D</sup>	

**NOTES:**

Analyses performed by SIREM in Guelph, ON or AmTEST Laboratories in Kirkland, Washington.

<sup>(1)</sup>Analyzed by Ion Chromatography.

<sup>(2)</sup>Analyzed by EPA Method 300.0.

<sup>(3)</sup>Analyzed by EPA Method 300.0 modified.

<sup>(4)</sup>Analyzed by SM 5310C or EPA Method 300.0 modified.

**Laboratory Notes:**

<sup>D</sup>The reported value is from a dilution.

<sup>X</sup>Acetic and propionic acids co-eluted. Results are quantitated at acetic acid.

-- = not measured/not applicable

< = not detected at a concentration exceeding the laboratory reporting limit

EPA = US Environmental Protection Agency

mg/L = milligrams per liter

SM = Standard Method



**Table 8**  
**Indoor and Outdoor Air Analytical Results for Petroleum Hydrocarbons and CVOCs**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample ID	Sample Name	Sample Location	Sampled By	Sample Type	Sample Date Range	Analytical Results ( $\mu\text{g}/\text{m}^3$ )											
						APH EC5-8 aliphatics <sup>(1)</sup>	APH EC9-12 aliphatics <sup>(1)</sup>	APH EC9-10 aromatics <sup>(1)</sup>	PCE <sup>(2)</sup>	TCE <sup>(2)</sup>	cis-1,2-DCE <sup>(2)</sup>	trans-1,2-DCE <sup>(2)</sup>	Vinyl Chloride <sup>(2)</sup>				
<b>2018 Indoor Air Sampling Event</b>																	
OA01	OA01-20180304	Outdoor - HVAC Intake	SoundEarth	Outdoor Air (24 hours)	03/04/18–03/05/18	54	<35	<25	<1.7	<0.27	<0.2	<0.2	<0.13				
IA01	IA01-20180304	P5 - North wall		Indoor Air (24 hours)		03/04/18–03/05/18	67	<35	<25	--	--	--	--	--			
IA02	IA02-20180304	P5 - Interior Stairway - North			03/04/18–03/05/18		130	36	<25	6.2	0.27	<0.2	<0.2	<0.13			
IA03	IA03-20180304	P5 - West wall				03/07/18–03/08/18	49	<35	<25	<1.7	<0.27	<0.2	<0.2	<0.13			
IA04	IA04-20180304	P5 - West wall			03/07/18–03/08/18		--	--	--	<1.7	<0.27	<0.2	<0.2	<0.13			
IA05	IA05-20180307	P5 - South Tower Parking Elevator Shaft				Indoor Air (24 hours)	03/07/18–03/08/18	--	--	--	<1.7	<0.27	<0.2	<0.2	<0.13		
IA06	IA06-20180304	P5- Elevator lobby			03/04/18–03/05/18			--	--	--	<1.7	<0.27	<0.2	<0.2	<0.13		
IA07	IA07-20180304	North wall					03/04/18–03/05/18	--	--	--	<1.7	<0.27	<0.2	<0.2	<0.13		
IA08	IA08-20180304	P4 - West wall			03/04/18–03/05/18			69	<35	<25	<1.7	<0.27	<0.2	<0.2	<0.13		
IA09	IA09-20180304	P4 - West wall					03/04/18–03/05/18	--	--	--	<1.7	<0.27	<0.2	<0.2	<0.13		
IA10	IA10-20180304	P4 - South wall			03/04/18–03/05/18			--	--	--	<1.7	<0.27	<0.2	<0.2	<0.13		
IA11	IA11-20180304	P3 - West wall					03/04/18–03/05/18	84	35	<25	<1.7	<0.27	<0.2	<0.2	<0.13		
IA12	IA12-20180304	P3 - West wall			03/04/18–03/05/18			--	--	--	<1.7	<0.27	<0.2	<0.2	<0.13		
IA13	IA13-20180304	P3 - East wall					03/04/18–03/05/18	140	<35	<25	--	--	--	--	--		
IA14	IA14-20180304	P2 - West wall			03/04/18–03/05/18			65	<35	<25	--	--	--	--	--		
IA15	IA15-20180304	P2 - West wall					03/04/18–03/05/18	62	<35	<25	<1.7	<0.27	<0.2	<0.2	<0.13		
IA16	IA16-20180304	P2 - South wall			03/04/18–03/05/18			--	--	--	<1.7	<0.27	<0.2	<0.2	<0.13		
IA19	IA19-20180304	P1 - South wall					03/04/18–03/05/18	--	--	--	<1.7	<0.27	<0.2	<0.2	<0.13		
IA20	IA20-20180304	P1 - Interior Stairway - North			03/04/18–03/05/18			86	47	<25	2.4	0.34	<0.2	<0.2	0.13		
<b>2019 Supplemental Indoor Air Sampling Event</b>																	
OA02	OA02-20190217	Outdoor - HVAC Intake	SoundEarth		Outdoor Air (24 hours)		02/17/19–02/18/19	--	--	--	<6.8	<0.27	<0.4	<0.4	<0.26		
IA21	IA21-20190217	P5 - Interior Stairway - North		Indoor Air (24 hours)	Indoor Air (24 hours)		02/17/19–02/18/19	--	--	--	<6.8	<0.27	<0.4	<0.4	<0.26		
IA22	IA22-20190219	P5 - South Tower Parking Elevator Shaft			Indoor Air (3 weeks)		Indoor Air (3 weeks)	02/19/19–03/12/19	--	--	--	<0.42	<b>&lt;0.64</b>	<0.87	<2.1	<b>&lt;5.5</b>	
IA23	IA23-20190217	P5 - Interior Stairway - South Tower					Indoor Air (24 hours)	Indoor Air (24 hours)	02/17/19–02/18/19	--	--	--	<6.8	<0.27	<0.4	<0.4	<0.26
IA24	IA24-20190217	P1 - Interior Stairway - North						Indoor Air (24 hours)	Indoor Air (24 hours)	02/17/19–02/18/19	--	--	--	<6.8	<0.27	<0.4	<0.4
IA25	IA25-20190217	P1 - Interior Stairway - South Tower				Indoor Air (24 hours)			Indoor Air (24 hours)	02/17/19–02/18/19	--	--	--	<6.8	<0.27	<0.4	<0.4
<b>MTCA Method B Indoor Air Cleanup Levels<sup>(3)</sup></b>									<b>2,700</b>	<b>140</b>	<b>180</b>	<b>9.62</b>	<b>0.37</b>	<b>NE</b>	<b>NE</b>	<b>0.28</b>	
<b>Modified Method B Indoor Air Remediation Levels<sup>(4)</sup></b>									<b>113,400</b>	<b>5,880</b>	<b>7,560</b>	<b>323.08</b>	<b>20.49</b>	<b>NE</b>	<b>NE</b>	<b>9.55</b>	

**NOTES:**

**Bold** indicates laboratory detection limit exceeds MTCA Method B Indoor Air Cleanup Level but less than the Modified Method B Indoor Air Remediation Level.

Sample analysis performed by Friedman & Bruya, Inc., Seattle, Washington, or Eurofins Air toxics, Inc. of Folsom, California.

<sup>(1)</sup>Analyzed by Method MA-APH.

<sup>(2)</sup>Analyzed by EPA Method TO-15 or Modified Method TO-17.

<sup>(3)</sup>MTCA Method B Indoor Air Cleanup Levels, Noncancer, DRAFT: Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action, October 2009 and updated in February 2016.

<sup>(4)</sup>Modified Method B Indoor Air Remediation Levels, calculated from MTCA Equation 750-2 and assumes an exposure frequency of 5 days/week, 1 hour/day, and 52 weeks/year.

-- = not tested

< = not detected at a concentration exceeding the laboratory reporting limit

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter

APH = air-phase hydrocarbons

CVOC = chlorinated volatile organic compound

DCE = dichloroethene

EPA = US Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

NE = not established

PCE = tetrachloroethene

SoundEarth = SoundEarth Strategies, Inc.

TCE = trichloroethene



**Table 9**  
**Summary of Indoor and Outdoor Air Analytical Results for APH**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Sample ID	Sample Name	Sample Location	Sampled By	Sample Type	Sample Date Range	Analytical Results <sup>(1)</sup> (µg/m <sup>3</sup> )			
						APH EC5-8 aliphatics	APH EC9-12 aliphatics	APH EC9-10 aromatics	
<b>2018 Indoor Air Sampling Event</b>									
OA01	OA01-20180304	Outdoor—HVAC Intake	SoundEarth	Outdoor Air (24 hours)	03/04/18–03/05/18	<b>54</b>	<35	<25	
IA01	IA01-20180304	P5—North Wall		Indoor Air (24 hours)		03/04/18–03/05/18	<b>67</b>	<35	<25
IA02	IA02-20180304	P5—Interior Stairway—North					<b>130</b>	<b>36</b>	<25
IA03	IA03-20180304	P5—West Wall					<b>49</b>	<35	<25
IA04	IA04-20180304	P5—West Wall					--	--	--
IA05	IA05-20180307	P5—South Tower Parking Elevator Shaft			--		--	--	
IA06	IA06-20180304	P5—Elevator Lobby		03/04/18–03/05/18	--	--	--		
IA07	IA07-20180304	North wall			--	--	--		
IA08	IA08-20180304	P4—West Wall			<b>69</b>	<35	<25		
IA09	IA09-20180304	P4—West Wall			--	--	--		
IA10	IA10-20180304	P4—South Wall			--	--	--		
IA11	IA11-20180304	P3—West Wall			<b>84</b>	<b>35</b>	<25		
IA12	IA12-20180304	P3—West Wall			--	--	--		
IA13	IA13-20180304	P3—East Wall			<b>140</b>	<35	<25		
IA14	IA14-20180304	P2—West Wall			<b>65</b>	<35	<25		
IA15	IA15-20180304	P2—West Wall			<b>62</b>	<35	<25		
IA16	IA16-20180304	P2—South Wall		--	--	--			
IA19	IA19-20180304	P1—South Wall		--	--	--			
IA20	IA20-20180304	P1—Interior Stairway—North		<b>86</b>	<b>47</b>	<25			
<b>MTCA Method B Indoor Air Cleanup Levels<sup>(2)</sup></b>						<b>2,700</b>	<b>140</b>	<b>180</b>	
<b>Modified Method B Indoor Remediation Levels<sup>(3)</sup></b>						<b>113,400</b>	<b>5,880</b>	<b>7,560</b>	

**NOTES:**

**Bold** indicates concentration exceeds laboratory detection limits.

Sample analysis performed by Friedman & Bruya, Inc., Seattle, Washington.

<sup>(1)</sup>Analyzed by Method MA-APH.

<sup>(2)</sup>MTCA Method B Indoor Air Cleanup Levels, Noncancer, DRAFT: Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action, October 2009 and updated in February 2016.

<sup>(3)</sup>Modified Method B Indoor Remediation Levels, calculated from MTCA Equation 750-2 and assumes an exposure frequency of 5 days/week, 1 hour/day, and 52

-- = not tested

< = not detected at a concentration exceeding the laboratory reporting limit

µg/m<sup>3</sup> = micrograms per cubic meter

APH = air-phase hydrocarbons

MTCA = Washington State Model Toxics Control Act

SoundEarth = SoundEarth Strategies, Inc.





**Table 10**  
**Remedial Component Screening Matrix**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Component Group	Component Options	Retained for Inclusion in Cleanup Action Alternatives?	Rationale for Inclusion or Exclusion
<b>Passive Remediation</b>			
	No Further Action	No	Not retained because it is not protective of human health or the environment.
	Monitored Natural Attenuation	Yes	Retained because monitored natural attenuation processes are currently maintaining the stability of the CVOC groundwater plume and preventing downgradient migration.
	Containment Cap	Yes	Retained as a component of a cleanup action alternative. The concrete floor slab and foundation walls of the existing buildings' underground parking garage and surrounding hardscapes (concrete/asphalt) throughout the Site serve as a barrier against direct contact with subsurface contamination.
	Environmental Covenant	Yes	Retained as a component for cleanup action alternatives for which subsurface contamination would remain in place following the cleanup action.
	Permeable Reactive Barrier	No	Not retained because the CVOC groundwater plume is stable and not migrating.
<b>In Situ Physical Treatment</b>			
	Air Sparging/Soil Vapor Extraction (SVE)	Yes	Retained to treat CVOCs through air stripping (volatilization) and vapor recovery.
	Biosparging	No	Not retained because PCE and TCE are not degraded via direct oxidation (i.e., biosparging); air sparging retained for volatilization of CVOCs in saturated zone.
	Surfactant Washing	No	Not retained because CVOC-impacted soils have been removed to the maximum extent practicable.
	Cosolvent Washing	No	Not retained because CVOC-impacted soils have been removed to the maximum extent practicable.
	Pump and Treat	No	Not retained because this technology is not typically implemented for sites with low CVOC concentrations in groundwater (i.e., CVOC mass removal in the aqueous phase would be minimal). In addition, the CVOC groundwater plume is stable and not migrating.
	Dual-Phase Extraction	No	Not retained because this technology is not implemented at sites with low CVOC concentrations in groundwater.
<b>In Situ Thermal</b>			
	Resistive Thermal with SVE	No	Not retained because these technologies are not implemented at sites with low CVOC concentrations in groundwater. In addition, these technologies are difficult to implement and not cost-competitive with in situ physical treatment, in situ powder activated carbon injections, or emulsified oil (anaerobic bioremediation) applications. These technologies also present an increased short-term safety risk during installation and operation.
	Conductive Thermal with SVE	No	
	Radio Frequency/Electromagnetic Thermal with SVE	No	
	Steam Injection with SVE and Groundwater Extraction	No	
	Hot Air Injection with SVE	No	
	Hot Water Injection with SVE and Groundwater Extraction	No	
<b>Source Removal</b>			
	Excavation Dewatering	No	Not retained because CVOC-impacted soils have been removed to the maximum extent practicable.
	Excavation on the Property with Shoring	No	
	Trench Boxes - Non-Imperious Wall	No	
	Secant Pile Wall - Imperious Wall	No	
	Sheet Pile Wall - Imperious Wall	No	
	Soil Nail Wall - Non-Imperious Wall	No	
	Soldier Pile Wall - Non-Imperious Wall	No	
	Excavation off-Property with Shoring	No	
	Secant Pile Wall - Imperious Wall	No	
	Sheet Pile Wall - Imperious Wall	No	
	Soil Nail Wall - Non-Imperious Wall	No	
	Soldier Pile Wall - Non-Imperious Wall	No	
<b>Ex Situ Source Treatment</b>			
	Surfactant Washing	No	Not retained because CVOC-impacted soils have been removed to the maximum extent practicable.
	Cosolvent Washing	No	
	Chemical Oxidation	No	
	Thermal Desorption	No	
	Landfill Disposal	No	



**Table 10**  
**Remedial Component Screening Matrix**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

Draft

Component Group	Component Options	Retained for Inclusion in Cleanup Action Alternatives?	Rationale for Inclusion or Exclusion
<b>In Situ Chemical Oxidation</b>			
	Activated Sodium Persulfate	No	Not retained because these technologies are not cost-competitive with in situ powder activated carbon or emulsified oil (anaerobic bioremediation) applications. These technologies also present an increased short-term safety risk during the injection process given the handling of a chemical oxidant. In addition, chemical oxidation injections may have a negative affect on water quality (e.g., increase in manganese concentrations via permanganate injections) and migrate downgradient.
	Hydrogen Peroxide	No	
	Fenton's Reagent	No	
	RegenOx (Catalyzed Sodium Percarbonate)	No	
	Permanganate	No	
<b>Containment/Immobilization</b>			
	Bituminization	No	Not retained because CVOC-impacted soils have been removed to the maximum extent practicable.
	Emulsified Asphalt	No	
	Modified Sulfur Cement	No	
	Polyethylene Extrusion	No	
	Pozzolan/Portland Cement	No	
	Vitrification/Molten Glass	No	
	Slurry Wall Containment	No	Not retained because the CVOC groundwater plume is stable and not migrating.
	Sheet Pile Wall Containment	No	
	Pump and Treat for Hydraulic Containment	No	
<b>Phytoremediation</b>			
	Phyto-Degradation	No	Not retained because CVOC-impacted groundwater is situated at depth.
	Phyto-Volatilization	No	
	Phyto-Accumulation	No	
	Phyto-Stabilization	No	
	Enhanced Rhizosphere Biodegradation	No	
<b>In Situ Bioremediation</b>			
	Aerobic Bioremediation	No	Not retained because PCE and TCE are not degraded via direct oxidation. cis-1,2-DCE and VC are degraded naturally under slightly aerobic conditions when the emulsified oil has been depleted.
	Anaerobic Bioremediation	Yes	Retained because this technology was successfully implemented as a interim remedial action with the injection of emulsified oil to the saturated zone. PCE, TCE, cis-1,2-DCE, and VC are degraded to ethene/ethane via reductive dechlorination under suitable geochemical conditions and the presence of a microbial genus ( <i>Dehalococcoides</i> ).

