PARTNERS INC

Remedial Investigation Report

Former Northwest Plating 825 South Dakota Street and 812 and 820 South Adams Street Seattle, Washington (Facility No. 2231, VCP No. NW2769)

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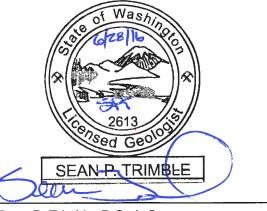
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- Attachment B Soil Boring Logs
- Attachment C Laboratory Data Sheets and Chain-of-Custody Documentation
- Attachment D Conceptual Site Model

ABBREVIATIONS AND ACRONYMS

Abbreviation/	
Acronym	Definition
1,1-DCE	1,1-Dichloroethene
1,1,1-TCA	1,1,1-Trichloroethane
1,1,2-TCA	1,1,2-Trichloroethane
AGI	Applied Geochemical Imaging, LLC
bgs	Below ground surface
cis-1,2-DCE	cis-1,2-Dichlorethene
CN	Cyanide
COC	Compound of concern
COPC	Compound of potential concern
CrVI	Hexavalent chromium
CSM	Conceptual site model
CUL	Cleanup level
DPT	Direct-push technology
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
EPI	Environmental Partners, Inc.
HCI	Hart Crowser, Inc.
µg/L	Micrograms per liter
µg/m³	Micrograms/cubic meter
mg/kg	Milligrams per kilogram
MTCA	Model Toxics Control Act (70.105D) and its implementing regulations (Washington
	Administrative Code [WAC] 173-340
PCE	Tetrachloroethene
PID	Photoionization detector
REL	Remediation level
RI	Remedial Investigation
SES	SoundEarth Strategies
SLsg	Soil gas screening levels
SSI	Spectrum Services, Inc.
TCE	Trichloroethylene
trans-1,2-DCE	trans-1,2-Dichloroethene
VC	Vinyl chloride
VCP	Voluntary Cleanup Program
VI	Vapor intrusion
VOCs	Volatile organic compounds
WAC	Washington Administrative Code
WII	Washington Industries, Inc.

1.0 INTRODUCTION

Environmental Partners, Inc. (EPI) is pleased to submit this Remedial Investigation (RI) Report for the Former Northwest Plating Site located at 812 and 820 South Adams Street and 825 South Dakota Street in Seattle, Washington ("the Site"). The location of the Site is depicted on Figure 1.

This RI report was requested in support of Washington Industries, Inc.'s (WII's) ongoing efforts to address the soil and groundwater impacts at the Site and to comply with the assessment and cleanup requirements of the Model Toxics Control Act (70.105D) and its implementing regulations (Washington Administrative Code [WAC] 173-340; collectively MTCA).

1.1 Site Description

The Site is located approximately 3 miles south of downtown Seattle along the eastern margin of the lower Duwamish River industrial area. It is outside the Lower Duwamish Superfund Site boundary, which is approximately 1.1 miles to the west. The Site consists of the WII Property at 825 South Dakota Street (the location of the former Northwest Plating operation) and all locations where hazardous substances from releases on that property have come to be located. The lateral and vertical extent of the Site have been fully characterized by this RI. The lateral extent of the Site, as defined in this RI, is identified on Figure 2.

The WI Property consists of one parcel identified in the property records of King County as Tax Parcel Number 788610-1290. The southern adjacent property ("Perine Property") located at 812 and 820 South Adams Street is also part of the Site and is identified in the King County property records as Tax Parcel Number 788610-1280. The western adjacent property is located at 4114 Airport Way South and is identified in the King County property records as Tax Parcel Number 788610-1280. The western adjacent property is located at 4114 Airport Way South and is identified in the King County property records as Tax Parcel Number 788610-1315. The Site also extends into the South Dakota Street right-of-way and may marginally impact properties to the north of South Dakota Street.

The Site has a Facility ID Number of 2231 in the Washington State Department of Ecology (Ecology) Facilities and Site Identification database, with alternate names including North Star Casteel, Northwest Plating, and Washington Industries. The Site is enrolled in Ecology's Voluntary Cleanup Program (VCP) with the VCP Number NW2769.

The WII Property is 0.31 acre. It has been improved with an 18,000-square-foot, slab-on-grade brick and masonry building with concrete floors. The exterior of the property consists of paved sidewalks and driveways, and border planter areas. The on-property building improvements consist of what appears to be three separate structures with shared walls. These structures are of varying quality. The structure in the southeastern corner of the WII Property is not weather tight and has limited structural integrity and utility.

The Perine Property is 0.85 acre and has been improved with two buildings, "Building 1" and "Building 2." Building 1 was constructed in 1957 and is a two-story brick and masonry building with a wood roof. Building 2 was constructed in 1996 and is a two-story prefabricated steel and reinforced concrete-framed structure with a metal roof. Prior to 1996, two historic buildings existed in the area where Building 2 is now located. The historic buildings date back to the early 1920s and early 1940s.

1.1.1 Zoning and Land Use

The Site is currently zoned as Industrial General 2 (IG2), which is defined by the City of Seattle as a zone to

"allow a broad range of uses where the industrial function of an area is less established than in IG1 zones, and where additional commercial activity could improve employment opportunities and the physical condition of the area, without conflicting with industrial activity."

The City of Seattle's July 2015 Draft *Comprehensive Plan for Managing Growth* also identifies the area of the Site as a planned "Industrial Area." IG2 zoning allows for general and heavy manufacturing, commercial uses (subject to some limits), high impact uses (as a conditional use), entertainment uses (other than adult), transportation and utility services, and salvage and recycling uses.

According to the definition provided in MTCA under WAC 173-340-200, "industrial properties" means:

"properties that are or have been characterized by, or are to be committed to, traditional industrial uses such as processing or manufacturing of materials, marine terminal and transportation areas and facilities, fabrication, assembly, treatment, or distribution of manufactured products, or storage of bulk materials, that are either:

• Zoned for industrial use by a city or county conducting land use planning under chapter 36.70A RCW (Growth Management Act); or

• For counties not planning under chapter 36.70A RCW (Growth Management Act) and the cities within them, zoned for industrial use and adjacent to properties currently used or designated for industrial purposes."

Based on the criteria set forth in MTCA, the Site and surrounding area meet the definition of "industrial properties."

The Site and surrounding properties are supplied with water by the City of Seattle municipal water system. The City of Seattle has an ordinance restricting the use of groundwater as a drinking water source in this industrial area of Seattle, and drinking water wells are not lawfully authorized in the Site vicinity.

1.2 Site History

1.2.1 Washington Industries, Inc. Property

The Northwest Plating Company was a metal electroplating business that began operations in 1957 at the WII Property. Metal plating operations and procedures conducted at the facility included cadmium, chromium, copper, nickel, and zinc plating; anodizing; application of special metal coatings; metal inspection services; metal polishing and refinishing; and spray painting (GeoEngineers 1989, Spectrum Services, Inc. 1999). Metals degreasing was routinely performed as a step in the plating process. The WII Property building is currently unoccupied.

Historical reports prepared for the Site indicate that releases of chemicals to soil and groundwater at the WII Property were initially discovered and investigated in 1989. The prior investigations identified the presence of volatile organic compounds (VOCs), hexavalent chromium (CrVI), and cyanide (CN) in soil and groundwater beneath the WII Property at concentrations greater than cleanup levels in effect at that time. The predominant VOC in soil and groundwater was trichloroethene (TCE).

Subsequent to the investigative actions documented in GeoEngineers 1989 and GeoEngineers 1990, at least two rounds of interim actions were undertaken, which included removal of historic plating process equipment and tanks, and removal of grossly impacted soils adjacent to and beneath the removed equipment. These actions are generally documented in AET 1993, HCI 2004a, HCI 2004b, and HCI 2012.

A partial cleanup of the structure was completed in 1993 that focused on removing selected hazardous materials (AET 1993). Hazardous waste and plating solutions were removed at that time, in addition to most of the tanks and equipment. However, the concrete flooring and underlying contaminated soil and groundwater remained.

In 2005, Hart Crowser, Inc. (HCI) undertook additional interim cleanup actions consisting of:

- building decontamination and limited demolition;
- removal and off-site disposal of hazardous and non-hazardous materials and equipment;
- excavation of soil hot spots near former dip tanks, processing areas, and floor trenches; and
- soil sampling and analysis.

Approximately 150 cubic yards of impacted soil were removed during the cleanup action. Those interim actions were later documented in HCI's 2012 *Historical Site Cleanup Summary* memorandum (HCI 2012).

The prior investigation did not succeed in fully characterizing the Site and the remedial actions did not succeed in fully remediating soil and groundwater contamination.

1.2.2 Perine Property

The Perine Property went through various stages of development and redevelopment through the 1900s. As set forth in Section 1.1, the Perine Property currently consists of two buildings constructed in 1957 and 1996 respectively. The majority of the Perine Property is currently occupied by the Perine Danforth Company, which uses the space for the storage and retail sales of screws, bolts, and other plated fasteners. Additional smaller lease spaces within the Perine building are used for workspaces and offices. The known historic operations at the Perine Property include a winery, a beverage distribution company, a warehouse and machine shop, and an emergency response equipment refurbishing operation.

Initial assessment of the Perine Property conducted by SoundEarth Strategies (SES) included collection and analysis of soil and groundwater samples on the northern portion of the Perine Property immediately adjacent to the WII Property. This assessment identified tetrachloroethene (PCE) and TCE in soil and groundwater at concentrations exceeding potentially applicable MTCA cleanup levels (CULs), and at concentrations exceeding the vapor intrusion screening level for TCE in groundwater as presented in the Guidance for Evaluating Soil Vapor Intrusion in Washington State, Investigation and Remedial Action, October 2009 (Draft VI Guidance). The screening levels used for the SES assessment assumed a residential exposure model that was not applicable to the Perine Property based on either zoning or current or future land use. Additionally, the screening levels presented in Table B-1, Appendix 8 of the Draft VI Guidance have since been updated.

Based upon those findings, two additional rounds of vapor intrusion (VI) assessment were performed by SES at the Perine Property. Those VI assessments included the collection of five indoor air samples and an exterior background air sample, and performance of a passive soil gas survey. The VI assessments were summarized in the following documents:

- Air Quality Evaluation, Perine Property, dated July 28, 2011 by SES; and
- *Results from Indoor Ambient Air and Soil Gas Sampling*, Perine Property (Technical Memorandum), dated January 13, 2012 by SES.

The VI assessments detected TCE in indoor air at concentrations ranging from 0.42 micrograms per cubic meter (μ g/m³) to 1.7 μ g/m³. Several of the detected concentrations of TCE were greater than the current MTCA Method B Indoor Air CUL of 0.37 μ g/m³, which is again based on a residential exposure scenario and the presence of infants and small children. The observed concentrations of TCE in indoor air did not exceed the MTCA Method C Indoor Air CUL of 2.0 μ g/m³.

Groundwater quality beneath the Perine Property was also assessed by SES and those data were presented in *Groundwater Quality Evaluation, Perine Property,* dated July 28, 2011 (SES 2011d). That evaluation indicated the presence of TCE in groundwater at a single location in the north central portion of the Perine Property at a concentration exceeding the VI Groundwater Screening Level for protection of indoor air to a residential standard.

Subsequent to the VI assessment and groundwater quality evaluation, Perine also conducted pilot testing to assess the viability of addressing potential VI into the Perine Property through vacuum capture beneath the floor slab. That work is summarized in a document titled *Memorandum, Pilot Testing for Sub-Slab Depressurization System Design*, dated October 15, 2012 by SES.

A previous assessment of indoor air quality was conducted on the WII Property in the interior of the former AV-Pro lease space on the WII Property¹. Three indoor air samples were collected in January 2004 and a fourth sample was collected in October 2007. Those results are presented in a memorandum titled *Historical Site Cleanup Summary, Northwest Plating Site,* dated October 3, 2012 by HCI. The indoor air samples contained elevated concentrations of TCE, 1,1-dichloroethene (1,1-DCE), and vinyl chloride (VC).

¹ AV-Pro remains a tenant at the Site. The former and current AV-Pro lease spaces are indicated on Figure 2.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 Objectives

The objectives of the RI described herein were to:

- Complete the characterization of the lateral and vertical distribution of impacts originating from historic WII Property uses;
- Develop a list of compounds of potential concern (COPCs) for the Site;
- Develop a conceptual site model (CSM) for the source, fate, and transport of the COPCs;
- Identify and develop CULs and remediation levels (RELs) for the COPCs;
- Identify the compounds of concern (COCs) for the Site based on the CULs and RELs; and
- Characterize the COCs sufficiently to allow for the evaluation, development, and selection of an interim action and/or cleanup action for the Site.

2.2 Methodology

In order to achieve the RI objectives, EPI collected samples of all of the potentially affected media at the Site. The media sampled included soil vapor, soil, groundwater, and indoor air. The RI activities for the Site were conducted in multiple iterative phases of investigation, where the results of initial investigation guided the scope of later phases of investigation. In this manner, each phase of investigation built on the findings of prior phases and presented a focused and cost-effective method for characterizing the Site. Specific investigation methods are described in the sections below.

2.2.1 Passive Soil Vapor Sampling

As an initial step in Site characterization for screening current conditions after the previous interim actions conducted by others, EPI conducted a passive vapor sampling evaluation at the Site. The passive survey provided a semi-quantitative measure of the relative abundance of VOCs in soil gas and served as an indication of where soil and groundwater concentrations are highest and where source areas may remain. This methodology provided a broad-based property-wide screening that is not generally possible using other methods.

Passive soil vapor sampling was performed using Gore-sorber methods and involved placing a total of 41 sampling points throughout the WII Property. The locations of the sampling points are indicated on Figure 3.

Each sampling point consisted of a 3/8-inch diameter hole drilled through the floor of the existing building and about 6 inches into the underlying material. Gore-sorber sorbent material was placed in each location and the surface was tightly sealed with a rubber stopper hammered into place to prevent atmospheric intrusion or venting. Several sorbers were placed outside on the east, north and west sides of the

building. When it was not possible to place those within a sidewalk or asphalt they were placed into the surrounding soil at a depth of about 2 feet and the surface was sealed with hydrated bentonite clay.

The sorbers were left in place for a period of 4 weeks and were then removed and sent to Applied Geochemical Imaging, LLC (AGI) for analysis under normal chain-of-custody protocols. The resulting data were contoured to identify soil gas hot spots that could be indicative of underlying impacts to soil and groundwater (Figure 4). The data were used to guide additional sampling and analysis.

The data indicated likely release areas throughout the former Northwest Plating operations area in the southeastern portion of the WII Property and a generally northwesterly axis of migration consistent with the expected direction of groundwater migration. AGI's summary report is included as Attachment A.

2.2.2 Sub-Slab Soil Gas Sampling

Sub-slab soil gas samples were collected in locations indicated by the passive soil gas survey to have the potential for elevated VOC concentrations and to contribute to vapor intrusion. Sub-slab soil vapor samples provided fully quantitative data that could be compared to potentially applicable screening levels and CULs.

On March 18, 2013, EPI installed four sub-slab vapor-sampling ports at the WII Property (ports WISS-1 through WISS-4). The ports were installed by drilling a 1-inch diameter hole approximately 1.5 inches into the floor slab using a rotohammer. Subsequently, a 3/8-inch-diameter hole was drilled through the remainder of the slab in the center of the 1-inch hole. After the holes were carefully cleared of concrete dust, $\frac{1}{4}$ -inch outside diameter Teflon tubing was installed through the slab with an open end slightly beneath the slab. The annular space between the tubing and the side of the 1-inch hole was sealed with approximately $\frac{1}{2}$ inch of moist clay, and finished with quick-setting concrete to the upper surface of the floor.

On March 19, 2013, EPI conducted sub-slab vapor sampling at the four ports at the WI Property and at three existing sampling ports previously installed at the Perine Property by SES. Two of the sampling ports at the Perine Property were in the Perine Danforth Company building (VS-1 and VS-2) and one was in the workspace located to the north of the current AV-Pro lease space $(VS-3)^2$. The locations of the vapor sampling ports are shown on Figure 2.

The tubing at each sampling port was purged with a hand vacuum pump prior to sampling. A preevacuated 6-liter summa canister equipped with a flow-restricting orifice valve and vacuum gauge, all supplied by ALS Global, was attached to the tubing using stainless steel Swagelok fittings. The orifice valves of the summa canisters were set to collect a 6-liter sample in approximately 8 hours. After setup, the valve on each canister was opened and the sampling start time and initial canister vacuum were recorded. After sampling was started, a containment cell was placed over the canister and sampling port. A paper towel saturated with isopropyl alcohol was also placed beneath the containment cell to identify leaks in the sampling train. After approximately 6 hours, the containment cells and isopropyl alcohol source were removed. The remaining vacuum in the summa canisters was monitored periodically until there was approximately 5.0 inches of mercury vacuum remaining, and the valve was closed and

² AV-Pro remains at tenant at the Site. The current and former AV-Pro lease spaces are indicated on Figure 2.

sampling stopped. Once sampling was completed, each canister was disconnected from the sampling port, the orifice valve was removed, and a plug was placed in the canister connection fitting. Each sampling port was also sealed. The canisters were shipped via overnight freight to Columbia Analytical Services in Simi Valley, California, under standard chain-of-custody protocols, for analysis for VOCs using U.S. Environmental Protection Agency (EPA) Method TO-15 on a standard turnaround time.

The following VOCs were detected in all sub-slab vapor samples: PCE, TCE, cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), 1,1-DCE, 1,1,1-trichloroethane (1,1,1-TCA), and 1,1,2-trichloroethane (1,1,2-TCA). PCE, TCE, and cis-1,2-DCE were the most commonly detected compounds. The highest observed VOC concentrations were in the Northwest Plating operations area and in the northernmost portion of the Perine Danforth Company lease space.

Comparison of the maximum TCE concentration in sub-slab vapor on the WII Property (1,200,000 μ g/m³) with maximum TCE concentrations in indoor air (360 μ g/m³, January 2004) suggests a site-specific vapor attenuation factor of about 0.0003. Comparison of maximum sub-slab vapor TCE concentrations on the Perine Property (150,000 μ g/m³) with maximum TCE concentration in indoor air (1.7 μ g/m³) suggests a site-specific vapor attenuation factor of about 0.00001. Both of these attenuation factors are significantly less than the default value of 0.03 provided by Ecology in the most recent Draft VI Guidance.

2.2.3 Drilling Methods

Prior to initiating all drilling-related work, EPI contracted with a utility locating service to identify the presence of locatable buried utilities at the Site. Specific drilling methods are described in the following sections. Soil boring logs for the explorations are included as Attachment B.

2.2.3.1 Direct-Push Technology

In order to continue the assessment of soil, groundwater, and soil vapor at the Site, EPI advanced a total of 84 soil borings at the Site between March 2014 and May 2015 and collected reconnaissance soil and groundwater samples. These borings were initially guided by the results of the passive soil gas survey with later phases of sampling based on the results of each successive phase of drilling and sampling.

EPI advanced 32 soil borings on the WII Property (soil borings B-1 through B-32) in March 2014. In July 2014 EPI subsequently completed 16 soil borings on the Perine Property (B-33 through B-47) and collected reconnaissance soil and groundwater samples.

In March 2015, EPI advanced an additional 14 soil borings on the Perine Property (B-48 through B-61) and an additional 8 soil borings on the WII Property (B-62 through B-69). Due to permitting and access limitations EPI completed soil boring B-70 along Airport Way in May 2015.

The soil borings were advanced using direct-push technology (DPT) techniques. The DPT borings were logged continuously for each 4-foot interval of the DPT drill stem. The DPT sampler was filled with an acetate liner. After retrieval, the soil-filled acetate liner was removed and sliced open along its length. The soils were then logged and a photoionization detector (PID) was used to screen for the potential presence of VOCs. Samples were collected from selected intervals using EPA Method 5035 for VOCs

and using a disposable plastic trowel when collecting samples for metals or chromium analysis. Soil samples were collected at multiple depths below grade.

Reconnaissance groundwater samples were collected from the upper 5 to 10 feet of target aquifer using a temporary PVC well screen. Samples were retrieved using a peristaltic pump after purging of the well. All samples were collected using low-flow methods to limit potential VOC volatilization.

On May 16, 2016, SES conducted additional investigation and soil sampling on the Perine Property in the area near soil boring B-56. This additional work included advancing four soil borings (P-08, P-09, P-10, and P-11). EPI observed SES's activities and collected 16 additional soil samples from the borings. The soil samples were submitted to ALS Environmental in Everett, Washington for independent laboratory analysis.

The soil borings were advanced using DPT techniques described above. The DPT borings were logged continuously for each 5-foot interval of the DPT drill stem. The soil were field screened for the potential presence of volatile compounds using a PID and those results were recorded on the field logs. Samples were collected from selected intervals using EPA Method 5035 for VOCs.

2.2.3.1.1 Monitoring Well Installation

Between July 2014 and November 2015, EPI completed 20 DPT borings as permanent monitoring wells. Soil samples were collected at multiple depths below grade from nine of the boring locations. The locations of the monitoring wells are shown on Figure 2.

In general, DPT monitoring wells in the shallow aquifer were completed to depths ranging from approximately 15 to 20 feet below ground surface (bgs), and monitoring wells completed in the intermediate aquifer were completed to depths ranging from approximately 25 to 45 feet bgs. The monitoring wells were completed using either ³/₄-inch or 2-inch diameter, Schedule 40 PVC casing and 5 or 10 feet of 0.010-inch factory slotted pre-packed PVC well screen. The monitoring wells were finished at the ground surface in a 12-inch nominal diameter flush-mount steel well box set in concrete. The top of the PVC casing was sealed with a lockable expanding plug.

Well construction details are provided on the soil boring logs included as Attachment B.

2.2.3.2 Rotosonic Well Installation

EPI completed five additional soil borings at the Site using rotosonic drilling methods. The objectives of these borings were to further investigate the occurrence and extent of the deeper aquifer, assess the potential presence of a deeper aquifer, and to characterize the vertical extent of contamination within soil and the hydrostratigraphic units identified.

Two of the borings (MW-7ir and SB-15d) were advanced to a total depth of 90 feet bgs. Soil samples were collected during drilling for analysis. Monitoring well MW-7ir was backfilled with bentonite to a depth of 35 feet bgs and completed as an intermediate depth aquifer monitoring well. Boring SB-15D was backfilled with bentonite to its full terminal depth.

The three additional rotosonic borings (MW-4i, MW-15i, and MW-24ir) were also completed as intermediate depth monitoring wells with terminal depths of 40 feet bgs, 30 feet bgs, and 45 feet bgs, respectively. The locations of the monitoring wells are shown on Figure 2.

Soil samples collected during drilling utilized a standard 18-inch long, 2.5-inch stainless split spoon sampler and a 140-pound drop hammer. At each sample interval, drilling was stopped and the split spoon sampler was advanced ahead of the drill stem. The bottommost interval of the split spoon was sampled using EPA Method 5035 and retained for laboratory analysis.

The monitoring wells were completed using 2-inch diameter, Schedule 40 PVC casing and 15 or 20 feet of 0.010-inch factory slotted PVC well screen. The monitoring well screens were placed to fully penetrate the intermediate depth aquifer and care was taken to not intersect both the shallow and intermediate depth aquifers with either the well screen or filter pack. The monitoring wells were finished at the ground surface in a 12-inch diameter flush-mount, traffic-rated steel well monument set in concrete. The top of the PVC casing was sealed with a lockable expanding plug.

Well construction details are provided on the soil boring logs included as Attachment B.

2.2.3.3 Air Knife/Vactor Well Installation

EPI supervised the completion of four monitoring wells (SBW-1 through SBW-4) along South Dakota Street. The objective of these wells was evaluate the potential for preferential migration of impacted groundwater within the backfill of utility lines within South Dakota Street.

Prior to drilling the monitoring well locations were cleared for utilities other than the known sewer lines. Following utility clearance, each boring was advanced using an air knife and truck-mounted vacuum to the total depth investigation. The locations of the monitoring wells are shown in Figure 2.

The monitoring wells were completed to depths ranging from approximately 10 to 12 feet bgs using 2-inch diameter Schedule 40 PVC casing and 5 feet of pre-packed 0.010-inch factory slotted PVC well screen. The monitoring wells were finished at the ground surface in a 12-inch diameter flush-mount, traffic-rated steel well box set in concrete. The top of the PVC casing was sealed with a lockable expanding plug.

Well construction details are provided on the soil boring logs included as Attachment B.

2.2.4 Soil Sampling

During the course of multiple phases of investigation at the Site, on both the WII Property and the Perine Property, a total of 278 soil samples were collected. This total included 249 samples using DPT methods and 29 samples using rotosonic methods. Soil sampling equipment was decontaminated before each sampling attempt with a Liqui-Nox® solution wash and a distilled water rinse. Soil samples were generally obtained at 2-foot depth intervals for field screening. Soil samples obtained from the borings were collected from the sampler with a stainless steel knife or new gloves. A portion of each sample was placed in a laboratory-prepared sample jar for potential chemical analysis. The remaining portion of each sample was used for field screening. The sampling equipment was decontaminated prior to each use with a Liqui-Nox® soap solution, a tap water initial rinse, and a distilled water final rinse.

Field screening was performed on soil samples obtained from the borings using visual examination and headspace vapor screening with a PID. Soil samples from each boring were selected for chemical analysis based on field screening results and/or the sample location relative to potential sources of contamination. Samples were placed into laboratory-supplied containers appropriate for the intended analysis. Immediately after collection each sample was labelled and placed in a chilled cooler. The samples were then transported to the analytical laboratory under standard chain-of-custody procedures.

Selected soil samples were submitted for chemical analysis of one or more of the following:

- VOCs by EPA Method 8260C;
- Total chromium using EPA Method 200.8; and
- CrVI using EPA Method 7196.

Soil samples collected for analysis of VOCs were collected using EPA Method 5035 to prevent a potential loss of volatiles. The approximate soil sample locations are shown on Figure 5.

2.2.5 Groundwater Sampling

During the course of multiple phases of investigation at the Site, a total of 361 groundwater samples were collected. This total included 75 reconnaissance groundwater samples and 286 samples from permanent monitoring wells. The groundwater sample locations are shown on Figure 2. Groundwater samples were collected using low-flow sampling methods. New downhole polyethylene tubing and a peristaltic pump were used to obtain all groundwater samples. Prior to sample collection, each monitoring well and temporary DPT well was purged until consistent values (i.e., less than 10 percent variance between consecutive readings) were obtained for pH, temperature, dissolved oxygen, and conductivity. All water samples were collected at a pumping rate of 100 milliliters/minute or less to limit potential VOC volatilization from the samples.

In order to limit turbidity, reconnaissance groundwater monitoring samples were collected from a temporary well casing installed in each DPT location. Temporary wells consisted of 1-inch PVC with 5 to 10 feet of 0.010-inch well screen. Samples were placed into laboratory-supplied containers appropriate for the intended analysis and, where applicable, appropriate sample preservative. Immediately after collection, each sample was labelled and placed in a chilled cooler. The samples were then transported to the analytical laboratory under standard chain-of-custody procedures.

Selected groundwater samples were submitted for chemical analysis of one or more of the following:

- VOCs by EPA Method 8260C;
- Total chromium using EPA Method 200.8;
- CrVI using EPA Method 7196; and
- Total cyanide using EPA Method 9012B.

The approximate groundwater sample locations are shown on Figure 2.

As discussed in Section 3.2 below, two principal groundwater-bearing units have been identified beneath the Site to the maximum depth of exploration (i.e., 90 feet bgs). These units have been termed the "shallow aquifer" and the "intermediate aquifer." The initial Site investigations in 1989 and 1990 tentatively identified the presence of a "deep aquifer." During this RI no "deep aquifer" consistent with prior descriptions could be identified at the Site. This topic is discussed further in Section 3.2.

2.2.6 Soil Gas Sampling

It is understood that VI is a concern in areas were the plume underlies the WII Property, the Perine Property and the property immediately to the west on South Dakota Street. To evaluate the potential for VI in other off-property locations, further assessment was required. For this additional assessment EPI collected soil gas samples in portions of the off-property, downgradient dissolved-phase VOC plume. This investigation consisted of collecting and analyzing soil gas samples contemporaneous with collocated shallow groundwater samples. Collection of these samples allowed for evaluation of Site-specific groundwater-to-soil vapor attenuation factors that could potentially be used to assess which downgradient properties may be affected by VI. Such empirical Site-specific data are considered more pertinent and applicable than generic table values contained in the Draft VI Guidance and the CLARC database (see Section 4.3).

Three additional soil vapor samples were collected in off-property locations indicated on Figure 2 (DGV-1, DGV-2, and DGV-3). These samples were collected from beneath the sidewalk slab through a vapor sampling port. The vapor sampling ports were installed by drilling a small hole through the slab and installing a dedicated, sealed port that extends through the slab. Each port is reusable and was sealed and secured with a flush mount cover after use. As noted above, other soil gas samples had previously been collected on the WII Property and on the Perine Property.