**NOTES:**

- cis-1,2-DCE = cis-1,2-dichloroethene
- COC = chemical of concern
- CVOC = chlorinated volatile organic compound
- MTCA = Washington State Model Toxics Control Act
- PCE = tetrachloroethene
- SVE = soil vapor extraction
- TCE = trichloroethene
- VC = vinyl chloride



**Table 11**  
**Feasibility Level Cost Estimate**  
**Cleanup Action Alternative 1**  
**MNA and Environmental Covenant**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

DRAFT

CAPITAL COST ITEM	QTY	UNIT	UNIT PRICE	COST	TOTALS
<b>Cleanup Action Plan</b>					
Cleanup Action Plan	1	ls	\$	23,000	\$ 23,000
Subtotal					\$ 23,000
<b>Project Management and Reporting</b>					
Project Management	1	year	\$	12,000	\$ 12,000
Cleanup Action Report	1	report	\$	21,000	\$ 21,000
Environmental Covenant	1	ls	\$	10,000	\$ 10,000
Regulatory Closure Support	1	ls	\$	20,000	\$ 20,000
Subtotal					\$ 63,000
<b>TOTAL CAPITAL COST</b>					<b>\$ 86,000</b>
FUTURE O&M AND OTHER DIRECT COST ITEMS <sup>(1)</sup>	ANNUAL COST <sup>(2)</sup>	PRESENT WORTH OF ANNUAL AND FUTURE CAPITAL COST			
Once Every 2 Years: Groundwater Monitoring and Reporting (Years 1, 3, 5, 7, and 9)	\$ 32,800	Discount Rate = 1.3%	\$	153,846	
Quarterly Compliance Groundwater Monitoring and Annual Report (Year 10)	\$ 81,600	Discount Rate = 1.3%	\$	71,713	
Well Decommissioning (Year 10)	\$ 83,000	Discount Rate = 1.3%	\$	72,943	
<b>TOTAL PRESENT WORTH COST</b>					<b>\$ 298,500</b>
<b>TOTAL PRESENT WORTH COST OF CLEANUP ACTION ALTERNATIVE 1</b>					<b>\$ 385,000</b>

**NOTES:**

Cost rounded up to nearest \$1,000.

<sup>(1)</sup>Additional direct costs, such as project management, regulatory communications and reporting, and other technical support services not specifically listed, are not included in any future annual costs.

<sup>(2)</sup>Annual cost is year 2021 cost.

% = percent

ls = lump sum

O&M = operation and maintenance

QTY = quantity



**Table 12**  
**Feasibility Level Cost Estimate**  
**Cleanup Action Alternative 2**  
**In Situ Reductive Dechlorination and Environmental Covenant with MNA**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

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CAPITAL COST ITEM	QTY	UNIT	UNIT PRICE	COST	TOTALS
<b>Cleanup Action Plan and Design</b>					
Cleanup Action Plan	1	ls	\$ 17,000	\$ 17,000	
Design	1	ls	\$ 5,000	\$ 5,000	
Subtotal					\$ 22,000
<b>Permitting</b>					
Underground Injection Control Registration	1	ls	\$ 2,300	\$ 2,300	
Street Use Permit	1	ls	\$ 5,400	\$ 5,400	
Subtotal					\$ 7,700
<b>Injection Well Installation</b>					
One Call and Private Utility Locate	1	ls	\$ 1,100	\$ 1,100	
Traffic Control/Uniformed Police Officer	1	ls	\$ 5,900	\$ 5,900	
Vertical Injection Well (includes vacuum clearance)	2	well	\$ 17,000	\$ 34,000	
Injection Well Installation Oversight	1	ls	\$ 10,600	\$ 10,600	
Investigation-Derived Waste Management/Disposal	1	ls	\$ 5,400	\$ 5,400	
Subtotal					\$ 57,000
<b>In Situ Reductive Dechlorination Injection</b>					
Emulsified Oil Product (material)	1	ls	\$ 86,250	\$ 86,250	
Bioaugmentation Product (material)	1	ls	\$ 16,675	\$ 16,675	
Traffic Control/Uniformed Police Officer	1	ls	\$ 11,700	\$ 11,700	
Emulsified Oil Injection Oversight	1	ls	\$ 83,200	\$ 83,200	
Bioaugmentation Injection Oversight	1	ls	\$ 41,600	\$ 41,600	
Subtotal					\$ 239,425
<b>Project Management and Reporting</b>					
Project Management	2	year	\$ 20,000	\$ 40,000	
Cleanup Action Report	1	report	\$ 21,000	\$ 21,000	
Environmental Covenant	1	ls	\$ 10,000	\$ 10,000	
Regulatory Closure Support	1	ls	\$ 20,000	\$ 20,000	
Subtotal					\$ 91,000
<b>TOTAL CAPITAL COST</b>					<b>\$ 417,100</b>
<b>FUTURE O&amp;M AND OTHER DIRECT COST ITEMS<sup>(1)</sup></b>		<b>ANNUAL COST<sup>(2)</sup></b>		<b>PRESENT WORTH OF ANNUAL AND FUTURE CAPITAL COST</b>	
Semiannual Groundwater Monitoring and Reporting (Years 1 through 7)		\$ 65,600	Discount Rate = 1.3%	\$ 436,223	
Quarterly Compliance Groundwater Monitoring and Annual Report (Years 8 and 9)		\$ 81,600	Discount Rate = 1.3%	\$ 146,234	
Well Decommissioning (Year 9)		\$ 83,000	Discount Rate = 1.3%	\$ 73,891	
<b>TOTAL PRESENT WORTH COST</b>					<b>\$ 656,300</b>
<b>TOTAL PRESENT WORTH COST OF CLEANUP ACTION ALTERNATIVE 2</b>					<b>\$ 1,073,000</b>

**NOTES:**

Cost rounded up to nearest \$1,000.

<sup>(1)</sup> Additional direct costs, such as project management, regulatory communications and reporting, and other technical support services not specifically listed, are not included in any future annual costs.

<sup>(2)</sup> Annual cost is year 2021 cost.

% = percent

ls = lump sum

O&M = operation and maintenance

QTY = quantity



**Table 13**  
**Feasibility Level Cost Estimate**  
**Cleanup Action Alternative 3**  
**In Situ PAC Adsorption and Environmental Covenant with MNA**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

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CAPITAL COST ITEM	QTY	UNIT	UNIT PRICE	COST	TOTALS
<b>Cleanup Action Plan and Design</b>					
Cleanup Action Plan	1	ls	\$ 17,000	\$ 17,000	
Design	1	ls	\$ 5,000	\$ 5,000	
Subtotal					\$ 22,000
<b>Permitting</b>					
Underground Injection Control Registration	1	ls	\$ 2,300	\$ 2,300	
Street Use Permit	1	ls	\$ 5,400	\$ 5,400	
Subtotal					\$ 7,700
<b>Injection Well Installation</b>					
One Call and Private Utility Locate	1	ls	\$ 1,100	\$ 1,100	
Traffic Control	1	ls	\$ 5,900	\$ 5,900	
Vertical Injection Well (five wells; includes vacuum clearance)	2	well	\$ 17,000	\$ 34,000	
Injection Well Installation Oversight	1	ls	\$ 10,600	\$ 10,600	
Investigation-Derived Waste Management/Disposal	1	ls	\$ 5,400	\$ 5,400	
Subtotal					\$ 57,000
<b>In Situ Adsorption Injection</b>					
Powder Activated Carbon (material)	1	ls	\$ 13,061	\$ 13,061	
Traffic Control	1	ls	\$ 11,700	\$ 11,700	
PAC Injection Oversight	1	ls	\$ 124,800	\$ 124,800	
Subtotal					\$ 149,561
<b>Project Management and Reporting</b>					
Project Management	1	year	\$ 20,000	\$ 20,000	
Cleanup Action Report	1	report	\$ 21,000	\$ 21,000	
Environmental Covenant	1	ls	\$ 10,000	\$ 10,000	
Regulatory Closure Support	1	ls	\$ 20,000	\$ 20,000	
Subtotal					\$ 71,000
<b>TOTAL CAPITAL COST</b>					<b>\$ 307,300</b>
FUTURE O&M AND OTHER DIRECT COST ITEMS <sup>(1)</sup>	ANNUAL COST <sup>(2)</sup>	PRESENT WORTH OF ANNUAL AND FUTURE CAPITAL COST			
Semiannual Groundwater Monitoring and Reporting (Years 1 through 7)	\$ 62,500	Discount Rate = 1.3%	\$	415,609	
Quarterly Compliance Groundwater Monitoring and Annual Report (Years 8 and 9)	\$ 81,600	Discount Rate = 1.3%	\$	146,234	
Well Decommissioning (Year 9)	\$ 83,000	Discount Rate = 1.3%	\$	73,891	
<b>TOTAL PRESENT WORTH COST</b>					<b>\$ 635,700</b>
<b>TOTAL PRESENT WORTH COST OF CLEANUP ACTION ALTERNATIVE 3</b>					<b>\$ 943,000</b>

**NOTES:**

Cost rounded up to nearest \$1,000.

<sup>(1)</sup> Additional direct costs, such as project management, regulatory communications and reporting, and other technical support services not specifically listed, are not included in any future annual costs.

<sup>(2)</sup> Annual cost is year 2021 cost.

% = percent

ls = lump sum

O&M = operation and maintenance

PAC = powder activated carbon

QTY = quantity

TBD = to be determined





**Table 14**  
**Feasibility Level Cost Estimate**  
**Cleanup Action Alternative 4**  
**AS/SVE Remediation System and Environmental Covenant with MNA**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

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CAPITAL COST ITEM	QTY	UNIT	UNIT PRICE	COST	TOTALS
<b>Cleanup Action Plan and Design</b>					
Cleanup Action Plan	1	ls	\$ 20,000	\$ 20,000	
Design	1	ls	\$ 50,000	\$ 50,000	
Subtotal					\$ 70,000
<b>Permitting</b>					
Puget Sound Clean Air Authority (permit evaluation)	1	ls	\$ 750	\$ 750	
Puget Sound Clean Air Authority	1	ls	\$ 1,000	\$ 1,000	
Street Use Permit (Well Installations)	1	ls	\$ 7,600	\$ 7,600	
City of Seattle Permit (Remediation System)	1	ls	\$ 50,000	\$ 50,000	
Subtotal					\$ 59,350
<b>Air Sparge and Soil Vapor Extraction Well Installation</b>					
One Call and Private Utility Locate	1	ls	\$ 1,100	\$ 1,100	
Traffic Control	1	ls	\$ 5,900	\$ 5,900	
AS/SVE Pilot Test (includes installation of one AS and one SVE well)	1	event	\$ 60,000	\$ 60,000	
AS Well Installation	12	well	\$ 20,000	\$ 240,000	
SVE Well Installation	8	well	\$ 18,000	\$ 144,000	
Well Installation Oversight	1	ls	\$ 42,400	\$ 42,400	
Investigation-Derived Waste Management/Disposal	1	ls	\$ 27,000	\$ 27,000	
Subtotal					\$ 520,400
<b>Air Sparge and Soil Vapor Extraction System Installation</b>					
One Call and Private Utility Locate	1	ls	\$ 1,100	\$ 1,100	
Traffic Control	1	ls	\$ 69,900	\$ 69,900	
Subterranean Vault	1	ls	\$ 100,000	\$ 100,000	
Remediation System Equipment	1	ls	\$ 100,000	\$ 100,000	
Trenching and Pipe Installation	1	ls	\$ 25,000	\$ 25,000	
System Installation	1	ls	\$ 75,000	\$ 75,000	
Transportation and Disposal of Excavated Soil (Clean Material)	50	ton	\$ 50	\$ 2,500	
Site Restoration	1	ls	\$ 60,000	\$ 60,000	
Subtotal					\$ 433,500
<b>Project Management and Reporting</b>					
Project Management	5	year	\$ 20,000	\$ 100,000	
Cleanup Action Report	1	report	\$ 21,000	\$ 21,000	
Environmental Covenant	1	ls	\$ 10,000	\$ 10,000	
Regulatory Closure Support	1	ls	\$ 20,000	\$ 20,000	
Subtotal					\$ 151,000
<b>TOTAL CAPITAL COST</b>					<b>\$ 1,234,300</b>
<b>FUTURE O&amp;M AND OTHER DIRECT COST ITEMS<sup>(1)</sup></b>		<b>ANNUAL COST<sup>(2)</sup></b>		<b>PRESENT WORTH OF ANNUAL AND FUTURE CAPITAL COST</b>	
Monthly O&M (Years 1 and 2)		\$ 50,000	Discount Rate = 1.3%	\$ 98,083	
Quarterly O&M (Years 3 through 6)		\$ 12,500	Discount Rate = 1.3%	\$ 47,182	
Semiannual Groundwater Monitoring and Reporting (Years 1 through 6)		\$ 65,600	Discount Rate = 1.3%	\$ 376,294	
Quarterly Compliance Groundwater Monitoring and Annual Report (Years 7 and 8)		\$ 81,600	Discount Rate = 1.3%	\$ 148,135	
Well Decommissioning (TBD number of wells; year 8)		\$ 83,000	Discount Rate = 1.3%	\$ 74,852	
<b>TOTAL PRESENT WORTH COST</b>					<b>\$ 744,500</b>
<b>TOTAL PRESENT WORTH COST OF CLEANUP ACTION ALTERNATIVE 4</b>					<b>\$ 1,979,000</b>

**NOTES:**

Cost rounded up to nearest \$1,000.