All soil gas samples were collected using 6-liter summa canisters, each fitted with an 8-hour inlet flow controller. The sampling canisters were connected to the installed sampling ports using Teflon or polyethylene tubing. At each location, the port and the sampling train were leak tested by purging under a helium filled shroud prior to the initiation of sampling. After canister setup and the initiation of sampling, the canisters were checked periodically to ensure that sampling proceeded appropriately. Sampling was discontinued at 8 hours or once the canister vacuum reached approximately -5 inches of mercury, whichever occurred first. Following sampling, each sample port was sealed with a threaded plug. All soil vapor samples were submitted to Fremont Analytical of Seattle, Washington, for analysis of VOCs using EPA Method TO-15.

The soil gas sample locations are shown on Figure 2.

3.0 NATURAL CONDITIONS

The Site is located approximately 3 miles south of downtown Seattle along the eastern margin of the lower Duwamish River industrial area. As discussed below, this area of the Site is a former tidally-influenced river estuary that was filled with dredge spoils during the early development of Seattle. The Site is not within the Lower Duwamish Superfund Site, which is located approximately 1.1 miles to the west.

3.1 Subsurface Soil

The Site lies in a depositional basin of the Duwamish estuary referred to as the Duwamish Trough. The basin consists of approximately 200 feet of deltaic, estuarine, and alluvial sediments deposited by the Duwamish River. According to the published geologic map of the Site vicinity, *Geologic Map of Seattle, Washington* by Derek B. Booth, Kathy A. Troost, Scott A. Shimel, and Aaron P. Wisher (2005), soils underlying the Site are quaternary age alluvium (Qal) consisting of sand, silt, gravel, and cobbles deposited by streams and running water.

In the vicinity of the Site, the recent alluvium filling the trough includes sands and silts deposited by the Duwamish River and its tributaries. During development of Seattle, the tidal flats and flood plain were reclaimed through deepening and channelization of the Duwamish River and placement of fill in the surrounding areas. In many cases, the contact between fill and native soils is difficult to discern as the fill used is similar to the native estuarine and riverine sediments. During the investigation on the Perine Property, a layer of fill, brick and building rubble was discovered on the western portion of the property. As discussed above in Sections 1.1 and 1.2.2, two historic buildings dating to the early 1920s and 1940s existed in this area of the Perine Property until 1996. An historic machine shop operated in this area between the 1950s and 1970s. When Perine demolished the historic buildings in 1996, it constructed the current building on top of a layer of fill, brick and building rubble several feet deep which remained after demolition.

Subsurface investigation has extended to a maximum depth of 90 feet bgs. The stratigraphic sequence encountered during soil boring explorations consists of predominantly of fine- to medium-grained sand with trace silt and gravel from the surface to depths of approximately 10 to 15 feet bgs. Underlying the sand is an approximate 10-foot thick layer of silt that is continuous through most of the Site. The silt appears to have a higher sand content in the northern and southeastern portions of the Site. This silt appears to act as an aquitard or local perching layer for the shallow water table aquifer in the shallower soils.

A second 5-foot to 10-foot thick sand stratum was encountered beneath the silt aquitard, which serves as the intermediate depth aquifer.

The two borings to 90 feet indicate that a second silt interval is present from approximately 35 to 52 feet bgs, which is in turn underlain by a dense, plastic clay from 52 feet bgs to the terminal depth of the borings at 90 feet bgs (see Section 3.2.3). No additional potentially saturated zones were encountered between about 35 and 90 feet bgs at the Site.

Figures 6 and 7 depict interpretive geologic cross-sections of the subsurface. The orientation of these cross sections is indicated on Figure 2. Soil boring logs are presented in Attachment B.

3.2 Groundwater

Two principal groundwater-bearing units have been identified beneath at the Site to the maximum depth of exploration. These units have been termed the "shallow aquifer," and the "intermediate aquifer." These groundwater-bearing units are separated by an approximate 10-foot-thick silt aquitard that is continuous throughout most of the Site with some variation in sand content. The aquifer units are discussed in further detail below.

EPI conducted a well log search for water production wells located within one-quarter mile of the Site using Ecology's well log search application. The results of the search indicated that no water production wells were present within the search radius. Given the lack of water production wells and that municipal water is locally supplied by the City of Seattle, groundwater in the vicinity of the Site is not a current source of drinking water. In addition, the City of Seattle has an ordinance restricting the use of groundwater as a drinking water source in this industrial area of Seattle. Drinking water wells are not lawfully authorized. Given the current zoning and master plan zoning of the area of the Site for industrial uses and the statutory restrictions on the extraction of groundwater for potable uses in the area of the Site, groundwater cannot reasonably be considered a potential future source of drinking water.

3.2.1 Shallow Groundwater

Groundwater occurs within the shallow aquifer under unconfined water table conditions. Depth to groundwater in the shallow aquifer ranges from approximately 7 to 12 feet below grade (see Table 1). Based on the groundwater monitoring data collected to date, the hydraulic gradient within the shallow aquifer has consistently been northwesterly with a magnitude of approximately 0.03 feet/foot. Site representations with shallow groundwater elevations and piezometric contours measured on November 30, 2015 and March 14, 2016 are included as Figure 8 and Figure 9, respectively.

3.2.2 Intermediate Groundwater

Groundwater occurs within the intermediate aquifer under confined conditions. Depth to water in wells completed in the intermediate aquifer ranges from approximately 4 to 11 feet below grade (see Table 1). Groundwater monitoring data indicate that the hydraulic gradient within the intermediate aquifer similarly trends to the northwest with a similar magnitude of approximately 0.027 feet/foot. Site representations with intermediate groundwater elevations and piezometric contours measured on November 30, 2015 and March 14, 2016 are included as Figure 10 and Figure 11, respectively.

3.2.3 Deep Groundwater

Historical studies conducted by others at the Site identified the presence of what, at the time, was called the "deep aquifer." The RI attempted to identify the deep aquifer within the study area. In November 2015, EPI advanced soil borings SB-15d and MW-7ir each to a depth of 90 feet bgs to investigate this deep aquifer. No water-bearing strata were encountered below approximately 35 feet bgs in either boring. A compact fine sandy silt was encountered from approximately 35 to 52 feet bgs and a hard

plastic clay was present from 52 feet bgs to the terminal depth of the borings at 90 feet bgs. No saturated conditions were encountered below the intermediate aquifer to the maximum depth of exploration.

EPI used rotosonic drilling methods for this deeper investigation; a drilling method not available during earlier studies. Rotosonic methods provide a continuous core of the full depth of investigation and seal the borehole from potential leakage from overlying units or water leakage into the drill stem. Earlier investigations utilized hollow stem drilling methods and sampling and logging at 5 foot vertical intervals. That methodology can be prone to misinterpretation of soil conditions. Leakage from the overlying saturated zones can be interpreted at saturated conditions where none exist. For these reasons, the information presented in this RI is considered of higher quality than earlier data and invalidates the earlier finding of a deeper aquifer. It is EPI's opinion that a deeper aquifer is not present between 32 and 90 feet below grade at the Site.

3.2.4 Vertical Hydraulic Gradient

During the RI, sets of shallow aquifer and intermediate aquifer wells were paired to allow for an evaluation of the type and the degree of hydraulic communication between the shallow and intermediate aquifers across the aquitard. Throughout most of the Site, water levels in the intermediate aquifer are between about 2 and 3 feet higher than in the shallow aquifer. This condition indicates a net upward hydraulic gradient.

The distribution of hydraulic differential between the shallow and intermediate aquifer measured during the December 2015 and March 2016 monitoring events is presented on Figure 12 and Figure 13. Negative head differences indicate an upward gradient. These differences in hydraulic head are apparent when comparing the piezometric contour maps for the shallow and intermediate aquifers.

The presence of an upward vertical gradient is protective of the water quality within the intermediate depth aquifer and serves to lessen the transport of dissolved-phase contaminants from the shallow to the intermediate aquifer. Contaminant migration between the two aquifers cannot occur through convection and dispersion across the aquitard, but is limited to transport along chemical gradients. Such chemical transport is extremely slow and must work in the opposite direction as actual groundwater transport across the aquitard. This condition is wholly consistent with the observations in this RI that the intermediate depth aquifer is only marginally impacted by the observed releases.

4.0 ANALYTICAL RESULTS

For the purposes of this RI an analyte detected in an environmental sample is considered a COPC for the media in which it was detected. COPCs were generally screened to eliminate from further consideration those compounds with a frequency of detection of less than 10 percent. The rationale being that the selected indicator hazardous substances, which are representative of the more abundant COPCs present at the Site, are adequately representative of those compounds that are present less than 10 percent of the time.

Compounds with a frequency of detection of less than 10 percent in one medium (e.g., soil) were retained for continued evaluation as COPCs if that compound was present more than 10 percent of the time in

another medium (e.g., groundwater). The following sections summarize the analytical results and COPCs identified for the Site. Laboratory analytical reports are included in Attachment C.

4.1 Subsurface Soil

A total of 278 soil samples were submitted for the range of analyses described in Section 2.2.4. A tabulated summary of analytical results for soil samples is included in Table 2. Copies of the original laboratory reports are included in Attachment C. A summary of the detected COPCs in soil is presented below in Table 3. The soil analytical results are indicated on Figures 14 through 21. Figures 14 through 16 present analytical results for PCE, TCE, and chromium (total and CrVI), respectively.

COPC	Number of Samples	Number of Detections	Frequency of Detection	Low Concentration (mg/kg)	High Concentration (mg/kg)
PCE	278	65	23.4%	0.013	49.0
TCE	278	141	50.1%	0.010	710.0
trans-1,2-DCE	278	9	3.2%	0.054	2.1
cis-1,2-DCE	278	48	17.3%	0.011	66.0
1,1-DCE	278	5	1.8%	0.016	0.520
Vinyl chloride	278	5	1.8%	0.14	1.5
Chloroform	278	2	0.72%	0.056	0.062
4-Methyl-2-Pentanone	248	2	0.81%	0.56	0.89
Toluene	248	5	2.0%	0.073	4.8
1,1,1-TCA	278	6	2.2%	0.051	0.37
1,1,2-TCA	278	2	0.72%	0.098	0.25
Ethylbenzene	248	5	2.0%	0.091	11.0
Total Xylenes	248	8	3.2%	0.19	12.1
Styrene	248	2	0.81%	0.14	0.18
Isopropylbenzene	248	3	1.2%	0.12	0.20
n-Butylbenzene	248	2	0.81%	0.065	0.18
1,3,5-Trimethylbenzene	248	8	3.2%	0.066	0.12
tert-Butylbenzene	248	2	0.81%	0.085	0.093
1,2,4-Trimethylbenzene	248	12	4.8%	0.06	0.17
s-Butylbenzene	248	2	0.81%	0.075	0.16
p-Isopropyltoluene	248	3	1.2%	0.069	0.13
Naphthalene	248	4	1.6%	0.071	2.6
Chromium (VI)	259	8	3.1%	0.54	910
Total Chromium	259	259	100%	4.8	37,000

Table 3Summary of COPCs in Soil

Notes:

mg/kg Milligrams per kilogram.

Bold COPC with low frequency of detection is retained based on presence in another environmental medium.

COPC screened out from further evaluation due to low frequency of detection.

4.2 Groundwater

4.2.1 Shallow Groundwater

A total of 186 shallow groundwater samples were submitted for the range of analyses described in Section 2.2.5. A summary of analytical data for reconnaissance groundwater samples is included in Table 4. Tables 5 and 6 present summaries of groundwater sampling results for VOCs and metals, respectively. Copies of the original laboratory reports are included in Attachment C. A summary of the detected COPCs in shallow groundwater is included in the following Table 7. The groundwater sampling locations are indicated on Figure 2. Figure 23 and Figure 24 present analytical results for TCE in shallow groundwater for the December 2015 and March 2016 sampling events, respectively.

COPC	Number of Samples	Number of Detections	Frequency of Detection	Low Concentration (µg/L)	High Concentration (µg/L)
PCE	179	46	25.7%	0.2	130
TCE	186	123	66.1%	0.45	56,000
trans-1,2-DCE	176	34	19.3%	0.5	11
cis-1,2-DCE	179	89	49.7%	1.2	2,700
1,1-DCE	167	3	1.8%	2.4	9.2
Vinyl chloride	175	46	26.3%	0.22	44
1,1,1-TCA	180	8	4.4%	0.5	20
1,1,2-TCA	167	3	1.8%	2.8	3.2
Chloroform	173	7	4.0%	0.4	4.3
Arsenic	6	1	16.7%	1.7	1.7
Cadmium	29	21	72.4%	1.2	11,000
Chromium (VI)	184	53	28.8%	12	430,000
Total Chromium	183	136	74.3%	2.0	440,000
Copper	6	3	50%	20	100
Lead	6	0	0%		
Nickel	20	14	70%	10	7,400
Zinc	27	17	62.9%	7	9,200
Cyanide	58	22	37.9%	0.26	13,000

 Table 7

 Summary of COPCs in Shallow Aquifer Groundwater

Notes:

µg/L Micrograms per liter.

Bold COPC with low frequency of detection is retained based on presence in another environmental medium.

COPC screened out from further evaluation due to low frequency of detection.

-- COPC was not detected, so there is no concentration available.

4.2.2 Intermediate Groundwater

A total of 84 intermediate groundwater samples were submitted for the range of analyses described in Section 2.2.5. A summary of analytical data for reconnaissance groundwater samples is included in Table 4. Tables 5 and 6 present summaries of groundwater sampling results for VOCs and metals, respectively. Copies of the original laboratory reports are included in Attachment C. A summary of the detected COPCs in intermediate groundwater is included in the following Table 8. The groundwater sampling locations are indicated on Figure 2.

СОРС	Number of Samples	Number of Detections	Frequency of Detection	Low Concentration (µg/L)	High Concentration (µg/L)
PCE	84	3	3.6%	3.1	4.8
TCE	84	21	25.0%	0.62	210
trans-1,2-DCE	82	0	0%		
cis-1,2-DCE	84	12	14.3%	3.0	150
1,1-DCE	82	0	0%		
Vinyl chloride	82	13	15.9%	0.28	28
1,1,1-TCA	82	0	0%		
1,1,2-TCA	82	0	0%		
Chloroform	82	0	0%		
Arsenic	1	1	100%	1.9	1.9
Cadmium	4	0	0%		
Chromium (VI)	82	1	1.2%	270	270
Total Chromium	82	30	36.6%	2.2	26
Copper	1	0	0%		
Lead	1	0	0%		
Nickel	1	1	100%	30	30
Zinc	1	1	100%	50	50
Cyanide	8	1	12.5%	30	30

Table 8
Summary of COPCs in Intermediate Aquifer Groundwater

Notes:

Bold COPC with low frequency of detection is retained based on presence in another environmental medium.

COPC screened out from further evaluation due to low frequency of detection.

-- COPC was not detected, so there is no concentration available.

4.3 Soil Gas Sampling

EPI collected 18 soil gas samples as part of the RI activities. Soil gas samples were analyzed for either VOCs or targeted halogenated volatile organic compounds (HVOCs) using EPA Method TO-15. A summary of analytical data for soil gas is included in Table 9. Copies of the original laboratory reports are included in Attachment C. A summary of the detected COPCs in soil gas is included in the following Table 10. The compounds detected in the soil gas samples are retained for screening as COPCs in indoor air at the Site. The soil gas sampling locations are indicated on Figure 2.

COPC	Number of Samples	Number of Detections	Frequency of Detection	Low Concentration (µg/m³)	High Concentration (µg/m³)
PCE	18	15	83%	4.83	6,200
TCE	18	17	94%	2.4	1,200,000
trans-1,2-DCE	18	6	33%	14.2	460
cis-1,2-DCE	18	12	67%	2.17	13,000
1,1-DCE	12	1	8%	1,900	1,900
Vinyl Chloride	18	1	6%	0.302	0.302
1,1,1-TCA	12	5	42%	1.37	180
1,1,2-TCA	12	1	8%	320	320

Table 10 Summary of COPCs in Soil Gas

Notes:

Bold COPC with low frequency of detection is retained based on presence in another environmental medium.

COPC screened out from further evaluation due to low frequency of detection.

5.0 CONCEPTUAL SITE MODEL

The following CSM is based on data collected during the RI and identifies current and potential human and ecologic exposure pathways at the Site. This CSM is based upon the current understanding of the Site using the best available information and incorporating current and potential future Site uses, statutory and zoning restrictions for the Site, and MTCA regulations. The RI has served to fully characterize the lateral and vertical limits of contamination, the likely pathways for contaminant migration, and the potential exposure pathways posed by those impacts. This CSM is graphically presented in Attachment D and is discussed below.

 The Site and surrounding land is currently zoned as Industrial General 2 (IG2), which is defined by the City of Seattle as a zone to "allow a broad range of uses where the industrial function of an area is less established than in IG1 zones, and where additional commercial activity could improve employment opportunities and the physical condition of the area, without conflicting with industrial activity." The City of Seattle's July 2015 Draft Comprehensive Plan for Managing Growth also identifies the area of the Site as a planned "Industrial Area." IG2 zoning allows for general and heavy manufacturing, commercial uses (subject to some limits), high impact uses (as a conditional use), entertainment uses (other than adult), transportation and utility services, and salvage and recycling uses. The majority of the Site and surrounding area is covered with buildings, roads, and other surface cover. The area of the Site has historically been used for industrial purposes and will continue to be used for industrial purposes for the foreseeable future. For these reasons, the Site qualifies as an Industrial Property under MTCA.

- Subsurface conditions at the Site consist predominantly of fine- to medium-grained sand with trace silt and gravel from the surface to depths of approximately 10 to 15 feet bgs. Underlying the sand is an approximate 10-foot-thick aquitard. A second 5-foot to 10-foot-thick silty sand stratum was encountered beneath the silt layer. Deeper borings suggest that a second silt interval is present from approximately 35 to 52 feet bgs followed by a dense, plastic clay from 52 feet bgs to the terminal depth of the borings at 90 feet bgs.
- During the investigation on the Perine Property, a layer of fill, brick and building rubble was discovered on the western portion of the property. As discussed above, two historic buildings dating to the early 1920s and 1940s existed in this area of the Perine Property until 1996. An historic machine shop operated in this area between the 1950s and 1970s. When Perine demolished the historic buildings in 1996, it constructed the current building on top of a layer of fill, brick and building rubble at an elevation several feet higher than the pre-demolition building surface.
- The COPCs are those commonly associated with (1) metals (predominantly chromium) from plating operations, which have historically been performed at the WII Property, (2) HVOCs from degreasing operations performed in conjunction with plating and their environmental degradation products; and (3) HVOCs from operations of an historic machine shop that operated on the Perine property from the 1950s to the 1970s.
- The releases from the plating and degreasing operations appears to have affected near surface soils (0 to 2 feet bgs) and deeper soils (greater than 2 feet bgs), and migrated vertically through the relatively permeable vadose zone soils down to the shallow water table that is present at a depth of approximately 7 to 12 feet below grade. The shallow and intermediate aquifers have been impacted; however, impacts to the intermediate aquifer are more limited in magnitude and extent. The intermediate aquifer is protected by the significant upward vertical gradient between the intermediate and shallow aquifers.
- The releases on the Perine property from the historic machine shop operations appear to have affected the shallow soil beneath the floor of the historic building. These impacts reside at the historic ground surface, approximately 4 to 5 feet below the floor of the existing building.

- The Site and surrounding properties are supplied with water by the City of Seattle municipal
 water system. The City of Seattle has an ordinance restricting the use of groundwater as a
 drinking water source in this industrial area of Seattle, and drinking water wells are not
 lawfully authorized in the Site vicinity. Therefore, there is no current threat of ingestion of
 groundwater at the Site.
- Section 12.24.010(C) of the King County Health Code (KCHC) establishes minimum setback distances for installation of drinking water wells. The KCHC requires a minimum setback distance of 100 feet from, among other Site features, building sewers, railroad tracks, public power utilities or gas lines, building foundations, and public and private road easements. There are no areas within a mile of the Site that meet these restrictions on well installation. Based on the City of Seattle restrictions on well installation in an industrial zone area, and the KCHC restriction on minimum setbacks, it would not be possible to install a drinking water well on any properties that are part of or adjacent to the Site or within the industrial zoning overlays of the comprehensive plan. The combination of the future use of the Site and surrounding area as industrial and the statutory restriction on the installation of drinking water wells within this industrial zoning overlay of the comprehensive plan serves as an institutional control that eliminates the potential for current and future use of groundwater at the Site for drinking water.
- Due to the industrial zoning and groundwater withdrawal restrictions in the Site vicinity, there is no potential for current or future residential exposures at the Site. As noted above, the Site qualifies as an industrial property under MTCA.
- The nearest downgradient surface water body is located over 1 mile from the Site, and there is no realistic potential for Site groundwater to adversely impact surface water. Therefore, exposure pathways related to surface water and sediment are not considered complete at this Site.
- Potential human health exposures at the WII Property are limited to direct contact with soil and groundwater, incidental ingestion of soil, and inhalation of potential vapors in indoor air.
- Based on Washington Administrative Code (WAC) 173-340-7490, the WII Property qualifies for an exclusion from the terrestrial ecological evaluation (TEE) based on full surface cover by asphalt, concrete, and/or buildings.
- The standard point of compliance for soil is 15 feet below grade, which corresponds to direct contact for human health and potential terrestrial exposures. Soils shallower than 15 feet at the Site are impacted with COPCs; therefore, direct contact with soil is a pathway of concern.
- For protection of the soil-to-groundwater leaching pathway, the standard point of compliance for soil includes the entire soil column throughout the Site. Soils appear to be a residual source of HVOC and metals dissolution to groundwater; therefore, the soil-to-groundwater leaching pathway is a pathway of concern.

- The standard point of compliance for groundwater is the interval from the uppermost saturated zone extending vertically to the lowest depth of the impacted groundwater throughout the Site. Shallow and intermediate groundwater aquifers at the Site are impacted with COPCs and this is a pathway of concern.
- The standard point of compliance for indoor air is throughout the interior of structures at the Site. Volatile compounds exist in portions of the Site and may pose a threat of exposure. Therefore, the potential for VI is a pathway of concern.

Addressing COPCs in soil and/or groundwater during a future Interim Action or Cleanup Action may consist of a combination of active remedial alternatives and may also include the use of engineering controls or institutional controls and/or environmental covenants to address current or potential future exposure pathways as allowed under MTCA.

6.0 CLEANUP LEVELS AND CHEMICALS OF CONCERN

Potentially applicable CULs were evaluated for each of the COPCs. Those CULs are developed to ensure protectiveness of current and potential exposure pathways as identified in the CSM. The CULs must be protective of human health and the environment based upon the exposure pathways that remain after completion of any remedial action and implementation of institutional or engineering controls (if any). In some cases, protectiveness of certain exposure pathways may be addressed exclusively by implementation of engineering controls. Those COPCs that are present at a concentration exceeding a CUL are then considered compounds of concern (COCs), which will require some form of remedial action.

MTCA also allows for the development of Remediation Levels (RELs) based on Site-specific exposures as indicated by the CSM. RELs are based on a Reasonable Maximum Exposure (RME) for the highest level of exposure and risk that can reasonably be anticipated at a Site. RELs are, by definition, greater than CULs.

CULs and RELs must address all exposure pathways. For instance, if VI is deemed to be an exposure pathway, concentrations in groundwater must be protective of the VI exposure pathway and concentrations in soil must be protective of groundwater for a VI exposure pathway.

As noted in Section 1.1.1, the Site is zoned as an Industrial Land Use based on current and master planned land uses by the City of Seattle. The Site also meets the definition of industrial properties under WAC 173-340-200.

6.1 Indoor Air

To evaluate indoor air CULs, the MTCA Method C Indoor Air CULs for the retained volatile COPCs are provided in Table 11 below.

СОРС	MTCA Method C CUL (µg/m ³) ^a				
COPC	Non-carcinogenic	Carcinogenic			
PCE	40	96.2			
TCE	2.0	6.3			
trans-1,2-DCE	NVE	NVE			
cis-1,2-DCE	NVE	NVE			
VC	100	5.5 ^a			
1,1,1-TCA	5,000	NVE			

Table 11Summary of MTCA Method C Indoor Air CULs

Notes:

a Using CPF of 1.6E-02 per mg/kg-day based on absence of children and pregnant women at the Site.

NVE No Method C CUL has been established for this chemical and no toxicity data are available to calculate CULs.

The standard MTCA Method C CULs for indoor air are based on an adult exposure scenario that includes an exposure frequency (EF) of 1 (i.e., exposure for 24 hours per day, 365 days each year). Because the current and future use of the Site is limited to industrial with some allowable commercial uses by zoning and master planning, an EF of 1 is not appropriate for the Site. It cannot reasonably be expected that an on-Site worker would be present for 24 hours/day, 365 days/year for their entire working life. Therefore, RELs based on an RME for an adult commercial worker of 40 hours/week for 50 weeks/year will be used for assessing protectiveness of indoor air. This results in an exposure frequency of 0.228. The remaining parameter values used to derive the MTCA Method C RELs for indoor air are provided below in Table 12.

Table 12 Summary of Parameter Values for Calculation of MTCA Method C Commercial Worker RELs for Inhalation

		Units	Industrial/Commercial Exposure Scenario			
Parameter	Abbreviation		Non-carcinogenic		Carcinogenic	
			Value	Source	Value	Source
Breathing Rate	BR	m³/day	20	Eq. 750-2	20	Eq. 750-2
Exposure Frequency	EF	unitless	0.23	Site- specific	0.23	Site- specific
Exposure Duration	ED	years	20	MTCA Default	30	750-2
Average Body Weight	ABW	kilograms	70	Eq. 750-2	70	Eq. 750-2
Averaging Time	AT	years	20	Eq. 750-2	75	Eq. 750-2
Unit Conversion Factor	UCF	µg/mg	1000		1000	
Target Risk	TR	unitless			10 ⁻⁵	Eq. 750-2
Target Hazard Quotient	HQ	unitless	1	Eq. 750-1		

The resulting preliminary MTCA Method C RELs are provided in Table 13.

COPCs	Toxicity Data ^a		Indoor Air RELs (µg/m³)		
	RfDi	CPFi	Non-carcinogenic ^b	Carcinogenic [∝]	
PCE	1.14E-02	9.10E-04	175	422	
TCE	5.71E-04	1.44E-02	8.8	27.6	
trans-1,2-DCE	NVE	NVE			
cis-1,2-DCE	NVE	NVE			
VC	2.86E-02	1.60E-02 ^d	439	24	
1,1,1-TCA	1.43E+00	NVE	21,930		

Table 13 Summary of MTCA Method C RELs for Indoor Air

Notes:

Shaded values represent the lowest REL for each COPC for Indoor Air at the Site.

a Toxicity data from Ecology's Cleanup Levels and Risk Calculation (CLARC) database.

b Calculated from MTCA Equation 750-1.

c Calculated from MTCA Equation 750-2.

d Using CPF of 1.6E-02 per mg/kg-day based on absence of children and pregnant women at the Site.

NVE No toxicity data have been established for this chemical.

RfDi Inhalation reference dose for non-carcinogenic health effects.

CPFi Inhalation cancer slope factor for carcinogenic effects.

The RELs above present indoor air concentrations that are protective of the expected RME at an industrial Site. The differences between the CULs and the RELs are addressed through the current zoning and land use restrictions for the Site, which serve as institutional controls compliant with the requirements of MTCA. CULs and RELs for other affected media at the Site must also be protective of these RELs for indoor air.

Site-specific soil gas screening levels (SLsg) were developed from the indoor air RELs. These screening levels serve to provide those concentrations in soil gas above which there is the potential for VI at concentrations exceeding the RELs. There are no CULs for soil gas. These values may be used in the future to confirm the likely adequacy of any remedial actions and to confirm the absence of unacceptable impacts to buildings above the dissolved-phase plume.

The Site-specific SLsg values were calculated using Equation 2 of Ecology's October 2009 Draft *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action* (as amended by the April 20, 2015 guidance from Ecology) and the current vapor attenuation factor (VAF) of 0.03. The resulting SLsg values are provided in Table 14.

СОРС	Indoor Air REL (μg/m³)	SLsg (µg/m³)
PCE	175	5,833
TCE	8.8	293
VC	24	800
1,1,1-TCA	21,930	731,000

Table 14 Summary of Site-specific SLsg Values Protective of the REL for Inhalation

These SLsg values provide soil gas concentrations that are protective of indoor air to the Site-specific RME using the current Ecology-default attenuation factor for migration across a floor slab. Any values less than these screening levels would therefore not result in an indoor air exposure that poses either an unacceptable excess cancer risk or non-carcinogenic health risk to current and/or future on-Site workers.

Soil and groundwater cleanup levels or RELs must be protective of these SLsg values.

6.2 Groundwater

The following exposures defined in the CSM were considered for groundwater COPCs:

- Groundwater volatilization-to-indoor air; and
- Dermal exposure via direct contact with groundwater for a construction worker.