<sup>(1)</sup>Additional direct costs, such as project management, regulatory communications and reporting, and other technical support services not specifically listed, are not included in any future annual costs.

<sup>(2)</sup>Annual cost is year 2021 cost.

% = percent

AS = air sparge

ls = lump sum

O&M = operation and maintenance

SVE = soil vapor extraction

QTY = quantity

TBD = to be determined

ton = number of bank cubic yards x 1.8 ton per bank cubic yard



**Table 15**  
**Cleanup Action Alternatives Screening Summary**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**

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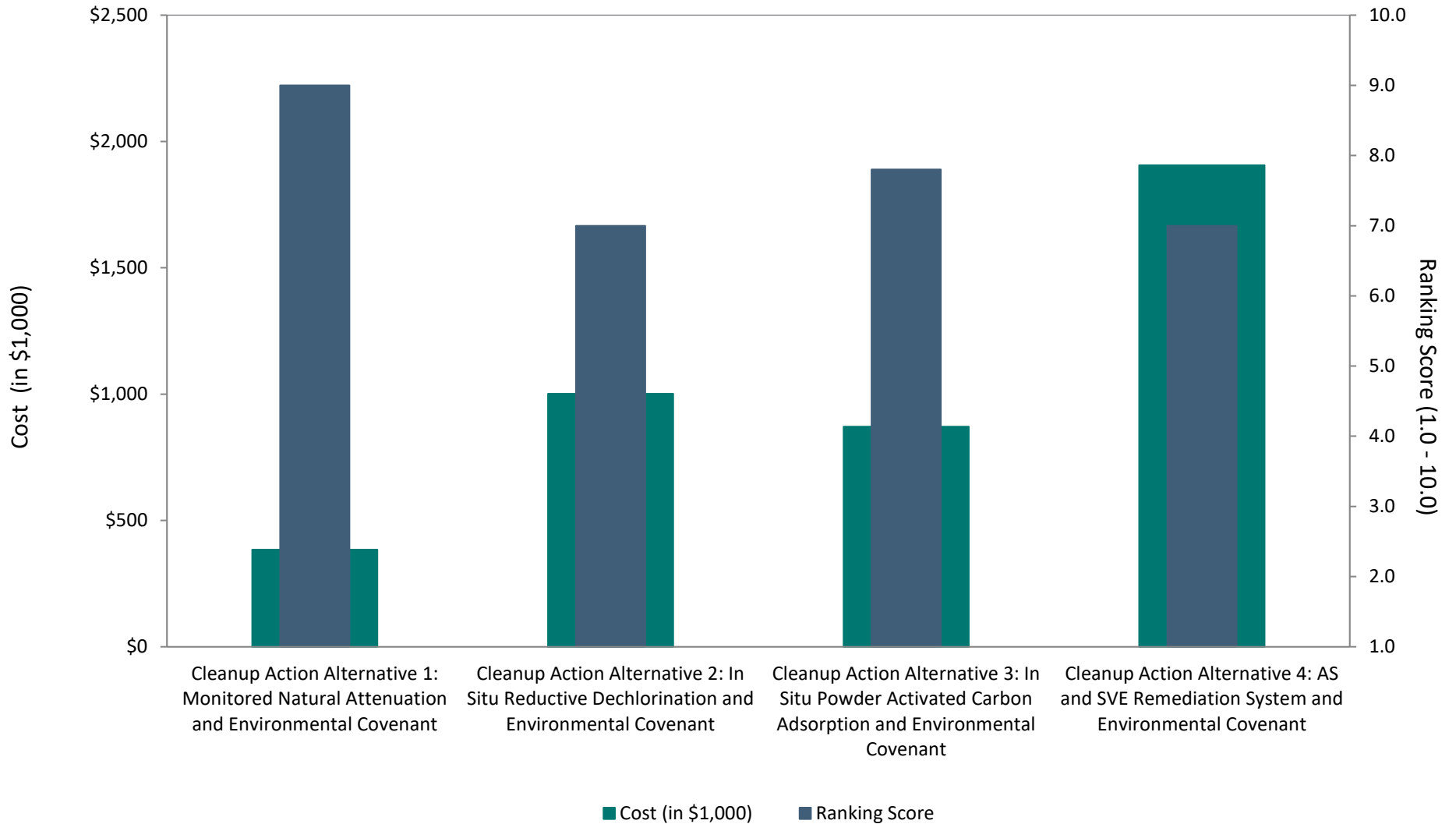
Cleanup Action Alternatives	Remedial Details	Cost	Washington State Department of Ecology Evaluation Criteria/Relative Ranking (1 = Low; 10 = High)						Ranking Score <sup>(1)</sup>
			Weighting Factors for Evaluation Criteria						
			20%	20%	20%	20%	20%		
			Protectiveness	Permanence	Effectiveness over the Long Term	Management of Short-Term Risks	Technical and Administrative Implementability	Consideration of Public Concerns	
<b>1. Monitored Natural Attenuation and Environmental Covenant</b>	Reliance on natural attenuation processes to attain compliance with the proposed groundwater cleanup levels.	\$385,000	9	9	9	9	9	9	9.0
<b>2. In Situ Reductive Dechlorination and Environmental Covenant</b>	Injection of emulsified oil to provide a substrate for the native microbial population (i.e., biostimulation) and to promote the bioremediation of chlorinated volatile organic compounds present in the saturated zone soil and groundwater via the anaerobic reductive dichlorination pathway.	\$1,073,000	9	9	5	7	5	6	7.0
<b>3. In Situ Powder Activated Carbon Adsorption and Environmental Covenant</b>	Injection of powder activated carbon to adsorb and immobilize chlorinated volatile organic compounds in the saturated zone soil and groundwater.	\$943,000	9	9	9	7	5	7	7.8
<b>4. AS and SVE Remediation System and Environmental Covenant</b>	Installation of an air sparge and soil vapor extraction system to volatile and remove chlorinated volatile organic compounds in the saturated zone.	\$1,979,000	9	9	8	5	4	5	7.0

NOTES:

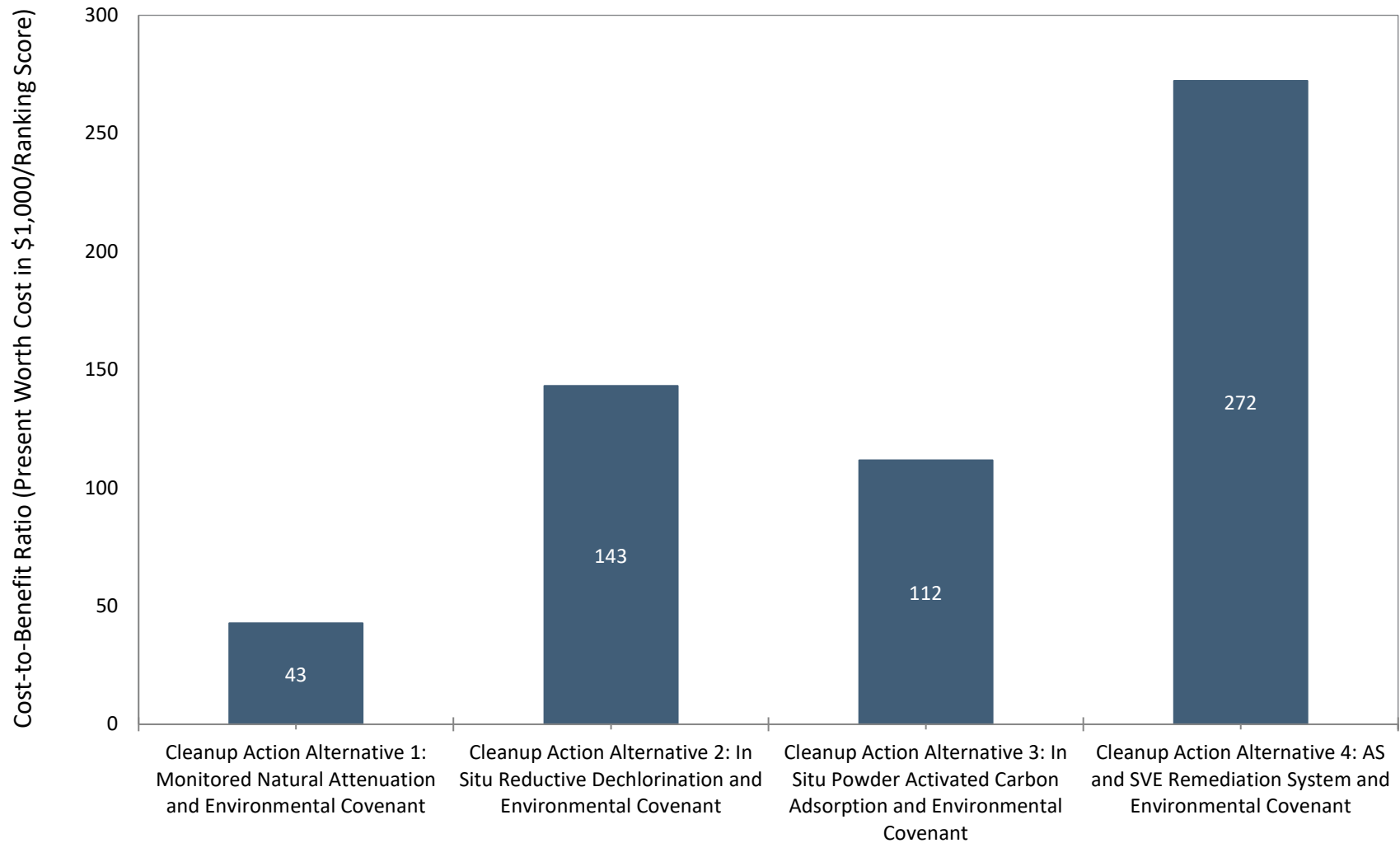
<sup>(1)</sup>The ranking score for each alternative is the average of the weighted score for five of the six evaluation criteria. Consideration of Public Concerns is not included in the ranking score.

## **CHARTS**

**Chart 1**  
**Cost and Relative Ranking of Cleanup Action Alternatives**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**



**Chart 2**  
**Cost-to-Benefit Ratios for**  
**Cleanup Action Alternatives**  
**Troy Laundry Seattle Site**  
**300 Boren Avenue North and 399 Fairview Avenue North**  
**Seattle, Washington**





**APPENDIX A**  
**Soil Boring/Injection Well Construction Logs**



**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/08/21  
**Surface Conditions:** Concrete  
**Location N/S:** 0' N/S of MW08  
**Location E/W:** 10' W of MW08  
**Reviewed by:** CJT  
**Date Completed:** 04/09/21

**BORING LOG** | **INJ-1**  
 IW92

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 91 feet bgs  
**Water Depth After Completion** 86.75 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0									0.0-1.0 feet bgs: 12 inches of concrete at surface. Boring cleared by air knife to 5 feet bgs.	
							SM		1.0-5.0 feet bgs: Silty SAND, trace gravel, tan, no solvent odor, moist (15-80-5).	
5			100	0.0			ML		5.0-8.0 feet bgs: Sandy SILT with gravel, gray to brown, no solvent odor, moist (60-30-10).	
			100	0.0			SM		8.0-9.0 feet bgs: Silty SAND, trace gravel, brown, no solvent odor, moist (20-75-5).	
10			100	0.0			SP-SM		9.0-15.0 feet bgs: Poorly graded SAND with silt and gravel, brown, no solvent odor, moist (10-60-30).	
15			100	0.0						

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 103

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/08/21  
**Surface Conditions:** Concrete  
**Location N/S:** 0' N/S of MW08  
**Location E/W:** 10' W of MW08  
**Reviewed by:** CJT  
**Date Completed:** 04/09/21

**BORING LOG** | **INJ-1**  
 IW92

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 91 feet bgs  
**Water Depth After Completion** 86.75 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
			100	0.0			SP-SM		15.0-17.0 feet bgs: Poorly graded SAND with silt and gravel, brown, no solvent odor, moist (10-60-30).	
			100	0.0			SM		17.0-20.0 feet bgs: Silty SAND with gravel, brown, no solvent odor, moist (15-70-15).	
20			100	0.2			SM		20.0-27.5 feet bgs: Silty SAND with gravel, brown with iron oxide staining, no solvent odor, moist (20-55-25).	
25			100	0.2					27.5-29.0 feet bgs: 6-inch-diameter granite fragments.	
30			100	0.0					29.0-30.0 feet bgs: Silty SAND, trace gravel, dark gray, no solvent odor, moist (15-80-5).	

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 103

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/08/21  
**Surface Conditions:** Concrete  
**Location N/S:** 0' N/S of MW08  
**Location E/W:** 10' W of MW08  
**Reviewed by:** CJT  
**Date Completed:** 04/09/21

**BORING LOG** | **INJ-1**  
 IW92

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 91 feet bgs  
**Water Depth After Completion** 86.75 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
35			80	0.0			SM		30.0-40.0 feet bgs: Silty SAND with gravel, tan with iron oxide staining, no solvent odor, moist (15-60-25).	
40			100	0.2			SP-SM		40.0-45.0 feet bgs: Poorly graded SAND with silt and gravel, tan with iron oxide staining, no solvent odor, moist (10-75-15).	
45			75	0.1						

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 103

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/08/21  
**Surface Conditions:** Concrete  
**Location N/S:** 0' N/S of MW08  
**Location E/W:** 10' W of MW08  
**Reviewed by:** CJT  
**Date Completed:** 04/09/21

**BORING LOG** | **INJ-1**  
 IW92

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 91 feet bgs  
**Water Depth After Completion** 86.75 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
45.0	45.0-52.0	100	100	0.0			SP-SM		45.0-52.0 feet bgs: Poorly graded SAND with silt and gravel, tan with iron oxide staining, no solvent odor, moist (10-75-15).	
52.0	52.0-55.0	100	100	0.0			GP		52.0-55.0 feet bgs: Sandy GRAVEL with silt, tan, no solvent odor, moist (10-35-55).	
55.0	55.0-60.0	100	100	0.0			SP-SM		55.0-60.0 feet bgs: Poorly graded SAND with silt and gravel, tan with iron oxide staining, no solvent odor, moist (10-75-15).	
60.0		100	100	0.0						

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 103

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface







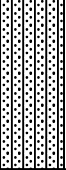

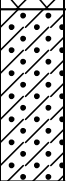
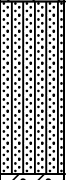
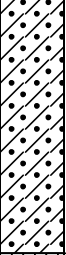
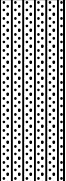
**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/08/21  
**Surface Conditions:** Concrete  
**Location N/S:** 0' N/S of MW08  
**Location E/W:** 10' W of MW08  
**Reviewed by:** CJT  
**Date Completed:** 04/09/21