As noted above and explained in the CSM groundwater at the Site is not currently a source of drinking water. Groundwater meets the requirements of MTCA [WAC 173-340-720(2)(a)] for exclusion of consideration as potable groundwater because groundwater is not currently used for drinking water. The requirements of WAC 173-340-720 (2)(b)(iii) are also met because of the statutory restrictions on well installation by the City of Seattle and the zoning of the Site and surrounding area, which make it technically impossible to install a well for potable uses in an area zoned as industrial. The requirements of WAC 173-340-720(2)(c)(i-vii) are met by the observed and documented extent of impacts and the hydrogeologic conditions at the Site. The impacted groundwater at the Site is vertically separated from any deeper groundwater by at least 60 feet of non-impacted soil and dense clay of very low permeability. In addition, the intermediate aquifer has a strong upward vertical gradient throughout the dissolved-phase plume, which limits the potential for downward migration of dissolved-phase contaminants. Therefore, the ingestion pathway for groundwater is eliminated from further consideration.

As a measure of conservatism, retained groundwater COPCs were initially screened against MTCA Method A or Method B groundwater CULs. Those COPCs with maximum reported concentrations less than the corresponding Method A or Method B CULs were eliminated from further evaluation. On this basis cis-1,2-DCE and trans-1,2-DCE were not considered as COCs for groundwater for protection of vapor intrusion.

Groundwater CULs and RELs protective of the indoor air CULs have been derived using the MTCA Method B Indoor Air CULs in Table 6.1a and 6.1c and Equation 1 of Ecology's October 2009 Draft *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action.* The resulting groundwater RELs are provided in Table 15.

COPC	Henry's Law Constant at 13°C ^a	Indoor Air CUL (μg/m ³)	Groundwater CUL (μg/L)	Indoor Air REL (μg/m³)	Groundwater REL (μg/L)
PCE	0.398	40	101	175	440
TCE	0.239	2.0	8.4	8.8	36.8
VC	0.807	5.5	6.8	24	29.7
1,1,1-TCA	0.419	5,000	11,930	21,930	52,340

 Table 15

 Evaluation of Site-Specific Groundwater CULs and RELs Protective of Indoor Air

Note:

a Values from CLARC updated August 2015 and adjusted for a groundwater temperature of 13°C.

The remaining groundwater COPCs are either inorganic or compounds for which the primary route of exposure is the dermal contact pathway (i.e., no inhalation toxicity data are available). The only other potentially completed pathway for groundwater exposure identified in the CSM is via dermal contact by a construction worker. However, MTCA does not provide a method for evaluating cleanup levels for this pathway. Absent a method within MTCA, EPI deferred to the risk-based concentrations (RBCs) for exposure via the construction worker pathway published by the Oregon Department of Environmental Quality (ODEQ). While not proscribed in MTCA, the ODEQ provides a conservative and generally accepted method for evaluating this exposure pathway, which have undergone scientific scrutiny. As such, this approach meets the requirements of WAC 173-340-702(15) and (16). Ecology has allowed the use of this approach for evaluating construction worker risk at other sites, particularly under multi-site agreements with major oil companies where groundwater is non-potable.

The ODEQ provides RBCs for direct contact with groundwater in an excavation scenario for a construction worker. Those RBCs for the direct exposure pathway have been adopted as CULs for the Site for those compounds that do not have a value for evaluating VI risks or are non-volatile. A summary of the RELs and adopted CULs for groundwater is provided below in Table 16.

	Groundwater	Groundwater
COPC	CULs	RELs
	(µg/L)	(µg/L)
PCE	101	440
TCE	8.4	37
trans-1,2-DCE	1,800	NVE
cis-1,2-DCE	180,000	NVE
VC	6.8	30
1,1,1-TCA	11,930	52,340
Arsenic	6,300 ^a	NVE
Cadmium	130,000 ^a	NVE
CrVI	9,400 ^a	NVE
Total Chromium	NVE	NVE
Copper	5,400,000 ^a	NVE
Nickel	13,446,802 ^a	NVE
Zinc	NVE	NVE
Cyanide	81,000 ^a	NVE
Nataa		

Table 16 Summary of Site-Specific Groundwater RELs and CULs

Notes:

a ODEQ RBC value.

NVE No value established or available for this chemical.

6.3 Soil

To evaluate soil cleanup levels, the following exposures defined in the CSM were considered:

- Soil leaching-to-groundwater-volatilizing-to-indoor air; and
- Dermal exposure via direct contact with soil for commercial/industrial workers.

Soil CULs and RELs that are protective of the soil-groundwater-indoor air pathway were derived using the MTCA Method C Indoor Air CULs and RELs presented above, and MTCA Equation 747-1. For non-volatile compounds in soil, the presented cleanup levels are protective of the direct-contact pathway. The RELs were derived using MTCA default values and chemical-specific properties provided in the CLARC database.

СОРС	Method C Soil CUL (mg/kg)	Method C Soil REL (mg/kg)
PCE	1.0	4.4
TCE	0.05	0.2
trans-1,2-DCE	9.3	NVE
cis-1,2-DCE	880	NVE
VC	0.04	0.2
1,1,1-TCA	89	390

 Table 17

 Summary of MTCA Method C Soil CULs and RELs for the Soil-Groundwater-Indoor Air Pathway

Note:

NVE No value established or available for this chemical.

In addition, a soil-to-groundwater CUL protective of the groundwater direct contact value in Table 17 above was developed for CrVI using equation 747-1 and the ODEQ RBC value for direct contact with groundwater in an excavation scenario for a construction worker. This is appropriate since CrVI is non-volatile and does not present a vapor intrusion risk.

For soil CULs protective of the dermal exposure pathway for commercial/industrial workers, EPI evaluated the MTCA Method C soil CULs. The CUL values for this pathway are provided in Table 18.

СОРС	Method C Soil CUL (mg/kg)		
PCE	21,000		
TCE	1,750		
trans-1,2-DCE	70,000		
cis-1,2-DCE	7,000		
VC	10,500		
1,1,1-TCA	7,000,000		
Arsenic	87.5		
Cadmium	3,500		
CrVI	10,500		
Total Chromium	5,520,000		
Copper	140,000		
Nickel	38,500		
Zinc	1,050,000		
Cyanide	2,100		

Table 18 Summary of MTCA Method C Soil CULs for Direct Contact

Note:

NVE No value established or available for this chemical.

6.4 Summary of Evaluated and Selected CULs and RELs

The appropriate CULs and RELs for the Site for each impacted medium are those that are the most protective of each potential exposure pathway. Table 19 below summarizes the results of the evaluation presented above in Sections 6.1 through 6.3. The lowest values, representing the most conservative CUL or REL for a particular compound and medium were selected. Those selected CULs and RELs are contained within the summary tables of this RI Report.

СОРС	Indoor Air CUL (μg/m ³)	Indoor Air REL (μg/m ³)	Groundwater CUL (µg/L)	Groundwater REL (µg/L)	Soil CUL (mg/kg)	Soil REL (mg/kg)
PCE	40	175	101	440	1.0	4.4
TCE	2.0	8.8	8.4	37	0.05	0.2
trans-1,2-DCE	NA	NA	1,800	NA	9.3	NA
cis-1,2-DCE	NA	NA	180,000	NA	880	NA
VC	5.5	24	6.8	30	0.04	0.2
1,1,1-TCA	5,000	21,930	11,930	52,340	89	390
Arsenic	NV	NA	6,300	NA	87.5	NA
Cadmium	NV	NA	130,000	NA	3,500	NA
CrVI	NV	NA	9,400	NA	10,500	NA
Total Chromium	NV	NA	NVE	NA	5,520,000	NA
Copper	NV	NA	5,400,000	NA	140,000	NA
Nickel	NV	NA	13,446,802	NA	38,500	NA
Zinc	NV	NA	NVE	NA	1,050,000	NA
Cyanide	NV	NA	81,000	NA	2,100	NA

Table 19 Summary of Selected CULs and RELs

Notes:

NA Not applicable; no value established and data not available to develop cleanup level.

NV Non-volatile compound.

NVE No value established.

7.0 DISTRIBUTION OF CONTAMINATION

Compounds of concern (COCs) for the WII Property are defined as those compounds that are present at concentrations exceeding the selected CULs (or RELs), which are documented in Section 6.0. The following sections describe COCs identified and their lateral and vertical distribution at the Site.

7.1 Soil

The COCs for soil at the Site are PCE, TCE, and VC. No other COPCs are present at a concentration exceeding a selected CUL or REL. The extent of these compounds at concentrations exceeding the CULs and RELs are presented in Figures 14 through 21.

PCE has been detected in soil at a concentration exceeding the CUL protective of the soil-togroundwater-indoor air pathway. That value is 1.0 mg/kg. PCE concentration in 15 soil samples exceeded 1.0 mg/kg. Reported PCE concentrations in these samples ranged from 1.1 mg/kg to 49 mg/kg. Samples with PCE concentrations exceeding the CUL are generally present beneath the WII Property at depths from the surface to 8 feet bgs. No PCE has been detected in soil on the Perine Property at a concentration exceeding the CUL.

PCE impacts to soil at concentrations exceeding the soil REL of 4.4 mg/kg were identified in three samples. Exceedances were reported in soil boring B-2 (5.4 mg/kg), B-23 (37 mg/kg), and B-31 (49 mg/kg). All three exceedances were limited to soil samples collected within two feet of the surface. Figure 17 presents PCE isoconcentration contours showing the estimated extent of PCE impacts to soil at a concentration exceeding the REL. No PCE has been detected in soil on the Perine Property at a concentration exceeding the REL.

TCE has been detected in soil at a concentration exceeding the CUL protective of the soil-togroundwater-indoor air pathway. That value is 0.05 mg/kg. TCE concentrations in 105 soil samples exceeded 0.05 mg/kg. Reported TCE concentrations in these samples ranged from 0.061 mg/kg to 710 mg/kg. TCE impacts in soil exceeding this CUL are distributed widely beneath the WII Property and extend to soils at and beneath the upper portion of the shallow aquifer.

TCE has been detected in soil at a concentration exceeding the CUL on the Perine Property. Those impacts are limited to an isolated area, are limited to depths between 2.5 and 5 feet below grade and are not contiguous with impacts on the WII Property. The isolated impacts to soil on the Perine Property do not extend to the water table.

The TCE impacts in soil at concentrations exceeding the soil REL of 0.2 mg/kg were identified in 94 samples. Those exceedances are widely distributed beneath the WII Property with the highest concentrations observed at borings B-21, B-23, B-26, and B-27 in soil from 0 to 2 feet below grade. This area appears to represent a historic source area of near surface releases. TCE concentrations in soil decrease rapidly with depth but remain above the REL throughout most of the WII Property down to a depth of 8 feet or greater. Figures 18, 19, and 20 present TCE isoconcentration contours showing the estimated extent of TCE impacts to soil at a concentration exceeding the REL.

TCE has been detected in soil at a concentration exceeding the REL on the Perine Property. As with the exceedances of the CUL, those impacts are limited to an isolated area that is not contiguous with impacts on the WII Property. Exceedances of the REL on the Perine property are also limited to soil in the 2.5 to 5 foot depth range and are not present in shallower or deeper soil samples or underlying groundwater.

VC has been detected in soil at a concentration exceeding the CUL protective of the soil-to-groundwaterto-indoor air pathway. That value is 0.04 mg/kg. VC concentrations in five soil samples exceeded 0.04 mg/kg. Reported VC concentrations ranged from 0.14 mg/kg to 1.5 mg/kg. The exceedances were generally limited to soil samples collected within three feet of the surface, with one exception and are limited to the WII Property.

VC impacts in soil at concentrations exceeding the soil REL of 0.2 mg/kg were identified in three samples. Exceedances were reported in soil boring B-6 (0.33 mg/kg) and B-31 (1.5 mg/kg and 0.22 mg/kg). All three exceedances were limited to soil samples collected within three feet of the surface. Figure 21 presents vinyl chloride isoconcentration contours showing the estimated extent of vinyl chloride impacts to soil at a concentration exceeding the REL.

No COCs were identified in soil at a concentration exceeding a CUL at a depth greater than 12 feet below grade. This is consistent with a historic pattern of surface releases of VOCs and vertical migration through the vadose zone down to the shallow aquifer.

No VOCs were detected at a concentration exceeding the detection limits of the method used in deeper soils below the intermediate depth aquifer down to the maximum depth of exploration of 90 feet below grade. The two deeper borings were located within an apparent source area for release (MW-15d) and the first accessible downgradient location outside the building (MW-7ir). This finding indicates that the vertical extent of contamination is well understood and that vertical migration of the observed impacts are limited to shallow soils. Figure 22 presents the estimated extent of soil impacts.

7.2 Groundwater

7.2.1 Shallow Groundwater

Shallow groundwater at the Site has been impacted by historic releases at the WII Property. The COCs identified in groundwater at the Site are TCE and VC. No other COPCs are present at concentrations greater than the applicable CULs or RELs. Figure 23 and Figure 24 present the lateral extent of TCE impacts to shallow groundwater observed for the December 2015 and March 2016 sampling events. VC is co-located with TCE and at significantly lower concentrations, therefore TCE is most representative of the extent of impacts in the shallow aquifer.

TCE was identified in groundwater at a concentration exceeding the groundwater CUL (8.4 μ g/L) and REL (37 μ g/L) that are protective of the groundwater-to-indoor air pathway. TCE was identified in groundwater at concentrations exceeding the CUL in groundwater samples collected from the central and western portion of the WII Property and the northwestern portion of the Perine Property as well as locations farther hydraulically downgradient of the Site. The extent of groundwater impacts exceeding the CUL are indicated on Figure 25.

VC was identified in shallow groundwater at a concentration equal to or exceeding the CUL (6.8 μ g/L) and REL (30 μ g/L). VC was present in wells MW-1, MW-3 and MW-8 at a concentration exceeding the CUL and only in well MW-3 at a concentration exceeding the REL. As noted above, these impacts are co-located with much higher concentrations of TCE.

The distribution of shallow groundwater impacts appears to be affected by the presence of buried utilities within South Dakota Street. As the dissolved-phase plume migrates hydraulically downgradient to the northwest, it encounters the backfill for an 18-inch diameter sanitary sewer and a 60-inch diameter storm sewer pipelines. It appears that the more permeable backfill for those sewer lines provide a preferential migration pathway to the west along South Dakota Street. Wells installed within that utility backfill appear to have characterized the maximum westward extent of those impacts at SBW-4.

The lateral distribution of impacts to the shallow aquifer are well understood and well characterized by the current groundwater monitoring network. As discussed below, the vertical extent of impacts to groundwater are also well characterized and understood.

7.2.2 Intermediate Groundwater

The intermediate aquifer at the Site has been impacted by historic releases at the WII property. The COCs identified in the intermediate aquifer are also TCE and VC as in the shallow aquifer. No other COPCs are present at concentrations greater than the applicable CULs or RELs.