**BORING LOG** | **INJ-1**  
 IW92

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

 **Water Depth At Time of Drilling** 91 feet bgs  
 **Water Depth After Completion** 86.75 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
			100	0.0			SM		60.0-62.0 feet bgs: Silty SAND with gravel, brown, no solvent odor, moist (15-70-15).	
									62.0-63.0 feet bgs: Building tie-back encountered.	
			100	0.0			SP-SM		63.0-65.0 feet bgs: Poorly graded SAND with silt and gravel, brown, no solvent odor, moist (10-75-15).	
65			100	0.0			SM		65.0-67.0 feet bgs: Silty SAND with gravel, red/orange with iron oxide staining, no solvent odor, moist (20-60-20).	
			100	0.0			SP-SM		67.0-70.0 feet bgs: Poorly graded SAND with silt and gravel, brown to tan, no solvent odor, moist (10-65-25).	
70			100	0.0			SM		70.0-75.0 feet bgs: Silty SAND with gravel, tan, no solvent odor, moist (20-60-20).	
			100	0.0						
75			100	0.0						

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 103

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount



**Notes/Comments:**  
 bgs = below ground surface

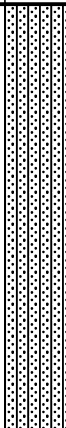
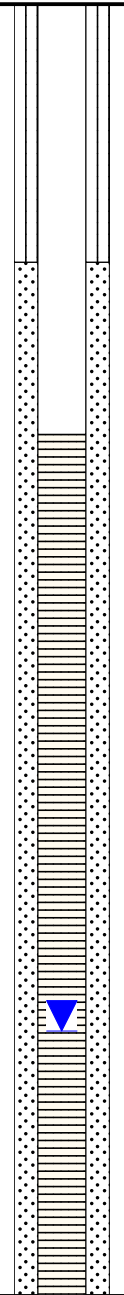
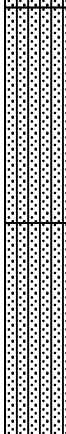
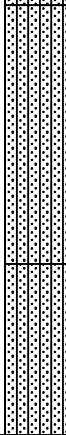

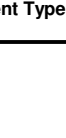
**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/08/21  
**Surface Conditions:** Concrete  
**Location N/S:** 0' N/S of MW08  
**Location E/W:** 10' W of MW08  
**Reviewed by:** CJT  
**Date Completed:** 04/09/21

**BORING LOG** | **INJ-1**  
 IW92

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

 **Water Depth At Time of Drilling** 91 feet bgs  
 **Water Depth After Completion** 86.75 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
80			100	0.0			SM		75.0-80.0 feet bgs: Silty SAND with gravel, tan, no solvent odor, moist (20-60-20).	
			100	0.0			SM		80.0-82.5 feet bgs: Silty SAND with gravel, tan, faint solvent odor, moist (20-60-20).	
			100	15.5			SM		82.5-85.0 feet bgs: Silty SAND with gravel, tan, moderate solvent odor, moist (20-60-20).	
85			100	158.3			SM		85.0-88.0 feet bgs: Silty SAND, trace gravel, brown, moderate solvent odor, moist to wet (20-75-5).	
			100	682	INJ-1-87		SM		88.0-90.0 feet bgs: Silty SAND, trace gravel, brown, faint solvent odor, wet (20-75-5).	
90			100	54			SM			

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 103

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/08/21  
**Surface Conditions:** Concrete  
**Location N/S:** 0' N/S of MW08  
**Location E/W:** 10' W of MW08  
**Reviewed by:** CJT  
**Date Completed:** 04/09/21

**BORING LOG** | **INJ-1**  
 IW92

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 91 feet bgs  
**Water Depth After Completion** 86.75 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
90.0	90.0-94.0		100	0.5	INJ-1-92		SM		90.0-94.0 feet bgs: Silty SAND, trace gravel, brown, no solvent odor, wet (20-75-5).	
94.0	94.0-102.5		100	1.8			SM		94.0-102.5 feet bgs: Silty SAND with gravel, brown, no solvent odor, wet (15-45-40).	
102.5	102.5-105.0		100	0.0			SM		102.5-105.0 feet bgs: Silty SAND, trace gravel, brown, no solvent odor, wet (20-75-5).	
105.0			100	0.0	INJ-1-105				Boring terminated at 105 feet bgs. Injection well IW92 installed, screened from 80 to 105 feet bgs.	

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 103

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/06/21  
**Surface Conditions:** Concrete  
**Location N/S:** 16' N of MW28  
**Location E/W:** 2.5' W of MW28  
**Reviewed by:** CJT  
**Date Completed:** 04/08/21

**BORING LOG** | **INJ-2**  
 IW93

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 90 feet bgs  
**Water Depth After Completion** 84.23 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0									0.0-1.0 feet bgs: 12 inches of concrete at surface. Boring cleared by air knife to 5 feet bgs.	
							SM		1.0-5.0 feet bgs: Silty SAND with gravel, tan, no solvent odor, moist (15-60-25).	
5				0.1			ML		5.0-10.0 feet bgs: SILT with sand and gravel, grayish brown, no solvent odor, moist (60-30-10).	
		100		0.0						
		100		0.0						
10				0.0			SP-SM		10.0-15.0 feet bgs: SAND with silt and gravel, brown, no solvent odor, moist (10-60-30).	
		100		0.0						
		100		0.0						
15										

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 102

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/06/21  
**Surface Conditions:** Concrete  
**Location N/S:** 16' N of MW28  
**Location E/W:** 2.5' W of MW28  
**Reviewed by:** CJT  
**Date Completed:** 04/08/21

**BORING LOG** | **INJ-2**  
 IW93

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 90 feet bgs  
**Water Depth After Completion** 84.23 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
			100	0.0			SP-SM		15.0-16.0 feet bgs: SAND with silt and gravel, brown, no solvent odor, moist (10-60-30).	
			100	0.0			SM		16.0-24.0 feet bgs: Silty SAND with gravel, brown, no solvent odor, moist (15-60-25).	
20			100	0.0			SM		24.0-27.5 feet bgs: Silty SAND, trace gravel, gray with iron oxide staining, no solvent odor, moist (20-75-5).	
25			100	0.0			ML		27.5-30.0 feet bgs: SILT with sand, dark brown, no solvent odor, moist (90-10-0).	
30			100	0.0						

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 102

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/06/21  
**Surface Conditions:** Concrete  
**Location N/S:** 16' N of MW28  
**Location E/W:** 2.5' W of MW28  
**Reviewed by:** CJT  
**Date Completed:** 04/08/21

**BORING LOG** | **INJ-2**  
 IW93

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 90 feet bgs  
**Water Depth After Completion** 84.23 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
			100	0.0			ML		30.0-33.0 feet bgs: Sandy SILT, trace gravel, blue-gray, no solvent odor, moist (70-25-5).	
			100	0.0			ML		33.0-43.0 feet bgs: Sandy SILT, trace gravel, tan with iron oxide staining, no solvent odor, moist (70-25-5).	
35			100	0.0						
			100	0.0						
40			100	0.0						
			100	0.0						
45			100	0.0			SP-SM		43.0-45.0 feet bgs: SAND with silt and gravel, tan with iron oxide staining, no solvent odor, moist (10-75-15)	

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 102

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface





**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/06/21  
**Surface Conditions:** Concrete  
**Location N/S:** 16' N of MW28  
**Location E/W:** 2.5' W of MW28  
**Reviewed by:** CJT  
**Date Completed:** 04/08/21

**BORING LOG** | **INJ-2**  
 IW93

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 90 feet bgs  
**Water Depth After Completion** 84.23 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
50			100	0.0			SP-SM		45.0-51.0 feet bgs: SAND with silt and gravel, tan with iron oxide staining, no solvent odor, moist (10-75-15)	
55			100	0.0			GP		51.0-58.0 feet bgs: Sandy GRAVEL with silt, tan, no solvent odor, moist (10-35-55).	
60			100	0.0			SM		58.0-60.0 feet bgs: Silty SAND with gravel, tan with iron oxide staining, no solvent odor, moist (20-60-20).	

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 102

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface





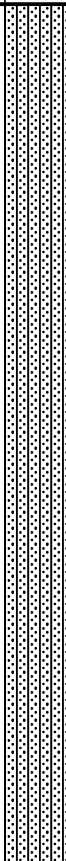

**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/06/21  
**Surface Conditions:** Concrete  
**Location N/S:** 16' N of MW28  
**Location E/W:** 2.5' W of MW28  
**Reviewed by:** CJT  
**Date Completed:** 04/08/21

**BORING LOG** | **INJ-2**  
 IW93

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

 **Water Depth At Time of Drilling** 90 feet bgs  
 **Water Depth After Completion** 84.23 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
65			100	0.0			SM		60.0-70.0 feet bgs: Silty SAND with gravel, tan with iron oxide staining, no solvent odor, moist (20-60-20).	
70			100	0.0			SP-SM		70.0-75.0 feet bgs: Poorly graded SAND with silt and gravel, tan, no solvent odor, moist (10-70-20).	
75			100	0.0						

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 102

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/06/21  
**Surface Conditions:** Concrete  
**Location N/S:** 16' N of MW28  
**Location E/W:** 2.5' W of MW28  
**Reviewed by:** CJT  
**Date Completed:** 04/08/21

**BORING LOG** | **INJ-2**  
 IW93

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 90 feet bgs  
**Water Depth After Completion** 84.23 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
75.0	75.0-77.0	100	0.0				SP-SM		75.0-77.0 feet bgs: Poorly graded SAND with silt and gravel, tan, no solvent odor, moist (10-70-20).	
77.0	77.0-82.5	100	0.0				SM		77.0-82.5 feet bgs: Silty SAND, trace gravel, brown, no solvent odor, moist (20-75-5).	
82.5	82.5-85.0	100	0.1				SM		82.5-85.0 feet bgs: Silty SAND, trace gravel, gray to brown, faint solvent odor, moist (20-75-5).	
85.0	85.0-88.0	100	145		INJ-2-86		SM		85.0-88.0 feet bgs: Silty SAND, trace gravel, gray to brown, moderate solvent odor, moist (20-75-5).	
88.0	88.0-90.0	100	75				SM		88.0-90.0 feet bgs: Silty SAND, trace gravel, brown, faint solvent odor, moist (20-75-5).	

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 102

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 04/06/21  
**Surface Conditions:** Concrete  
**Location N/S:** 16' N of MW28  
**Location E/W:** 2.5' W of MW28  
**Reviewed by:** CJT  
**Date Completed:** 04/08/21

**BORING LOG** | **INJ-2**  
 IW93

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 90 feet bgs  
**Water Depth After Completion** 84.23 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
90			100	1.9	INJ-2-92		SM		90.0-93.0 feet bgs: Silty SAND, trace gravel, brown, no solvent odor, wet (20-75-5).	
95			100	2.4			SM		93.0-100.0 feet bgs: Silty SAND with gravel, brown to gray, no solvent odor, wet (15-45-40).	
100			100	2.1						
100			100	2.0						
100			100	0.5			SM		100.0-105.0 feet bgs: Silty SAND, trace gravel, brown, no solvent odor, wet (20-75-5).	
105				0.2	INJ-2-105				<b>Boring terminated at 105 feet bgs. Injection well IW93 installed, screened from 80 to 105 feet bgs.</b>	

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 102

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 03/29/21  
**Surface Conditions:** Concrete  
**Location N/S:** 16.5' N of MW28  
**Location E/W:** 10' E of MW28  
**Reviewed by:** CJT  
**Date Completed:** 04/05/21

**BORING LOG** | **INJ-3**  
 IW94

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 89 feet bgs  
**Water Depth After Completion** 87.18 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0									0.0-1.0 feet bgs: 11.5 inches of concrete at surface. Boring cleared by air knife to 5 feet bgs.	
							SM		1.0-5.0 feetbgs: Silty SAND with gravel, tan, no solvent odor, moist (15-60-25).	
5				0.2			SP-SM		5.0-7.5 feet bgs: SAND with silt and gravel, brown, no solvent odor, moist (10-80-10).	
		100		0.0			ML		7.5-10.0 feet bgs: Sandy SILT with gravel, brown, no solvent odor, moist (60-30-10).	
		100		0.0			SP-SM		10.0-15.0 feet bgs: SAND with silt and gravel, brown, no solvent odor, moist (10-60-30).	
10				0.0						
		100		0.0						
		100		0.1						
15										

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 101

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 03/29/21  
**Surface Conditions:** Concrete  
**Location N/S:** 16.5' N of MW28  
**Location E/W:** 10' E of MW28  
**Reviewed by:** CJT  
**Date Completed:** 04/05/21

**BORING LOG** | **INJ-3**  
 IW94

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 89 feet bgs  
**Water Depth After Completion** 87.18 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
			100	0.0			SP-SM		15.0-17.5 feet bgs: SAND with silt and gravel, brown, no solvent odor, moist (10-60-30).	
			100	0.1			SM		17.5-20.0 feet bgs: Silty SAND with gravel, brown, no solvent odor, moist (15-60-25).	
20			100	1.2			SM		20.0-22.5 feet bgs: Silty SAND with gravel, brown, no solvent odor, moist (25-65-10).	
			100	0.0			SP-SM		22.5-25.0 feet bgs: SAND with silt and gravel, brown, no solvent odor, moist (10-75-15).	
25			100	1.1			SM		25.0-27.5 feet bgs: Silty SAND with gravel, brown with iron oxide staining, no solvent odor, moist (20-65-15).	
			100	0.0			SM		27.5-30.0 feet bgs: Silty SAND, trace gravel, gray, no solvent odor, moist (15-80-5).	
30										

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 101

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface





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**Location E/W:** 10' E of MW28  
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**BORING LOG** | **INJ-3**  
 IW94

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 89 feet bgs  
**Water Depth After Completion** 87.18 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
30.0-32.5			100	0.4			ML		30.0-32.5 feet bgs: Sandy SILT, trace gravel, dark brown, no solvent odor, moist (70-25-5).	
32.5-35.0			100	0.1			ML		32.5-35.0 feet bgs: Sandy SILT, trace gravel, blue/gray, no solvent odor, moist (70-25-5).	
35.0-41.0			100	0.2			ML		35.0-41.0 feet bgs: Sandy SILT, trace gravel, tan with iron oxide staining, no solvent odor, moist (70-25-5).	
41.0-45.0			100	0.1			SM		41.0-45.0 feet bgs: Silty SAND with gravel, tan with iron oxide staining, no solvent odor, moist (15-60-25).	