TCE was identified in the intermediate aquifer at concentrations exceeding the CUL in MW-05i (67 μ g/L) and MW-20i (13 μ g/L). The reported TCE concentration is MW-5i also exceeds the REL.

VC was identified in the intermediate aquifer at concentrations exceeding the CUL in MW-7ir (28 μ g/L) and MW-15i (27 μ g/L). Neither of these reported concentrations exceed the REL for VC.

The intermediate aquifer is generally protected from impacts in the shallow aquifer due to the significant upward hydraulic gradient between the intermediate and shallow aquifer. The vertical extent of the intermediate aquifer is well understood. Any impacts to the intermediate aquifer are likely related to chemical diffusion and cannot be related to mechanical dispersion in groundwater since groundwater transport is vertically upward. Transport solely through chemical diffusion is well understood to be at very low rates and low mass flux. Chemical diffusion transport is easily overwhelmed by groundwater migration. As noted herein, impacts to the intermediate aquifer or minor compared to the shallow aquifer and are only present in areas where very high concentrations are present in the shallow aquifer. In the absence of impacts to the shallow aquifer the lesser impacts to the intermediate aquifer would likely rapidly attenuate due to natural processes.

The bottom of the intermediate aquifer is at about 32 feet below grade and underlain by a dense and relatively impermeable plastic clay. As noted above, there are no detectable VOCs within soil samples collected from beneath the intermediate aquifer down to a depth of 90 feet below grade and no saturated conditions have been encountered below 32 feet below grade. These conditions support a conclusion that deeper groundwater that may be present at some undetermined depth below the Site is not at a risk of contamination from the Site.

7.3 Soil Gas

The analytical results of EPI's soil gas sampling suggest that concentrations of PCE and TCE in soil gas beneath portions of the Site exceed the corresponding Site-specific SLsg values for a commercial worker RME. Those soil gas impacts are likely the result of volatilization of PCE and TCE from the dissolved-phase plume into soil gas under normal environmental conditions. Any remedial actions to address the dissolved-phase plume will necessarily address the soil gas impacts and potential for vapor intrusion.

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8.0 REMAINING DATA GAPS

Only two minor data gaps remain at the Site:

- The extent of soil gas at concentrations exceeding the SLsg. Minor gaps in this characterization exist at the limits of the dissolved-phase plume.
- The extent of TCE at a concentration exceeding the CUL and REL in shallow soil (less than 5 feet bgs) to the west of the WII Property.

These data gaps can be filled with limited effort as a component of future interim actions or remedial action implementation. The data gaps are not substantial and do not limit the ability to perform a feasibility study or evaluate remedial alternatives.

9.0 RI FINDINGS/CONCLUSIONS

The following conclusions are supported by the findings of the RI:

- The work documented herein is sufficient to characterize the Site to a degree that is appropriate for evaluation and selection of interim and final cleanup alternatives. No additional characterization is necessary before proceeding to the evaluation and selection of interim and/or final remedial alternatives.
- Soil and groundwater at the Site have been predominantly impacted with TCE and related VOCs. Those impacts represent at threat of VI to properties at the Site. The lateral and vertical impacts of contamination are currently well characterized and documented in this RI report.
- The primary source of impacts at the Site are related to the operations of the former Northwest Plating and include releases from historical metals plating operations and associated degreasing using chlorinated solvents.
- There is an area of TCE impacts to shallow soil on the Perine Property that is not contiguous with soil impacts on the WII Property. Additionally, this area of TCE impacts on the Perine Property cannot be explained by groundwater contamination at the Site. This area of TCE impact to shallow soil on the Perine Property also cannot be attributed to historic operations on the WII Property. It appears to represent a separate historic source of TCE release on the Perine Property unrelated to the operations conducted on the WII Property. It is in the area of the Perine Property at which an historic machine shop operated from the 1950s to the 1970s.
- The Site is within an industrial area of Seattle and is zoned Industrial General 2. Under the comprehensive plan for the City of Seattle the Site will remain an industrial property for the foreseeable future.

- The primary exposure pathway at the Site is VI. The CULs and RELs that have been developed are consistent with current and potential future land use and are protective of soiland groundwater-to-air-pathways at concentrations that are protective of current and potential future workers at and near the Site.
- Groundwater at the Site does not qualify as potable groundwater. It is not currently used for drinking water and cannot be used for drinking water in the future due to statutory limitations on installation of drinking water wells within industrial zoning. The lateral extent of impacts to groundwater is well understood and the upward vertical gradient between the shallow and intermediate aquifers significantly limits the potential vertical migration of impacts. No saturated conditions have been observed at the Site below the intermediate aquifer to a depth of 90 feet bgs. Neither the shallow nor intermediate aquifers are in hydraulic connection with an aquifer that could be used for drinking water purposes, and the vertical extent of groundwater is well understood.
- Active remedial measures are necessary to address the observed contamination. Those
 remedial measures will likely include a combination of remedial technologies including
 source control through excavation, soil vapor extraction, and *in situ* chemical treatment of
 groundwater, as well as other potentially applicable alternatives.
- With the submittal of this report to Ecology, WII is requesting an advisory opinion under the VCP regarding the completeness of this RI and the selected CULs and RELs.

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Tables

825 South Dakota Street and 812 and 820 South Adams Street, Seattle, Washington

Monitoring Well	Groundwater Zone	Date Measured	Depth to Groundwater ^a (feet)	Depth to Bottom of Well ^a (feet)	Top of Casing Elevation ^b (feet)	Groundwate Elevation ^c (feet)
		9/22/2014	9.14	11.09		11.89
		6/5/2015	8.91	11.10		12.12
MW-1 (MW-1s)	Shallow	9/14/2015	9.00	NM	21.03	12.03
(10100-15)		11/30/2015	8.43	NM		12.60
		3/14/2016	7.61	NM		13.42
		10/28/2013	6.22	25.00		14.97
		8/26/2014	6.28	NM		14.91
		9/22/2014	6.38	NM		14.81
MW-1i	Intermediate	6/5/2015	6.12	25.21	21.19	15.07
		9/14/2015	6.48	NM		14.71
		11/30/2015	5.97	NM		15.22
		3/14/2016	4.85	NW		16.34
		10/28/2013	7.34	12.49		14.84
		8/26/2014	7.41	NM		14.77
		9/22/2014	7.50	NM		14.68
MW-2	Shallow	6/5/2015	7.29	12.53	22.18	14.89
		9/14/2015	7.45	NM		14.73
		11/30/2015	7.11	NM		15.07
		3/14/2016	6.69	NW		15.49
		10/28/2013	9.10	12.31		12.16
		8/26/2014	9.20	NM		12.06
		9/22/2014	9.26	NM		12.00
MW-3	Shallow	6/5/2015	9.09	12.51	21.26	12.17
		9/14/2015	9.22	NM		12.04
		11/30/2015	8.83	NM		12.43
		3/14/2016	8.21	NW		13.05
		10/28/2013	8.06	11.65		14.92
		8/26/2014	8.19	NM		14.79
		9/22/2014	8.27	NM		14.71
MW-4	Shallow	6/5/2015	7.92	11.86	22.98	15.06
		9/14/2015	8.21	NM		14.77
		11/30/2015	7.68	NM		15.30
		3/14/2016	7.14	NW		15.84
MW-4i	Intermediate	11/30/2015	5.01	NM	22.84	17.83
		3/14/2016	4.17	NM		18.67
		8/26/2014	5.30	24.93		16.50
		9/22/2014	5.40	NM		16.40
MW-5	Intermediate	6/5/2015	5.19	25.28	21.80	16.61
		9/14/2015	5.46	NM		16.34
		11/30/2015	5.19	NM		16.61
		3/14/2016	4.29	NM		17.51
		10/28/2013	5.09	25.23		16.63
		8/26/2014	5.23	NM		16.49
		9/22/2014	5.32	NM		16.40
MW-5B	Intermediate	6/5/2015	5.08	25.26	21.72	16.64
		9/14/2015	5.38	NM		16.34
		11/30/2015	5.09	NM		16.63
		3/14/2016	4.23	NM		17.49
		8/26/2014	13.02	NM		14.30
		9/22/2014	13.13	NM		14.19
MW-05	Shallow	6/5/2015	12.82	15.00	27.32	14.50
(MW-05s)		9/14/2015	13.08	NM		14.24
		11/30/2015	12.96	NM		14.36
		3/14/2016	11.98	NM	ļ	15.34
		6/5/2015	10.90	25.80		16.48
MW-05i	Intermediate	9/14/2015	11.18	NM	27.38	16.20
		11/30/2015	10.84	NM		16.54
		3/14/2016	10.02	NM		17.36
MW-6					andoned	
		6/5/2015	9.73	13.46		11.84
MW-7s	Shallow	9/14/2015	9.87	NM	21.57	11.70
		11/30/2015	9.16	NM		12.41
		3/14/2016	8.48	NM		13.09
		10/28/2013	6.76	24.90		14.64
		8/26/2014	7.47	NM		13.93
MW-7i	Intermediate	9/22/2014	7.62	NM	21.40	13.78
		6/5/2015	7.22	25.06		14.18
		9/14/2015	7.63	NM		13.77
		11/30/2015	6.58	NM		14.82
MW-7ir	Intermediate	11/30/2015	6.28	NM	21.48	15.20
		3/14/2016	5.49	NM		15.99

825 South Dakota Street and 812 and 820 South Adams Street, Seattle, Washington

Monitoring Well	Groundwater Zone	Date Measured	Depth to Groundwater ^a (feet)	Depth to Bottom of Well ^ª (feet)	Top of Casing Elevation ^b (feet)	Groundwate Elevation ^c (feet)
		9/22/2014	3.87	39.00		17.42
MW-7		6/5/2015	3.60	39.45		17.69
(MW-7d)	Deep	9/14/2015	3.85	NM	. 21.29	17.44
、 ,		11/30/2015	3.68	NM		17.61
		3/14/2016	2.75	NM		18.54
		8/26/2014 9/22/2014	11.79 11.90	NM NM		14.76 14.65
		6/5/2015	11.53	14.32		14.05
MW-07	Shallow	9/14/2015	11.80	NM	26.55	14.75
		11/30/2015	11.21	NM		15.34
		3/14/2016	10.65	NM		15.90
		6/5/2015	8.10	13.64		11.48
MW-8s	Shallow	9/14/2015	8.20	NM	19.58	11.38
		11/30/2015	7.57	NM		12.01
		3/14/2016	4.12	NM		15.46
		10/28/2013	5.59	25.00		13.90
		8/26/2014 9/22/2014	5.64 5.82	NM NM		13.85 13.67
MW-8	Intermediate	6/5/2015	5.54	25.19	. 19.49	13.95
(MW-8i)		9/14/2015	5.81	NM		13.68
		11/30/2015	5.40	NM		14.09
		3/14/2016	5.09	NM		14.40
		10/28/2013	10.34	14.86		8.69
		8/26/2014	10.49	NM		8.54
		9/22/2014	10.59	NM		8.44
MW-9	Shallow	6/5/2015	10.47	15.06	. 19.03	8.56
		9/14/2015	10.39	NM		8.64
		3/14/2016	10.00 9.67	NM NM		9.03
		10/28/2013	9.07 11.98	23.71		6.62
		8/26/2014	12.02	NM		6.58
		9/22/2014	12.17	NM		6.43
MW-10 (MW-10s)	Shallow	6/5/2015	11.84	24.35	. 18.60	6.76
(10100-105)		9/14/2015	12.08	NM		6.52
		11/30/2015	NM	NM		NM
		3/14/2016	11.11	NM		7.49
		6/5/2015	12.60	32.93		6.28
MW-10i	Intermediate	9/14/2015	11.83	NM	18.88	7.05
		11/30/2015	11.27 11.18	NM NM		7.61 7.70
		3/14/2016 10/28/2013	6.61	14.13		6.72
		8/26/2013	7.14	NM		6.19
		9/22/2014	7.21	NM		6.12
MW-11	Shallow	6/5/2015	6.95	14.99	. 13.33	6.38
		9/14/2015	7.12	NM		6.21
		11/30/2015	6.85	NM		6.48
		3/14/2016	6.60	NM		6.73
		10/28/2013	4.83	12.22		6.63
		8/26/2014	4.87	NM		6.59
MW-12	Shallow	9/22/2014 6/5/2015	4.98	NM	. 11.46	6.48
10100-12	Shallow	6/5/2015 9/14/2015	4.66 4.84	14.88 NM	. 11.40	6.80 6.62
		11/30/2015	4.38	NM		7.08
		3/14/2016	3.98	NM		7.48
MW-13			1	Well at	andoned	
		10/28/2013	6.64	7.81		14.94
		8/26/2014	6.80	NM		14.78
		9/22/2014	6.91	NM		14.67
MW-14	Shallow	6/5/2015	6.55	8.20	21.58	15.03
		9/14/2015	7.23	NM		14.35
		11/30/2015	6.29	NM	.	15.29
		3/14/2016	5.83	NM 10.00		15.75
		10/28/2013 8/26/2014	6.99	10.00		14.55
		8/26/2014 9/22/2014	7.12	NM NM		14.42 14.36
MW-15	Shallow	6/5/2015	6.93	10.19	. 21.54	14.30
(MW-15s)	Ghanow	9/14/2015	7.14	NM	. 21.04	14.61
		11/30/2015	6.69	NM	.	14.40
		3/14/2016	3.19	NM		14.05