<b>Drilling Co./Driller:</b> Cascade / Matt <b>Drilling Equipment:</b> Track-mounted sonic <b>Sampler Type:</b> Plastic sleeve <b>Hammer Type/Weight:</b> -- lbs <b>Total Boring Depth:</b> 105 feet bgs <b>Total Well Depth:</b> 105 feet bgs <b>State Well ID No.:</b> BNW 101	<b>Well/Auger Diameter:</b> 4 / 8 inches <b>Well Screened Interval:</b> 80 - 105 feet bgs <b>Screen Slot Size:</b> 0.020 inches <b>Filter Pack Used:</b> Sand <b>Surface Seal:</b> Concrete <b>Annular Seal:</b> Bentonite <b>Monument Type:</b> Flush mount	<b>Notes/Comments:</b> bgs = below ground surface  <hr/> <b>Page:</b>   <b>3 of 7</b>
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**DRAFT**

**Project:** Troy Laundry Seattle Site  
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**Date Completed:** 04/05/21

**BORING LOG** | **INJ-3**  
 IW94

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 89 feet bgs  
**Water Depth After Completion** 87.18 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
45.0	45.0-50.0	100	0.1				SP-SM		45.0-50.0 feet bgs: SAND with silt and gravel, tan with iron oxide staining, no solvent odor, moist (10-75-15).	
50.0	50.0-57.5	100	0.1				GP		50.0-57.5 feet bgs: GRAVEL with sand and silt, tan, no solvent odor, moist (10-35-55).	
55.0	57.5-60.0	100	0.1				SM		57.5-60.0 feet bgs: Silty SAND with gravel, tan, no solvent odor, moist (20-60-20).	
60.0		100	0.2							

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 101

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



**DRAFT**

**Project:** Troy Laundry Seattle Site  
**Project Number:** 0731-004  
**Logged by:** SNW  
**Date Started:** 03/29/21  
**Surface Conditions:** Concrete  
**Location N/S:** 16.5' N of MW28  
**Location E/W:** 10' E of MW28  
**Reviewed by:** CJT  
**Date Completed:** 04/05/21

**BORING LOG** | **INJ-3**  
 IW94

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 89 feet bgs  
**Water Depth After Completion** 87.18 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
65			100	0.3			SM		60.0-70.0 feet bgs: Silty SAND with gravel, tan with iron oxide staining, no solvent odor, moist (20-55-25).	
70			100	0.1			SP-SM		70.0-75.0 feet bgs: Poorly graded SAND with silt and gravel, tan, no solvent odor, moist (10-70-20).	
75			100	0.2						

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 101

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



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**Reviewed by:** CJT  
**Date Completed:** 04/05/21

**BORING LOG** | **INJ-3**  
 IW94

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 89 feet bgs  
**Water Depth After Completion** 87.18 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
75.0	75.0-79.0	100	0.2				SM		75.0-79.0 feet bgs: Silty SAND with gravel, tan, no solvent odor, moist (20-60-20).	
79.0	79.0-80.0	100	0.0				SM		79.0-80.0 feet bgs: Silty SAND, trace gravel, brown, no solvent odor, moist (20-75-5).	
80.0	80.0-89.0	100	0.1				SM		80.0-89.0 feet bgs: Silty SAND, trace gravel, brown, moderate solvent odor, moist (20-75-5).	
80.0		100	607.3		INJ-3-83					
85.0		100	1,761							
85.0		75	1,683							
89.0		100	1,062				SM		89.0-90.0 feet bgs: Silty SAND, trace gravel, brown, moderate solvent odor, wet (20-75-5).	

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 101

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface



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**Project:** Troy Laundry Seattle Site  
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**Surface Conditions:** Concrete  
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**BORING LOG** | **INJ-3**  
 IW94

**Site Address:** 300 Boren Avenue North  
 Seattle, Washington

**Water Depth At Time of Drilling** 89 feet bgs  
**Water Depth After Completion** 87.18 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
90.0	90.0-93.0		100	5.8	INJ-3-92		SM		90.0-93.0 feet bgs: Silty SAND, trace gravel, brown, no solvent odor, wet (20-75-5).	
93.0	93.0-100.0		100	11.5		SM		93.0-100.0 feet bgs: Silty SAND with gravel, brown, no solvent odor, wet (15-45-40).		
95.0	95.0-85.0		85	1.5						
100.0	100.0-80.0		100	0.8						
100.0	100.0-105.0		100	1.4	INJ-3-105		SP-SM		100.0-105.0 feet bgs: Poorly graded SAND with silt and gravel, brown, no solvent odor, wet to moist (10-70-20).	
105.0	<b>Boring terminated at 105 feet bgs. Injection well IW94 installed, screened from 80 to 105 feet bgs.</b>									

**Drilling Co./Driller:** Cascade / Matt  
**Drilling Equipment:** Track-mounted sonic  
**Sampler Type:** Plastic sleeve  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 105 feet bgs  
**Total Well Depth:** 105 feet bgs  
**State Well ID No.:** BNW 101

**Well/Auger Diameter:** 4 / 8 inches  
**Well Screened Interval:** 80 - 105 feet bgs  
**Screen Slot Size:** 0.020 inches  
**Filter Pack Used:** Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 bgs = below ground surface

**APPENDIX B**  
**Statistical Trend Analysis**





## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

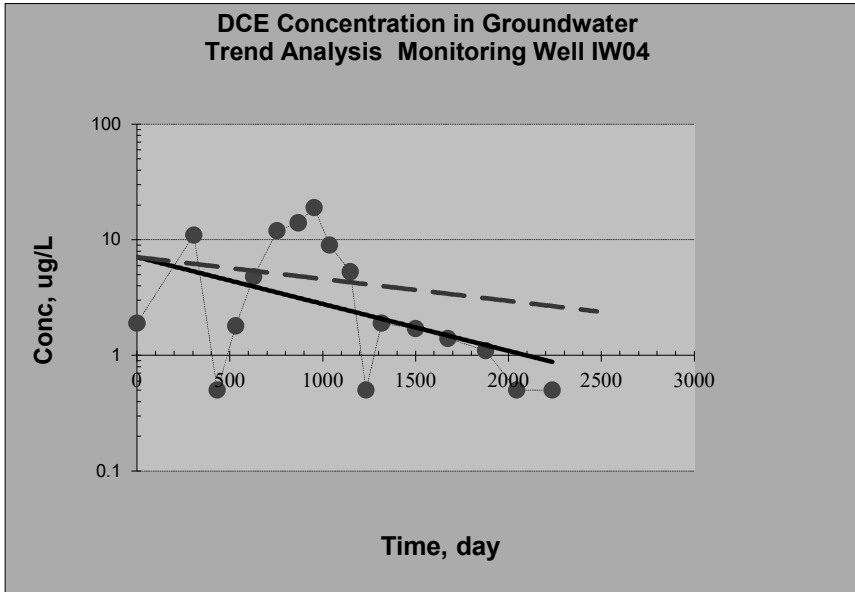
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance: cis-1,2-DCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	IW04	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	93.739%		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.341 @50% C.L.;	0.159 @85% C.L.	
Half Life for $k_{point}$ , yr	2.034 @50% C.L.;	4.351 @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

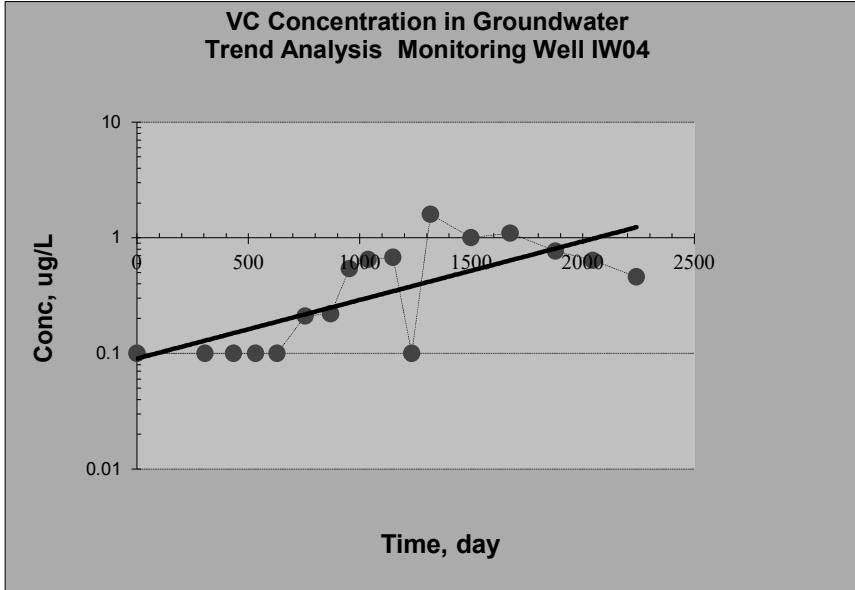
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance VC

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	IW04	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	99.898%		
Plume Stability?	Expanding ; Decision Criteria is 85%.		
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	NA @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	NA @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

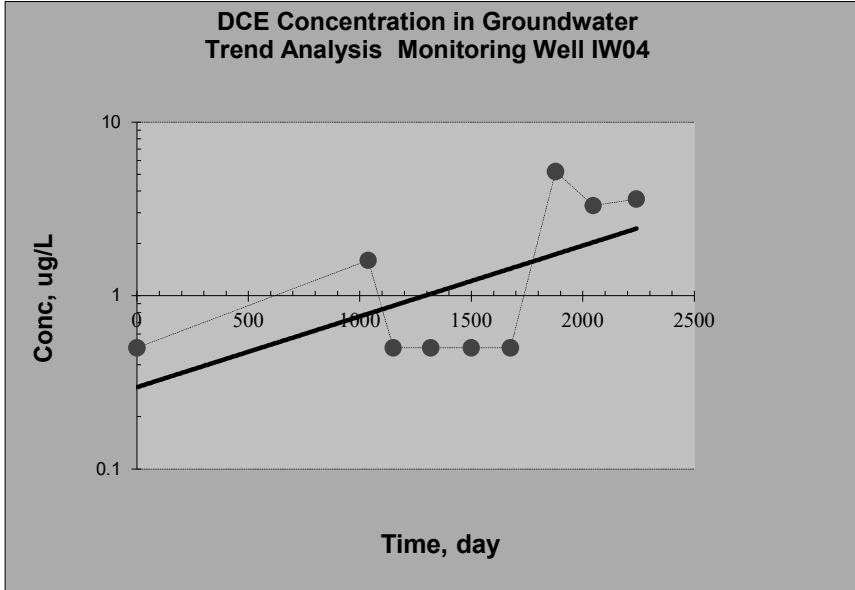
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance: DCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	IW06	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	92.485%		
Plume Stability?	Expanding	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	NA @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	NA @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	





## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

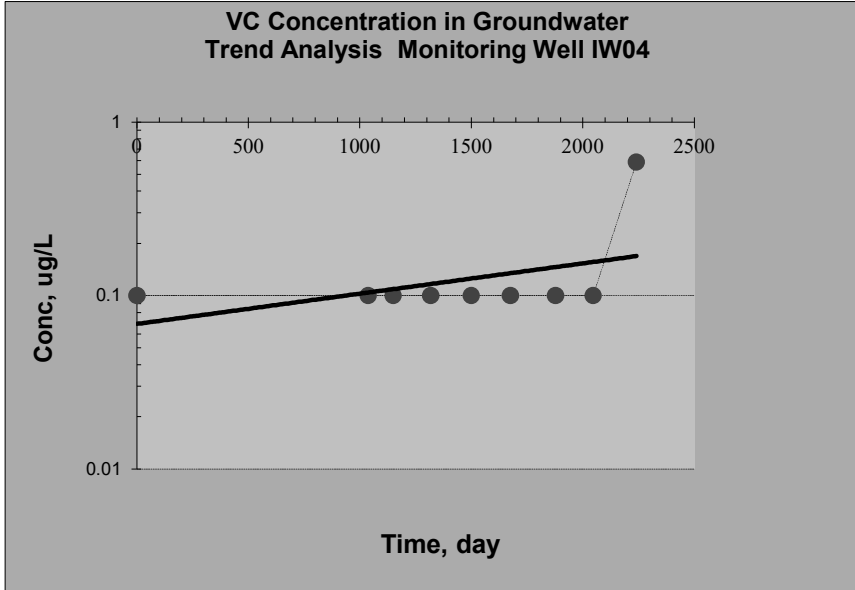
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance VC

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	IW06	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	78.192%		
Plume Stability?	UD	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	NA @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	NA @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

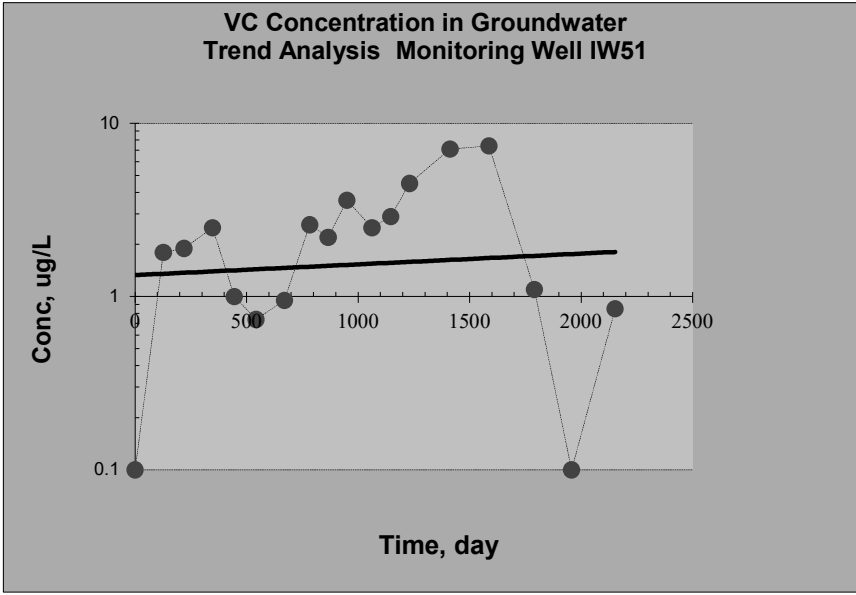
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance VC

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	IW50	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	23.645%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.052 @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	13.271 @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

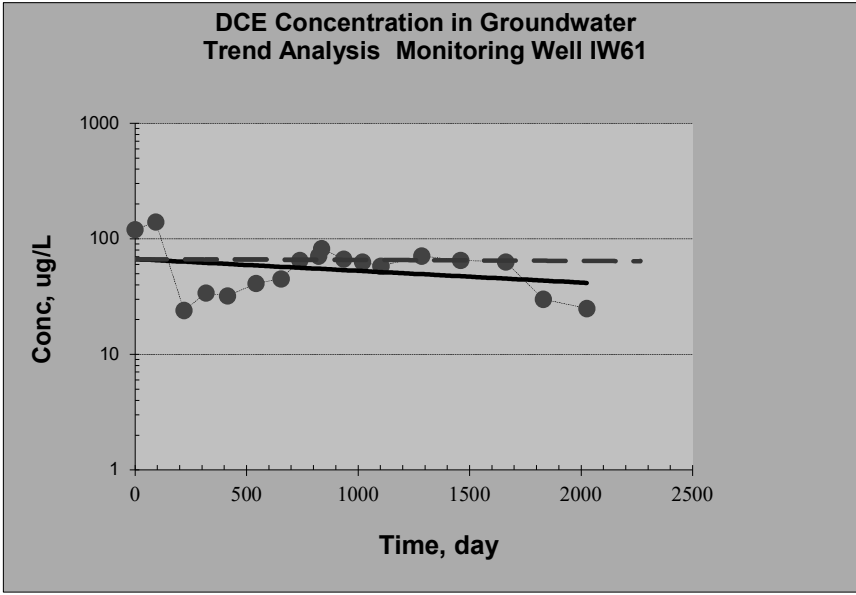
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance cis-1,2-DCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	IW61	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	73.537%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.085 @50% C.L.;	0.006 @85% C.L.	
Half Life for $k_{point}$ , yr	8.116 @50% C.L.;	107.811 @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	





## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

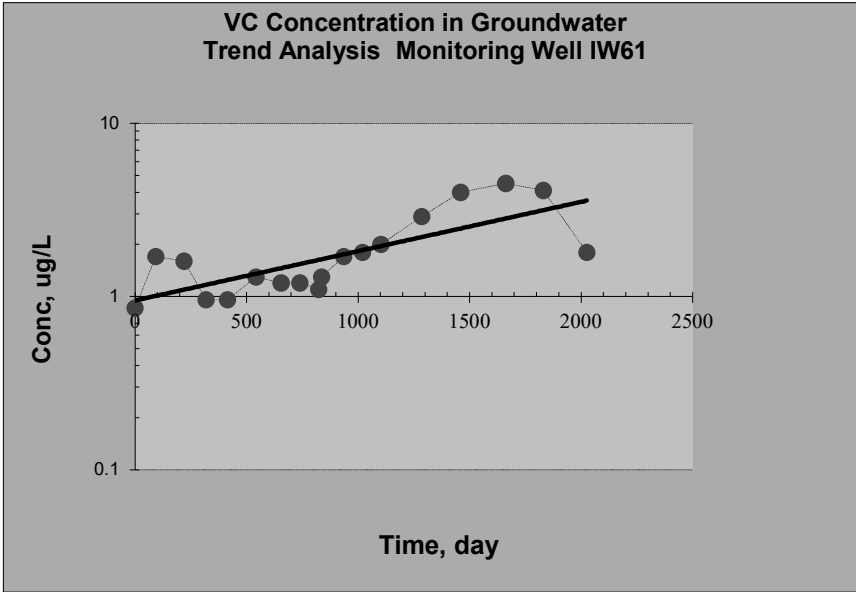
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance VC

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	IW61	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	99.972%		
Plume Stability?	Expanding	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	NA @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	NA @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

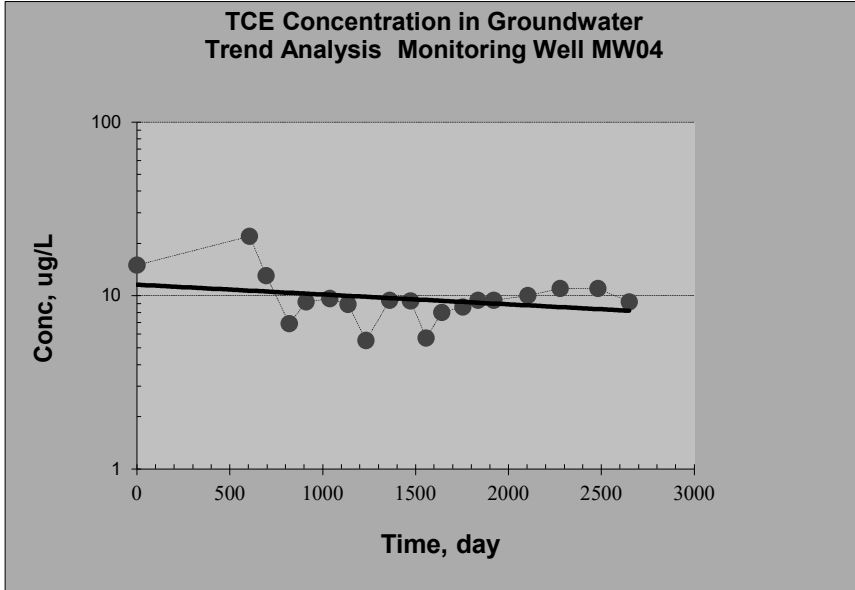
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance: TCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW04	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	63.871%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.033 @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	21.245 @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

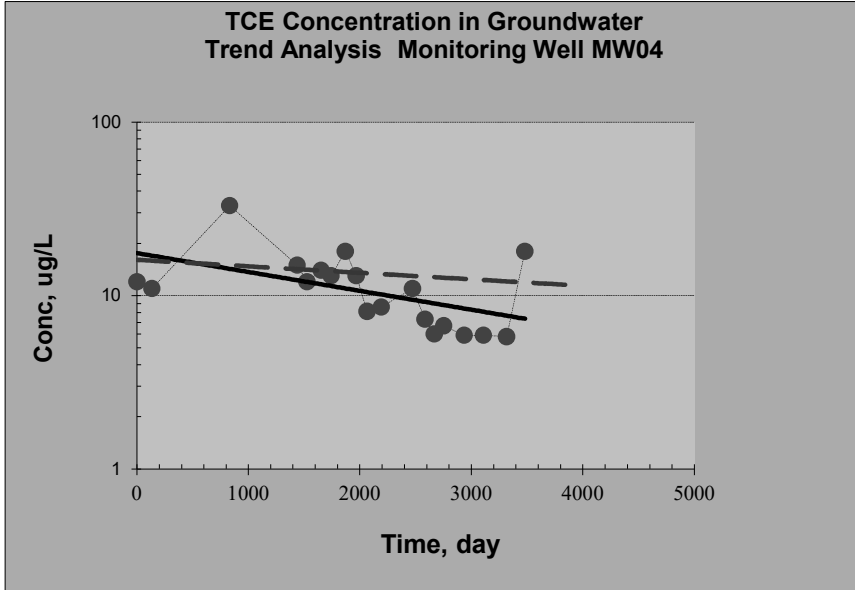
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance TCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW07	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	93.260%		
Plume Stability?	Shrinking ; Decision Criteria is 85%.		
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.070 @50% C.L.;	0.031 @85% C.L.	
Half Life for $k_{point}$ , yr	9.973 @50% C.L.;	22.038 @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	





## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

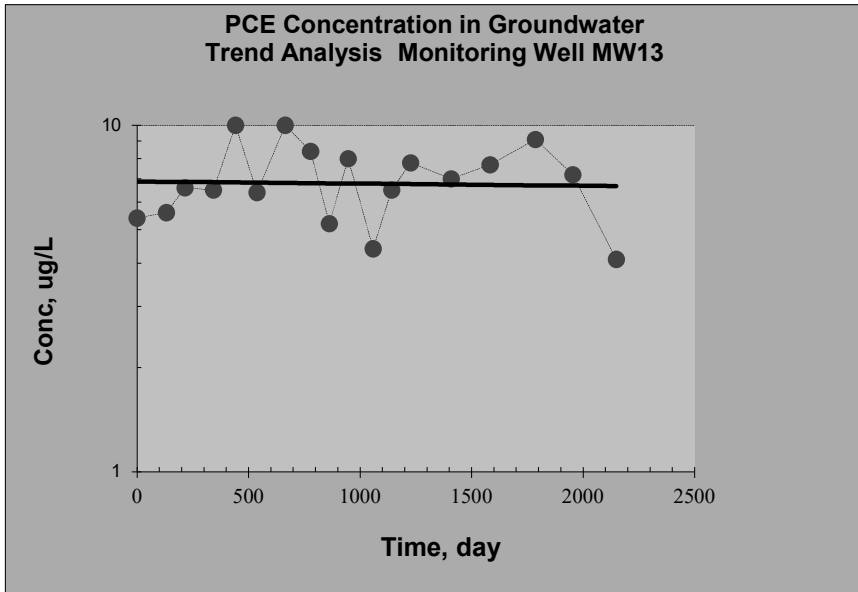
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance: PCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW13	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	11.171%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.005 @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	132.965 @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

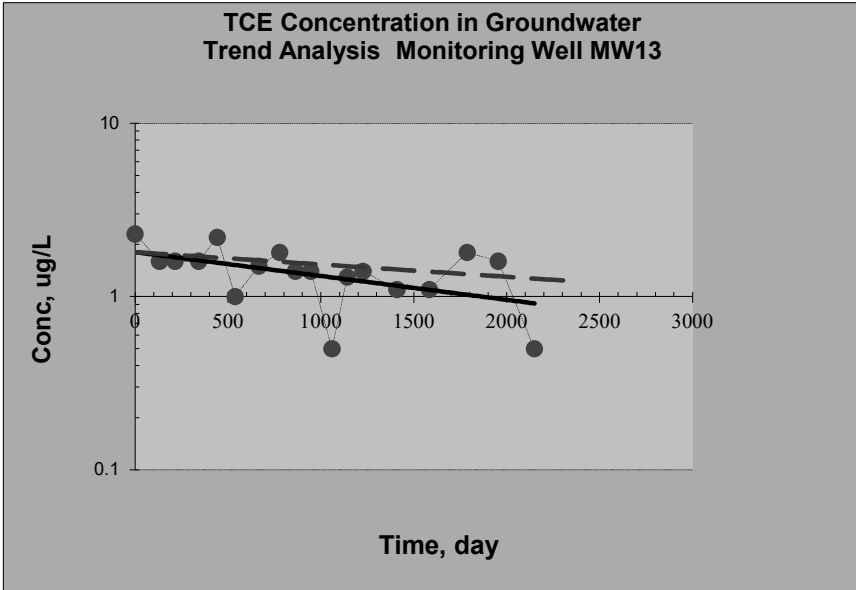
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance TCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW13	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	95.791%		
Plume Stability?	Shrinking ; Decision Criteria is 85%.		
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.116 @50% C.L.;	0.060 @85% C.L.	
Half Life for $k_{point}$ , yr	5.998 @50% C.L.;	11.623 @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

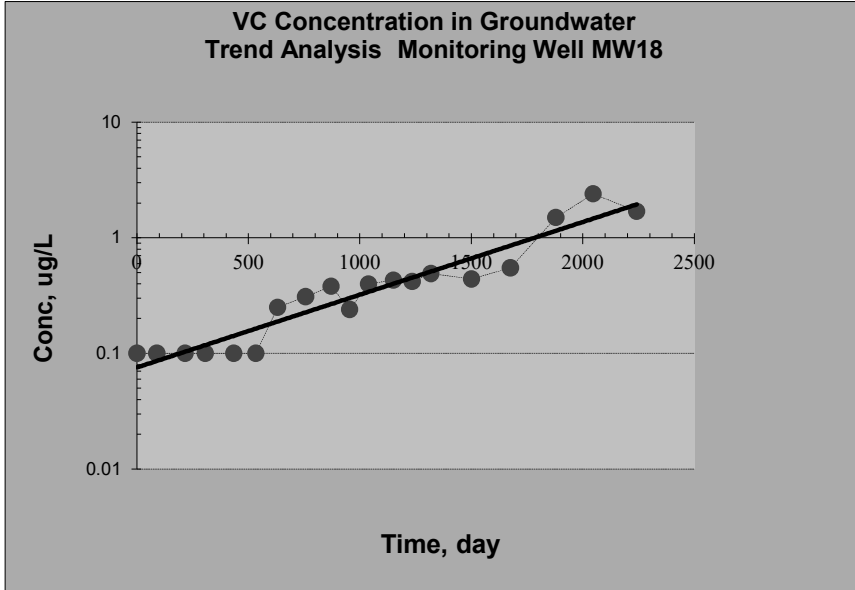
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance VC

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW18	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	100.000%		
Plume Stability?	Expanding	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	NA @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	NA @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	





## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

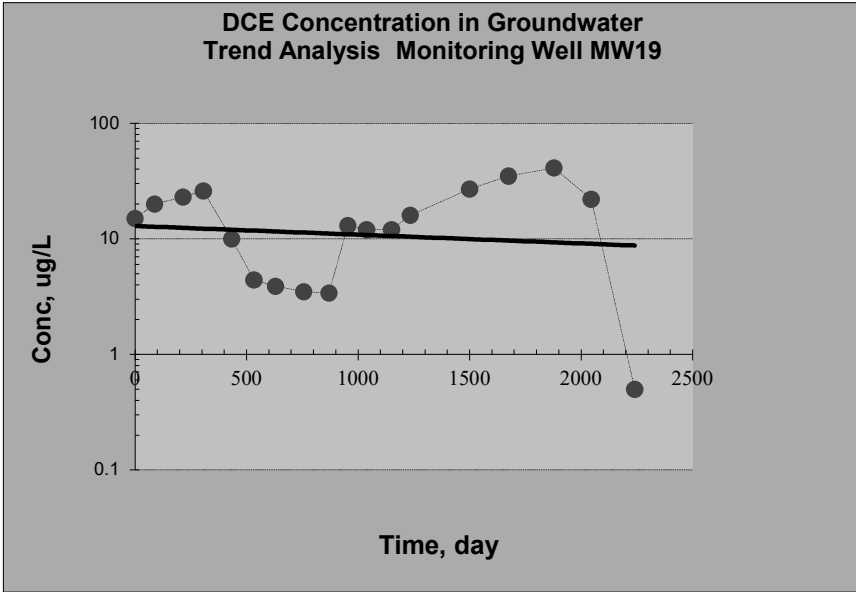
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance: cis-1,2-DCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW19	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	32.972%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.063 @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	10.926 @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

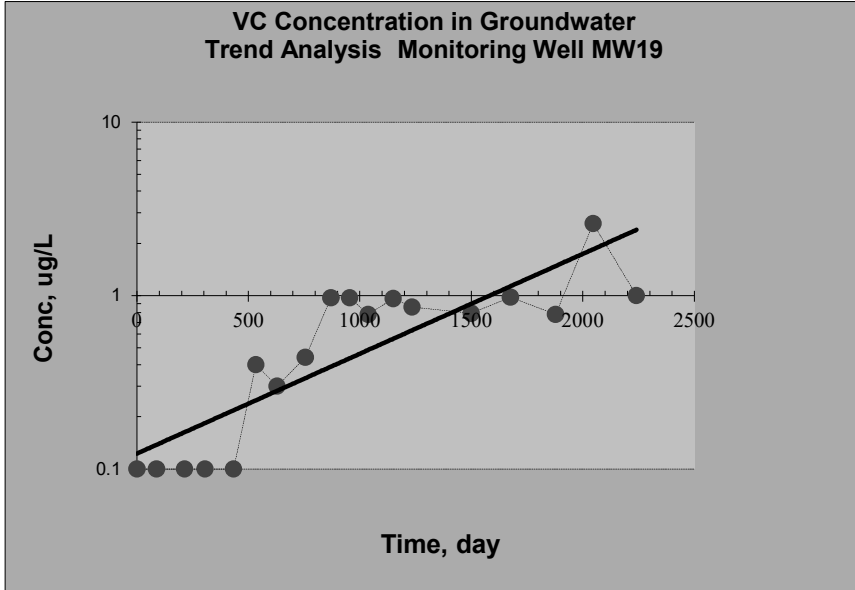
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance VC

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW19	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	99.999%		
Plume Stability?	Expanding	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	NA @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	NA @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

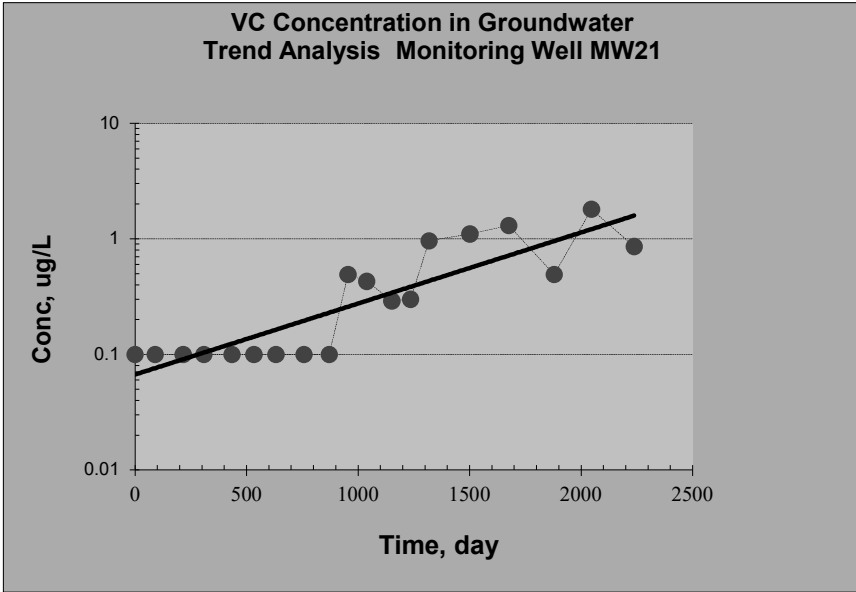
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance VC

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW21	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	100.000%		
Plume Stability?	Expanding	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	NA @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	NA @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	<input type="text"/>
Plot #2: Sampling date #2	<input type="text"/>
Plot #3: Sampling date #3	<input type="text"/>
Plot #4: Sampling date #4	<input type="text"/>
Plot #5: Sampling date #5	<input type="text"/>
Plot #6: Sampling date #6	<input type="text"/>





## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

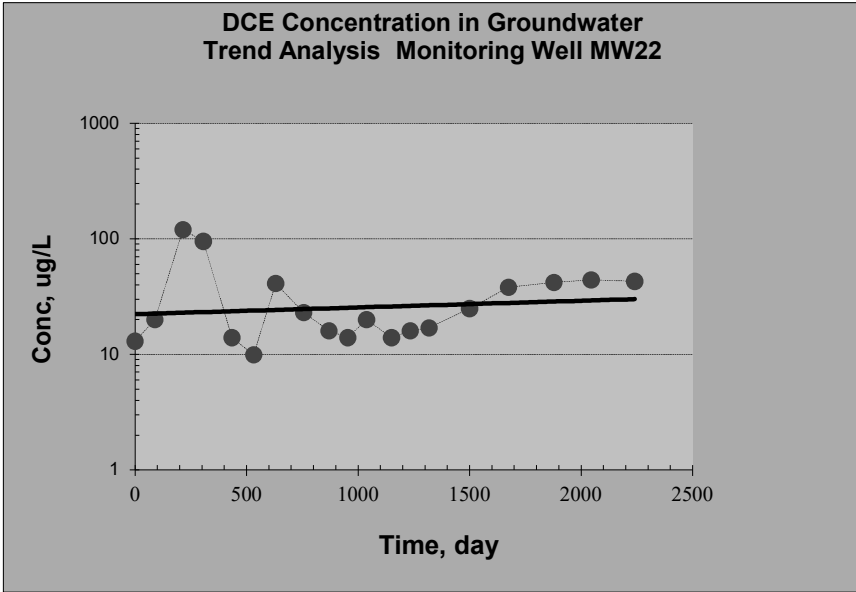
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance: cis-1,2-DCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW22	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	40.275%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.049 @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	14.212 @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

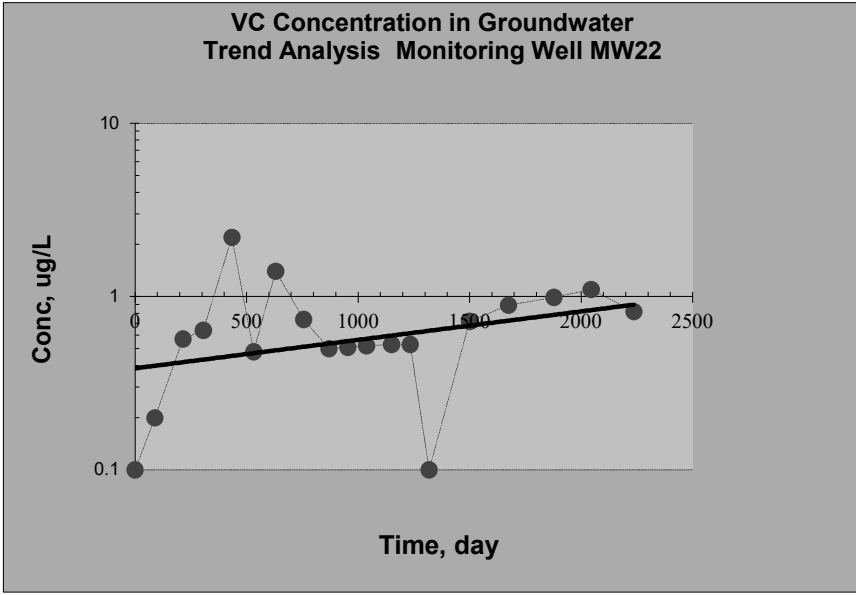
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance VC

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW22	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	81.915%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.138 @50% C.L.;	0.032 @85% C.L.	
Half Life for $k_{point}$ , yr	5.025 @50% C.L.;	21.363 @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	<input type="text"/>
Plot #2: Sampling date #2	<input type="text"/>
Plot #3: Sampling date #3	<input type="text"/>
Plot #4: Sampling date #4	<input type="text"/>
Plot #5: Sampling date #5	<input type="text"/>
Plot #6: Sampling date #6	<input type="text"/>



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

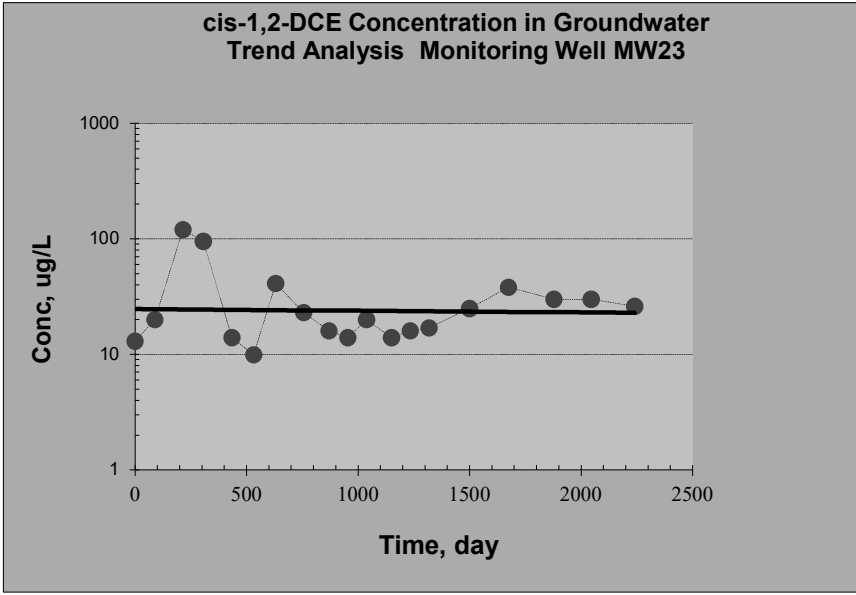
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance: cis-1,2-DCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW23	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	10.929%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.012 @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	57.396 @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	





## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

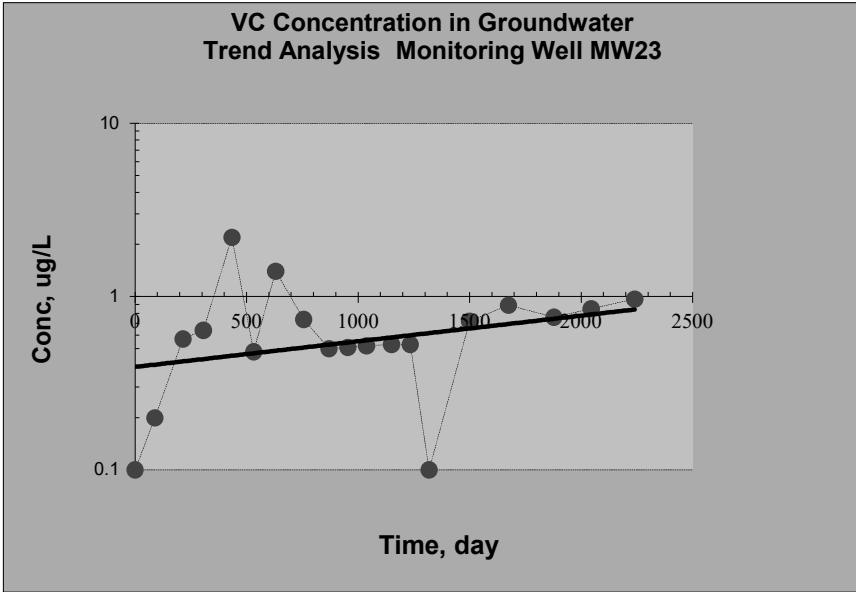
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance VC

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW23	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	77.801%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.124 @50% C.L.;	0.020 @85% C.L.	
Half Life for $k_{point}$ , yr	5.577 @50% C.L.;	35.256 @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

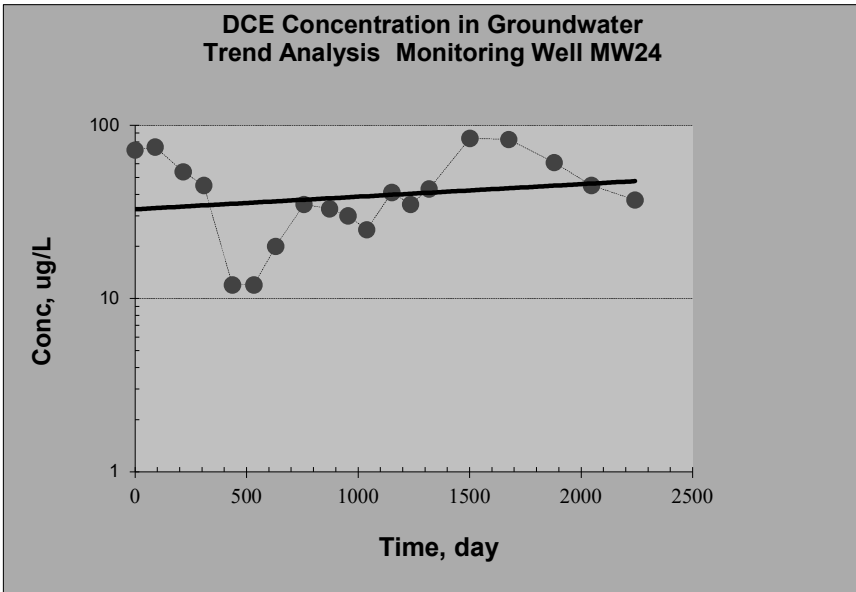
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance cis-1,2-DCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW24	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	57.399%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.061 @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	11.409 @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	<input type="text"/>
Plot #2: Sampling date #2	<input type="text"/>
Plot #3: Sampling date #3	<input type="text"/>
Plot #4: Sampling date #4	<input type="text"/>
Plot #5: Sampling date #5	<input type="text"/>
Plot #6: Sampling date #6	<input type="text"/>



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

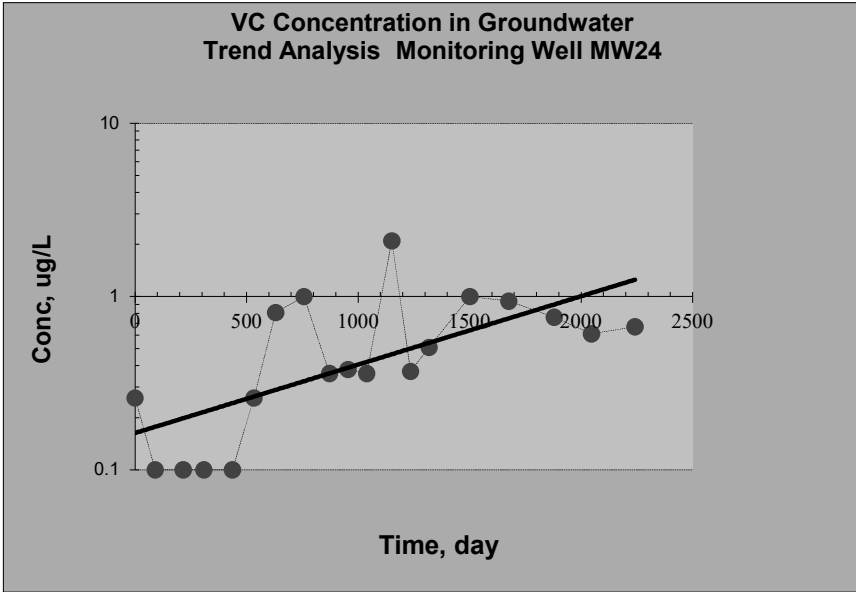
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance VC

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW24	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	99.830%		
Plume Stability?	Expanding	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	NA @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	NA @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

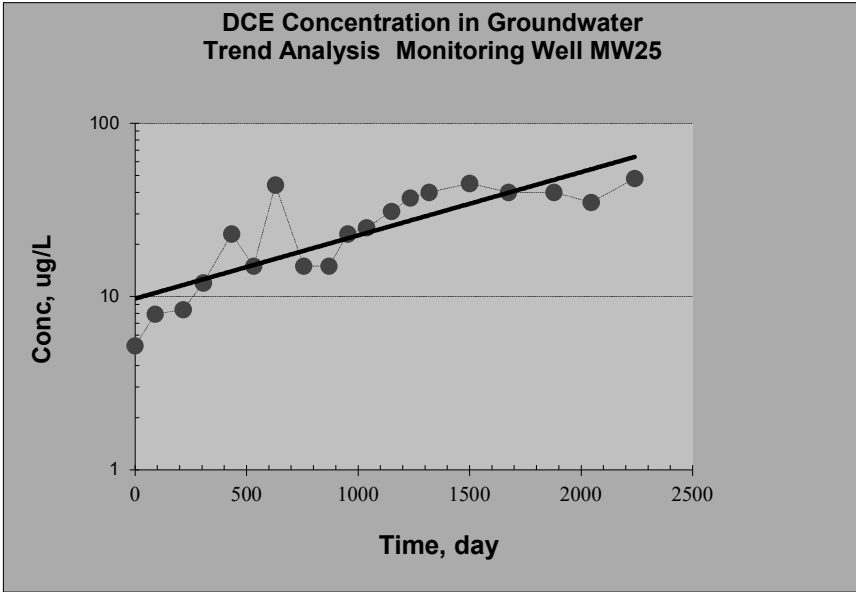
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance: cis-1,2-DCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW25	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	99.999%		
Plume Stability?	Expanding ; Decision Criteria is 85%.		
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	NA @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	NA @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	





## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

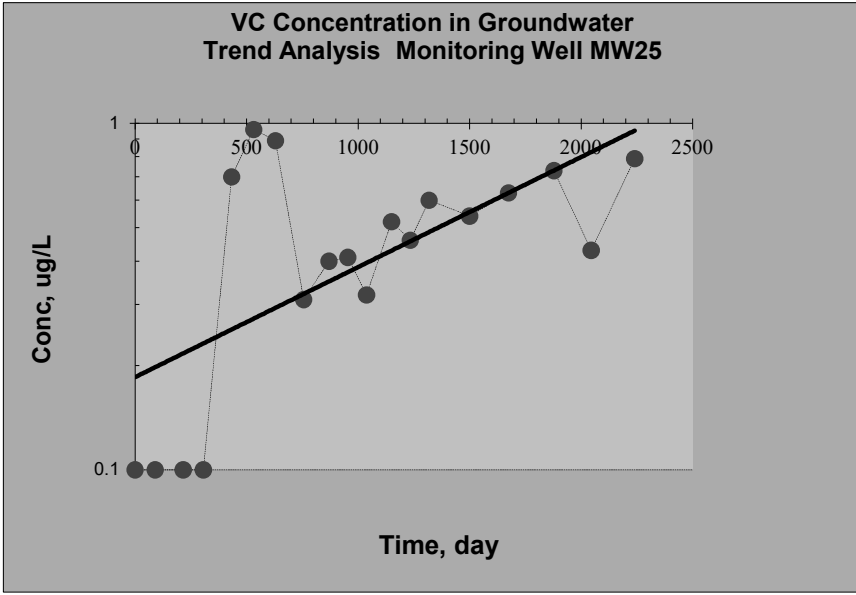
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance VC

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW25	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	99.585%		
Plume Stability?	Expanding ; Decision Criteria is 85%.		
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	NA @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	NA @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

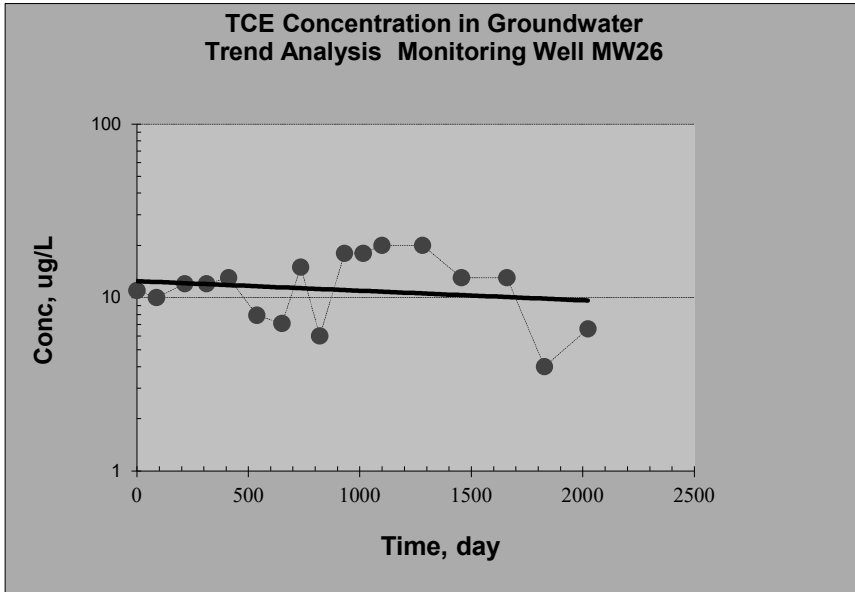
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance TCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW26	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	48.540%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.047 @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	14.896 @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

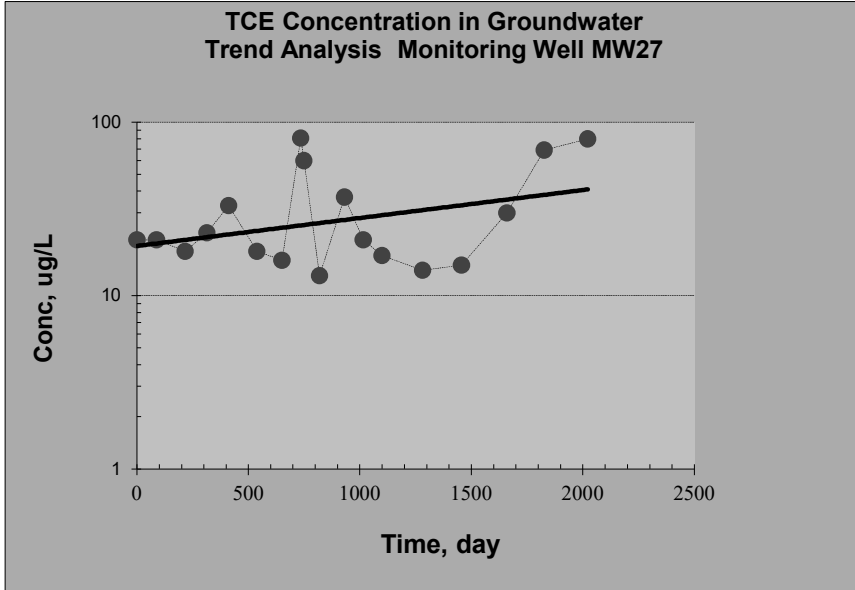
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance TCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW27	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	85.596%		
Plume Stability?	Expanding	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	NA @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	NA @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	





## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

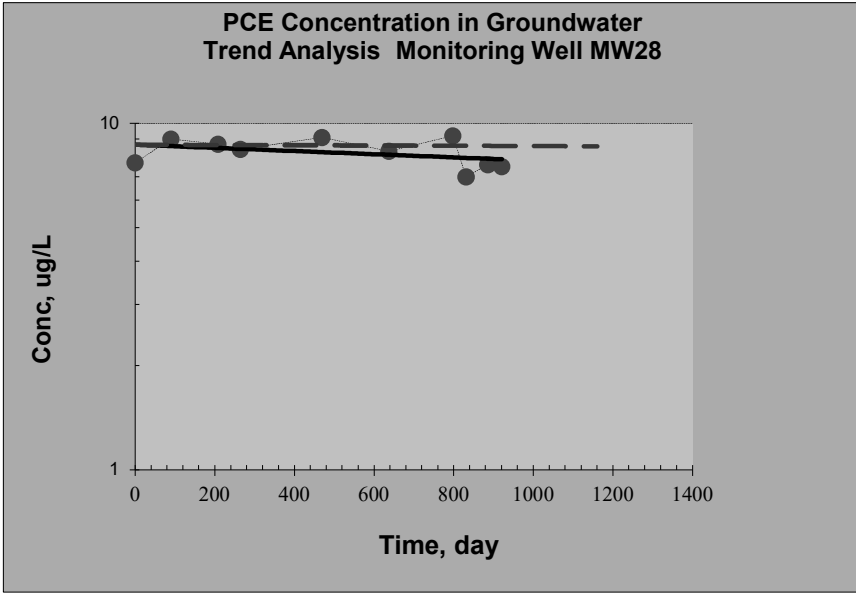
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance: PCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW28	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	73.870%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.039 @50% C.L.;	0.003 @85% C.L.	
Half Life for $k_{point}$ , yr	17.976 @50% C.L.;	199.406 @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

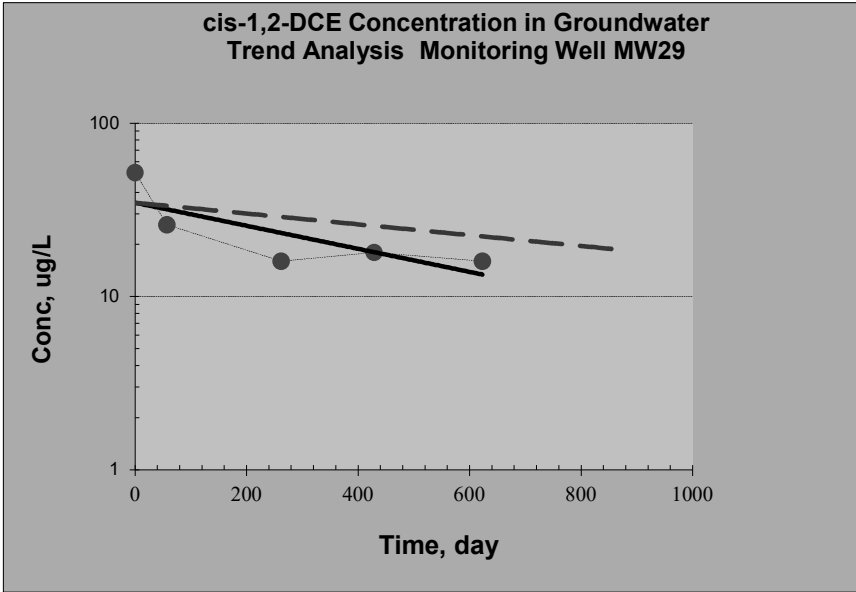
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance: cis-1,2-DCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW29	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	88.904%		
Plume Stability?	Shrinking ; Decision Criteria is 85%.		
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.559 @50% C.L.;	0.262 @85% C.L.	
Half Life for $k_{point}$ , yr	1.241 @50% C.L.;	2.646 @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

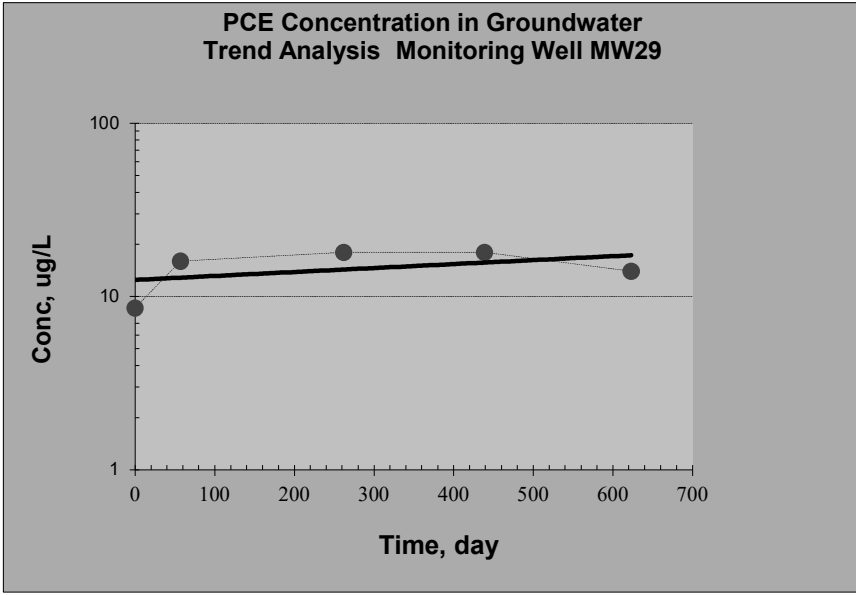
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance: PCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW29	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	54.841%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.192 @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	3.611 @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	<input type="text"/>
Plot #2: Sampling date #2	<input type="text"/>
Plot #3: Sampling date #3	<input type="text"/>
Plot #4: Sampling date #4	<input type="text"/>
Plot #5: Sampling date #5	<input type="text"/>
Plot #6: Sampling date #6	<input type="text"/>



## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

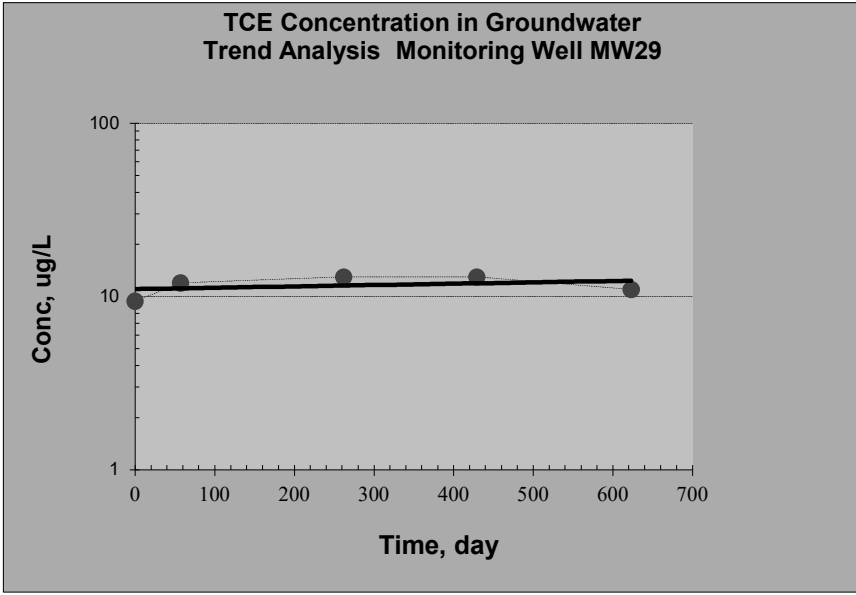
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance TCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW29	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	42.508%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.065 @50% C.L.;	NA @85% C.L.	
Half Life for $k_{point}$ , yr	10.603 @50% C.L.;	NA @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	





## Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: Troy Laundry Property

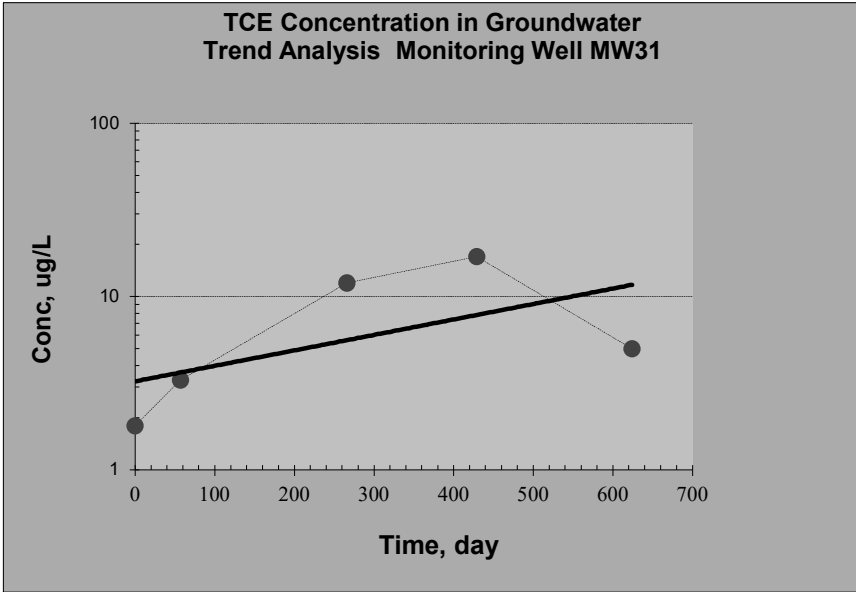
Site Address: 300 Boren Ave North Fairview Ave North

Additional Description: Seattle, Washington

Hazardous Substance TCE

### 1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	MW31	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	69.267%		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant ( $k_{point}$ ), yr <sup>-1</sup>	0.750 @50% C.L.;	0.023 @85% C.L.	
Half Life for $k_{point}$ , yr	0.925 @50% C.L.;	30.293 @85% C.L.	



### 2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	<input type="text"/>
Plot #2: Sampling date #2	<input type="text"/>
Plot #3: Sampling date #3	<input type="text"/>
Plot #4: Sampling date #4	<input type="text"/>
Plot #5: Sampling date #5	<input type="text"/>
Plot #6: Sampling date #6	<input type="text"/>