825 South Dakota Street and 812 and 820 South Adams Street, Seattle, Washington

Monitoring Well	Groundwater Zone	Date Measured	Depth to Groundwater ^a (feet)	Depth to Bottom of Well ^a (feet)	Top of Casing Elevation ^b (feet)	Groundwate Elevation ^o (feet)
		6/5/2015	3.73	29.64		17.64
	Intermediate	9/14/2015	4.01	NM		17.36
MW-15i	Intermediate	11/30/2015	3.79	NM	21.37	17.58
		3/14/2016	2.88	NM		18.49
		10/28/2013	6.90	11.45		14.54
		8/26/2014	6.97	NM		14.47
		9/22/2014	7.20	NM		14.24
MW-16	Shallow	6/5/2015	7.81	11.69	21.44	13.63
		9/14/2015	7.02	NM		14.42
		11/30/2015	6.68	NM		14.76
		3/14/2016	6.17	NM		15.27
		10/28/2013				
		8/26/2014				
MW-17		9/22/2014		Not measured,	well inaccessibl	е
		6/5/2015				
		11/30/2015				
		10/28/2013		Not measured,	well inaccessibl	е
		8/26/2014	7.03	NM		14.64
		9/22/2014	7.18	NM		14.49
MW-18	Shallow	6/5/2015	6.91	10.96		14.76
		9/14/2015	7.1	NM	21.67	14.57
		11/30/2015	6.69	NM		14.98
		3/14/2016	6.22	NM		15.45
		10/28/2013			well inaccessibl	
		8/26/2014	6.88	NM		14.69
		9/22/2014	7.01	NM	.	14.56
MW-19	Shallow	6/5/2015	6.77	10.68		14.80
		9/14/2015	6.95	NM	21.57	14.62
		11/30/2015	6.55	NM		15.02
		3/14/2016	6.06	NM		15.51
		10/28/2013			well inaccessibl	
		8/26/2014	13.72	NM		13.87
		9/22/2014	13.78	NM		13.81
MW-20s	Shallow	6/5/2015	14.53	18.78		13.06
		9/14/2015	13.75	NM	· 27.59	13.84
		11/30/2015	13.29	NM		14.30
		3/14/2016	9.88	NM		17.71
		6/5/2015	10.80	29.62		16.72
		9/14/2015	11.09	NM		16.43
MW-20i	Intermediate	11/30/2015	10.79	NM	· 27.52	16.73
		3/14/2016	12.73	NM		14.79
		10/28/2013			well inaccessibl	
		8/26/2014	8.55	NM		12.50
		9/22/2014	8.51	NM		12.54
MW-21s	Shallow	6/5/2015	8.54	15.15	·	12.54
		9/14/2015	8.53	NM	21.05	12.51
		11/30/2015	8.51	NM	.	12.52
		3/14/2016	7.92	NM	·	12.54
		6/5/2015	6.01	24.68		15.29
		9/14/2015	6.22	24.08 NM	·	15.29
MW-21i	Intermediate	11/30/2015	5.86	NM	· 21.30	15.08
		3/14/2016	4.93	NM	·	15.44
		6/5/2015	9.30	13.85		12.08
		9/14/2015	9.30	NM	·	12.08 11.98
MW-22s	Shallow	11/30/2015	9.40	NM NM	21.38	11.98
		3/14/2016 6/5/2015	8.19 7.53	NM 24.82		13.19 14.14
			7.53	24.82 NM		14.14 13.86
MW-22i	Intermediate	9/14/2015			· 21.67	
		11/30/2015 3/14/2016	7.42 3.52	NM		14.25 18.15
				NM		
		6/5/2015	13.19	13.79		14.33
MW-23s	Shallow	9/14/2015	13.38	NM	27.52	14.14
		11/30/2015	12.85	NM	.	14.67
		3/14/2016	12.19	NM 20.00		15.33
		6/5/2015	11.46	29.08		16.03
MW-23i	Intermediate	9/14/2015	11.69	NM	27.49	15.80
		11/30/2015	11.29	NM		16.20
		3/14/2016	10.42	NM		17.07
		6/5/2015	8.89	13.19		12.54
MW-24s	Shallow	9/14/2015	8.88	NM	21.43	12.55
		11/30/2015	8.56	NM		12.87
		3/14/2016	7.94	NM	1	13.49

825 South Dakota Street and 812 and 820 South Adams Street, Seattle, Washington

Monitoring Well	Groundwater Zone	Date Measured	Depth to Groundwater ^a (feet)	Depth to Bottom of Well ^a (feet)	Top of Casing Elevation ^b (feet)	Groundwater Elevation ^c (feet)
		6/5/2015	5.58	24.80		15.80
	Intermediate	9/14/2015	6.83	NM		14.55
MW-24i	Intermediate	11/30/2015	5.49	NM	. 21.38	15.89
		3/14/2016	4.48	NM		16.90
MW-24ir	Intermediate	11/30/2015	5.13	NM	. 21.06	15.93
10100-2411	Intermediate	3/14/2016	3.37	NM	21.00	17.69
		6/5/2015	12.71	19.82		7.31
MW-25s	Shallow	9/14/2015	13.24	NM	20.02	6.78
10100-255	Shallow	11/30/2015	12.53	NM	20.02	7.49
		3/14/2016	11.52	NM		8.50
		6/5/2015	8.84	33.98		11.16
		9/14/2015	10.49	NM		9.51
MW-25i	Intermediate	11/30/2015	10.05	NM	. 20.00	9.95
		3/14/2016	9.14	NM		10.86
		6/5/2015	12.37	19.49		6.73
N/14/ 00	<u>.</u>	9/14/2015	12.62	NM		6.48
MW-26s	Shallow	11/30/2015	11.55	NM	. 19.10	7.55
		3/14/2016	11.70	NM		7.40
		6/5/2015	14.12	33.73		4.93
		9/14/2015	11.25	NM		7.80
MW-26i	Intermediate	11/30/2015	10.62	NM	. 19.05	8.43
		3/14/2016	10.83	NM		8.22
		6/5/2015	11.38	19.64		7.05
		9/14/2015	11.62	NM		6.81
MW-27s	Shallow	11/30/2015	10.95	NM	· 18.43	7.48
		3/14/2016	10.58	NM		7.85
		6/5/2015	6.19	15.10		5.85
		9/14/2015	6.20	NM		5.84
MW-28s	Shallow	11/30/2015	5.49	NM	. 12.04	6.55
		3/14/2016	5.72	NM		6.32
		6/11/2015	7.02	15.19		14.88
		9/14/2015	7.23	NM		14.67
MW-29s	Shallow	11/30/2015	6.70	NM	· 21.90	15.20
		3/14/2016	6.19	NM		15.71
		6/5/2015	8.81	11.66		12.48
		9/14/2015	8.92	NM	·	12.40
SBW-1	Shallow	11/30/2015	8.64	NM	. 21.29	12.65
		3/14/2016	8.34	NM		12.95
		6/5/2015	8.55	10.65		11.22
		9/14/2015	8.63			11.14
SBW-2	Shallow	11/30/2015	8.05	NM	· 19.77	11.72
		3/14/2016	7.66	NM	•	12.11
		6/5/2015	11.06	12.10		6.62
		9/14/2015	11.30			6.38
SBW-3	Shallow	11/30/2015	10.88	NM	. 17.68	6.80
		3/14/2016	10.88	NM		7.22
		6/5/2015	6.00	9.13		6.35
		9/14/2015	6.16	9.13 NM		6.19
SBW-4	Shallow		+ ++++++		· 12.35	
		11/30/2015 3/14/2016	5.90 5.63	NM NM	·	6.45 6.72

Notes:

All site monitoring wells resurveyed on August 7 and 20, 2014.

More recently installed monitoring wells surveyed on June 11, 2015 and February 2, 2016.

- a Depths in feet below top of well casing.
- b Depths measured from north side of top edge of well casing.
- c Elevations reported in feet above NAVD 88 datum.
- NM Not measured.

0 america	O	Data											Detected	l Volitile Organic	Compounds ^a										Requeste	ed Metals
Sample Identification	Sample Depth (Feet)	Date Collected	Tetrachloro- ethene	Trichloro- ethene	trans-1,2- Dichloroethene	cis-1,2- Dichloroethene	1,1- Dichloroethene	Vinyl Chloride	Chloroform	4-Methyl-2- Pentanone	Toluene	1,1,1- Trichloroethane	1,1,2- Trichloroethane	Ethylbenzene	Total Xylenes	Styrene	Isopropyl- benzene	n-Butylbenzene	1,3,5- Trimethylbenzen	tert-Butylbenzene	1,2,4- Frimethylbenzene	s-Butylbenzene	P- Isopropyltoluene	Naphthalene	Chromium (VI) ^b	Chromium ^c
B-1	0.5	3/18/2014 3/18/2014	(PCE) 0.180 0.140	(TCE) 0.71 0.46	<0.046 <0.073	0.093 <0.080	<0.010 <0.010	<0.010 <0.010	<0.047 <0.076	<0.050 <0.076	<0.049 <0.078	<0.043 <0.068	<0.051 <0.082	<0.050 <0.080	<0.133 <0.209	<0.039 <0.062	<0.042 <0.067	<0.040 <0.064	<0.038 <0.061	<0.049 <0.079	<0.041 <0.066	<0.045	<0.037 <0.059	<0.053 <0.084	<5.0 <5.0	15 14
B-2	0.5	3/18/2014	1.20	11.0	<0.055	0.390	<0.010	<0.010	<0.057	<0.057	<0.059	<0.051	<0.061	0.100	0.284	<0.046	0.130	<0.048	0.079	<0.059	0.086	0.075	<0.044	<0.063	<5.0	63
D-2	6	3/18/2014 3/18/2014	0.910 0.096	6.1 0.53	<0.055 <0.049	0.180 <0.054	<0.010 <0.010	<0.010 <0.010	<0.051 <0.051	<0.051 <0.051	<0.053 <0.053	<0.046 <0.046	<0.055 <0.055	<0.054 <0.054	<0.145 <0.142	<0.042 <0.042	<0.045 <0.045	<0.043 <0.043	<0.041 <0.041	<0.053 <0.053	<0.045 <0.045	<0.049 <0.049	<0.040 <0.040	<0.057 <0.057	<5.0 <5.0	18 6.7
B-3	0.5 3.5	3/18/2014 3/18/2014	1.60 0.150	24.0 1.7	0.083 <0.048	2.30 0.067	<0.010 <0.010	<0.010 <0.010	<0.060 <0.050	<0.060 <0.050	<0.063 <0.051	<0.054 <0.045	<0.065 <0.054	<0.064 <0.053	<0.165 <0.144	<0.049 <0.041	<0.053 <0.044	<0.051 <0.042	<0.049 0.074	<0.063 <0.052	<0.053 0.093	<0.057 <0.047	<0.047 <0.039	<0.067 <0.055	<5.0 <5.0	37 9.6
	6.5 0.5	3/18/2014 3/17/2014	<0.010 0.330	0.4 8.4	<0.050 0.070	<0.055 0.840	<0.010 <0.010	<0.010 <0.010	<0.052 <0.051	<0.052 <0.050	<0.054 <0.052	<0.047 <0.046	<0.056 <0.055	<0.055 <0.053	<0.146 <0.142	<0.042 <0.041	<0.046 <0.045	<0.044 <0.053	<0.042 0.100	<0.054 0.093	<0.045 0.140	<0.049 <0.048	<0.040 0.069	<0.058 <0.056	<5.0 <5.0	6.7 110
B-4	3	3/17/2014	0.170	1.4	<0.044	0.085	<0.010	<0.010	<0.046	<0.050	<0.047	<0.041	<0.049	<0.048	<0.129	<0.037	<0.040	<0.038	<0.037	<0.047	<0.040	<0.043	<0.035	<0.051	<5.0	29
	6 0.5	3/17/2014 3/17/2014	<0.010 0.450	0.34 7.8	<0.055 <0.043	<0.061 0.510	<0.010 <0.010	<0.010 <0.010	<0.058 <0.044	<0.057 <0.050	<0.060 <0.046	<0.052 <0.040	<0.062 0.098	<0.061 <0.047	<0.162 <0.124	<0.047 <0.036	<0.051 <0.039	<0.048 <0.037	<0.046 <0.036	<0.060 <0.046	<0.050 0.060	<0.055 <0.042	<0.045 <0.034	<0.064 <0.049	<5.0 <5.0	8.7 88
B-5	3	3/17/2014 3/17/2014	0.260	4.0 0.38	<0.045 <0.047	0.480 <0.051	<0.010 <0.010	<0.010 <0.010	<0.047 <0.048	<0.050 <0.050	<0.048 <0.050	<0.042 <0.044	<0.050 <0.052	<0.050	<0.132 <0.191	<0.038	<0.041 <0.043	<0.039 <0.041	<0.038 <0.039	<0.049 <0.050	<0.041 <0.042	<0.044 <0.046	<0.036 <0.038	<0.052 <0.054	<5.0 <5.0	16 10
B-6	1 0.5	3/18/2014 3/17/2014	0.190 0.410	15 20	0.077	8.20 48.0	<0.010 0.049	0.330	<0.063 <0.070	<0.062 <0.070	<0.065 0.073	<0.056 <0.063	<0.067 <0.075	<0.066 <0.074	0.200 <0.194	<0.051 <0.057	<0.055 <0.062	<0.052 <0.059	0.084 <0.056	<0.065 <0.073	0.110 0.099	<0.059 <0.066	0.100 <0.054	<0.070 <0.078	<5.0 <5.0	49 55
B-7	3	3/17/2014	0.290	7.50	<0.049	0.490	<0.010	<0.010	<0.051	<0.051	<0.053	<0.046	<0.055	<0.054	<0.143	<0.042	<0.045	<0.043	<0.041	<0.053	<0.044	<0.048	<0.040	<0.057	<5.0	37
	6 0.5	3/17/2014 3/17/2014	0.085	1.20 28	<0.047 <0.065	0.084	<0.010 <0.010	<0.010 <0.010	<0.048 <0.067	<0.050 <0.067	<0.050 <0.069	<0.043 <0.046	<0.052 <0.072	<0.051 <0.071	<0.136 <0.191	<0.039 <0.055	<0.043 <0.059	<0.041 <0.056	<0.039 <0.054	<0.050 <0.070	<0.042 <0.058	<0.046 <0.064	<0.037 <0.052	<0.054 <0.075	<5.0 <5.0	8.2 190
B-8	3	3/17/2014 3/17/2014	0.130 <0.010	1.20 0.32	<0.050 <0.054	<0.054 <0.059	<0.010 <0.010	<0.010 <0.010	<0.051 <0.056	<0.051 <0.056	<0.053 <0.058	<0.046 <0.051	<0.055 <0.061	<0.054 <0.059	<0.145 <0.161	<0.042 <0.046	<0.045 <0.050	<0.043 <0.047	<0.041 <0.045	<0.053 <0.058	<0.045 <0.056	<0.049 <0.053	<0.040 <0.044	<0.057 <0.063	<5.0 <5.0	12 36
B-9	0.5	3/17/2014	0.055	0.82	<0.041	<0.045	<0.010	<0.010	<0.043	<0.050	<0.044	<0.038	<0.046	<0.045	<0.120	<0.035	<0.038	<0.036	<0.034	<0.044	<0.037	<0.041	<0.033	<0.048	<5.0	19
D-9	3 6	3/17/2014 3/17/2014	0.990 <0.010	34.0 0.58	<0.045 <0.045	1.20 <0.049	<0.010 <0.010	<0.010 <0.010	<0.047 <0.047	<0.050 <0.050	<0.048 <0.049	<0.042 <0.042	<0.050 <0.051	<0.049 <0.050	<0.131 <0.132	<0.038 <0.038	<0.041 <0.042	<0.039 <0.039	<0.038 <0.038	<0.048 <0.049	<0.041 <0.041	<0.044 <0.045	<0.036 <0.036	<0.052 <0.052	<5.0 <5.0	93 11
B-10	0.5	3/17/2014 3/17/2014	0.280	6.1 15.0	<0.053 <0.053	<0.057 0.120	<0.010	<0.010 <0.010	<0.055 <0.055	<0.054 <0.055	<0.056 <0.057	<0.049 <0.049	<0.059 <0.059	<0.058	<0.150 <0.150	<0.044 <0.045	<0.048 <0.048	<0.046	<0.044 <0.044	<0.057 <0.057	<0.047	<0.052 <0.052	<0.042 <0.042	<0.061 <0.061	<5.0 <5.0	280 2,100
	6 0.5	3/17/2014 3/17/2014	<0.010 0.550	0.39 26	<0.052 <0.055	<0.057 0.840	<0.010 <0.010	<0.010 <0.010	<0.054 <0.057	<0.054 <0.057	<0.056 <0.059	<0.049 <0.052	<0.058 <0.062	<0.057 <0.061	<0.149 <0.162	<0.044 <0.047	<0.048 <0.051	<0.046 <0.048	<0.044 <0.046	<0.056 <0.060	<0.047 <0.050	<0.051 <0.054	<0.042 <0.045	<0.060 <0.064	<5.0 <5.0	1,200 150
B-11	3	3/17/2014	<0.010	0.68	<0.054	<0.059	<0.010	<0.010	<0.056	<0.058	<0.058	<0.050	<0.060	<0.059	<0.161	<0.046	<0.050	<0.047	<0.045	<0.058	<0.049	<0.053	<0.043	<0.062	<5.0	18
	6 0.5	3/17/2014 3/19/2014	<0.010 <0.010	0.59 4.4	<0.053 <0.052	<0.058 <0.057	<0.010 <0.010	<0.010 <0.010	<0.055 <0.054	<0.054 <0.054	<0.057 <0.056	<0.049 <0.059	<0.059 <0.058	<0.058 <0.057	<0.150 <0.149	<0.045 <0.044	<0.048 <0.048	<0.046 <0.046	<0.044 <0.044	<0.057 <0.056	<0.048 0.074	<0.052 <0.051	<0.042 <0.042	<0.061 2.600	<5.0 910	130 37,000
B-12	3	3/19/2014 3/19/2014	<0.010 <0.010	0.069 0.33	<0.053 <0.051	<0.058 <0.055	<0.010 <0.010	<0.010 <0.010	<0.055 <0.053	<0.055 <0.052	<0.057 <0.054	<0.049 <0.047	<0.059 <0.057	<0.058 <0.056	<0.150 <0.148	<0.045 <0.043	<0.048 <0.046	<0.046 <0.044	<0.044 <0.042	<0.057 <0.055	<0.057 <0.046	<0.052 <0.050	<0.043 <0.041	<0.061 <0.059	<500 <100	8,600 12,000
D 42	0.5	3/18/2014	0.690	19	<0.049	0.220	<0.010	<0.010	<0.051	<0.050	<0.052	<0.045	<0.054	<0.053	<0.142	<0.041	<0.045	<0.042	<0.041	<0.052	<0.044	<0.048	<0.039	<0.056	<5.0	62
B-13	3 6	3/18/2014 3/18/2014	<0.010 <0.010	0.70 0.83	<0.055 <0.053	<0.060 <0.057	<0.010 <0.010	<0.010 <0.010	<0.057 <0.055	<0.057 <0.054	<0.059 <0.056	<0.051 <0.049	<0.061 <0.059	<0.060 <0.058	<0.152 <0.150	<0.047 <0.044	<0.050 <0.048	<0.048 <0.046	<0.046 <0.044	<0.059 <0.057	<0.050 <0.048	<0.054 <0.052	<0.044 <0.042	<0.064 <0.061	<5.0 <5.0	29 59
B-14 B-15	8	3/18/2014 3/18/2014	<0.010 0.060	0.063	<0.048	<0.052 <0.057	<0.010 <0.010	<0.010 <0.010	<0.050 <0.054	<0.050 <0.054	<0.051 <0.058	<0.045 <0.049	<0.053 <0.058	<0.052 <0.057	<0.134 <0.149	<0.040 <0.044	<0.044 <0.048	<0.042 <0.046	<0.040 <0.044	<0.051 <0.056	<0.049 <0.047	<0.047 <0.051	<0.038 <0.042	<0.055 <0.060	<5.0 <5.0	580 9.4
B-16	0.5	3/18/2014 3/18/2014	0.340 <0.010	17 0.28	<0.058 <0.051	<0.063	<0.010 <0.010	<0.010 <0.010	<0.060 <0.053	<0.060	<0.062	<0.054 <0.047	<0.065 <0.057	<0.063	<0.165	<0.049	<0.053 <0.047	<0.050 <0.044	<0.048	<0.062 <0.055	<0.052 <0.046	<0.057 <0.050	<0.047 <0.041	<0.067 <0.059	<5.0 <5.0	22 11
B-10	5.5	3/18/2014	<0.010	0.24	<0.048	<0.055 <0.053	<0.010	<0.010	<0.050	<0.052 <0.050	<0.054 <0.052	<0.045	<0.054	<0.056 <0.053	<0.148 <0.140	<0.043 <0.041	<0.044	<0.042	<0.042 <0.040	<0.052	<0.043	<0.047	<0.039	<0.056	<5.0	21
B-17	0.5	3/20/2014 3/20/2014	<0.010 <0.010	1.1 0.025	<0.068 <0.057	<0.075	<0.010 <0.010	<0.010 <0.010	<0.071 <0.059	<0.071 <0.059	<0.073 <0.061	<0.064 <0.053	<0.076 <0.063	<0.075	<0.194 <0.164	<0.058 <0.048	<0.063 <0.052	<0.060 <0.049	<0.057 <0.047	<0.074 <0.061	<0.062 <0.051	<0.067 <0.056	<0.055 <0.046	<0.079 <0.066	95 <5.0	12,000 460
	6	3/20/2014 3/20/2014	<0.010 <0.010	0.15	<0.055 <0.050	<0.060 <0.054	<0.010 <0.010	<0.010 <0.010	<0.057 <0.052	<0.057 <0.051	<0.059 <0.053	<0.051 <0.046	<0.061 <0.055	<0.060 <0.054	<0.162 <0.145	<0.046 <0.042	<0.050 <0.046	<0.048 <0.043	<0.046 <0.046	<0.059 <0.042	<0.050 <0.045	<0.054 <0.049	<0.044 <0.040	<0.063 <0.057	26 <5.0	3,400 31
B-18	6	3/20/2014	<0.010	0.18	<0.059	<0.064	<0.010	<0.010	<0.061	<0.060	<0.063	<0.055	<0.065	<0.064	<0.175	<0.049	<0.054	<0.051	<0.049	<0.063	<0.053	<0.058	<0.047	<0.068	<5.0	420
B-19	0.5	3/19/2014 3/19/2014	0.280 0.430	10 19	<0.052 <0.054	<0.056 <0.059	<0.010 <0.010	<0.010 <0.010	<0.053 <0.056	<0.053 <0.056	<0.055 <0.058	<0.048 <0.050	<0.057 <0.060	<0.056 <0.059	<0.149 <0.161	<0.044 <0.046	<0.047 <0.049	<0.045 <0.047	<0.043 <0.045	<0.055 <0.058	<0.046 <0.049	<0.051 <0.053	<0.041 <0.043	<0.060 <0.062	<5.0 <5.0	32 54
	6 0.5	3/19/2014 3/19/2014	0.092	2.1 7.1	<0.047 <0.040	<0.052 <0.044	<0.010 <0.010	<0.010 <0.010	<0.049 <0.042	<0.050 <0.050	<0.051 <0.043	<0.044 <0.038	<0.053 <0.045	<0.052 <0.044	<0.138 <0.118	<0.040	<0.043 <0.037	<0.041 <0.035	<0.040 <0.034	<0.051 <0.043	<0.043	<0.046 <0.040	<0.038 <0.032	<0.055 <0.047	<5.0 <5.0	26 27
B-20	3	3/19/2014 3/19/2014	0.240 0.088	7.0 1.4	<0.048 <0.054	<0.053 <0.059	<0.010 <0.010	<0.010 <0.010	<0.050 <0.056	<0.050 <0.056	<0.052 <0.058	<0.045 <0.050	<0.054 <0.060	<0.053 <0.059	<0.141 <0.161	<0.041 <0.045	<0.044 <0.049	<0.042 <0.047	<0.059 <0.045	<0.052 <0.058	<0.044 <0.049	<0.047 <0.053	<0.039 <0.043	<0.056 <0.062	<5.0 <5.0	17 15
	0.5	3/19/2014	5.4	160	<0.047	0.270	<0.010	<0.010	<0.049	<0.050	<0.050	0.140	<0.053	<0.052	0.268	<0.040	<0.043	0.065	0.066	<0.051	0.089	<0.046	<0.038	0.095	<5.0	200
B-21	3 6	3/19/2014 3/19/2014	<0.010 0.099	0.52 1.2	<0.055 <0.052	<0.060 <0.057	<0.010 <0.010	<0.010 <0.010	<0.057 <0.054	<0.057 <0.054	<0.059 <0.056	<0.051 <0.049	<0.061 <0.058	<0.060 <0.057	<0.162 <0.149	<0.046 <0.044	<0.050 <0.048	<0.049 <0.058	<0.046 <0.044	<0.059 <0.056	<0.049 <0.047	<0.054 <0.051	<0.044 <0.042	<0.063 <0.060	<5.0 <5.0	11 12
B-22	0.5	3/20/2014 3/20/2014	0.490 0.380	11 8.3	<0.064 <0.051	<0.070 <0.056	<0.010 <0.010	<0.010 <0.010	<0.066 <0.053	<0.066 <0.053	<0.069 <0.055	<0.060 <0.048	<0.071 <0.057	<0.070 <0.056	<0.190 <0.148	<0.054 <0.043	<0.059 <0.047	<0.056 <0.045	<0.054 <0.043	<0.069 <0.055	<0.058 <0.046	<0.063 <0.050	<0.052 <0.041	<0.074 <0.059	<5.0 <5.0	23 17
	6	3/20/2014	1.10	21.0	<0.054	<0.059	<0.010	<0.010	<0.056 <0.046	<0.055	<0.058	<0.050	<0.060	<0.059	<0.161	<0.045	<0.049	<0.047	<0.045	<0.058	<0.048	<0.053	<0.043 0.130	<0.062	<5.0	25 150
B-23	0.5	3/19/2014 3/19/2014	37.0 0.180	610 1.9	0.120 <0.053	7.400 <0.058	<0.010 <0.010	<0.010 <0.010	<0.055	<0.050 <0.055	<0.048 <0.057	0.200 <0.049	<0.050 <0.059	<0.049 <0.058	0.320 <0.150	<0.038 <0.045	0.120 <0.048	0.180 <0.059	0.120 <0.044	0.085 <0.057	0.170 <0.048	0.160 <0.052	<0.042	0.071 <0.061	<5.0 <5.0	20
	6 0.5	3/19/2014 3/19/2014	0.110 2.40	<u>1.1</u> 19	<0.056 0.075	<0.061 0.730	<0.010 <0.010	<0.010 <0.010	<0.058 <0.046	<0.057 <0.050	<0.059 <0.048	<0.052 <0.042	<0.062 <0.050	<0.061 <0.049	<0.162 <0.130	<0.047 <0.038	<0.051 <0.041	<0.062 <0.050	<0.046 <0.037	<0.060	<0.050	<0.055 <0.044	<0.045 <0.036	<0.064 <0.051	<5.0 <5.0	29 27
B-24	3	3/19/2014 3/19/2014	0.460 2.7	7.6 42.0	<0.051 <0.052	0.150 0.610	<0.010 <0.010	<0.010 <0.010	<0.053 <0.053	<0.053 <0.053	<0.055 <0.055	<0.048 0.053	<0.057 <0.058	<0.056 <0.056	<0.148 <0.149	<0.043 <0.044	<0.047 <0.047	<0.057 <0.058	<0.043 <0.043	<0.055 <0.055	<0.046 <0.047	<0.050 <0.051	<0.041 <0.041	<0.059 <0.060	<5.0 <5.0	16 110
D 05	0.5	3/20/2014	1.4	31	<0.053	0.430	<0.010	<0.010	<0.055	<0.054	<0.056	0.051	<0.059	<0.058	<0.150	<0.045	<0.057	<0.046	<0.044	<0.057	<0.048	<0.052	<0.042	<0.061	<5.0	84
B-25	3 6	3/20/2014 3/20/2014	0.20 0.110	3.1 1.3	<0.062 <0.049	<0.068 <0.053	<0.010 <0.010	<0.010 <0.010	<0.064 <0.050	<0.064 <0.050	<0.067 <0.052	<0.058 <0.045	<0.069 <0.054	<0.068 <0.053	<0.179 <0.142	<0.053 <0.041	<0.057 <0.044	<0.054 <0.042	<0.052 <0.041	<0.067 <0.052	<0.056 <0.044	<0.061 <0.048	<0.050 <0.039	<0.072 <0.056	<5.0 <5.0	15 11
B-26	0.5	3/20/2014 3/20/2014	4.10 0.940	450 42.0	<0.051 <0.054	10.0 3.300	0.025 <0.010	<0.010 <0.010	0.056 <0.056	<0.050 <0.056	<0.054 <0.058	0.230 <0.051	<0.057 <0.061	<0.055 <0.060	<0.148 <0.161	<0.043 <0.046	<0.046 <0.050	<0.044 <0.047	<0.042 <0.045	<0.055 <0.059	<0.046 <0.049	<0.050 <0.053	<0.041 <0.044	<0.059 0.077	<5.0 <5.0	160 23
	6 0.5	3/20/2014 3/20/2014	0.090	2.0 710	<0.052 0.330	0.140	<0.010 0.210	<0.010 <0.010	<0.054 0.062	<0.053 <0.060	<0.055 0.100	<0.048 0.370	<0.058 <0.064	<0.057 <0.063	<0.149 0.190	<0.044	<0.047	<0.045	<0.043 <0.048	<0.056	<0.047 <0.052	<0.051 <0.057	<0.042	<0.060	<5.0 <5.0	12 470
B-27	3	3/20/2014	0.110	2.9	<0.051	0.260	<0.010	<0.010	<0.053	<0.053	<0.055	<0.048	<0.057	<0.056	<0.148	<0.043	<0.047	<0.045	<0.043	<0.055	<0.046	<0.050	<0.041	<0.059	<5.0	13
B-28	6 0.5	3/20/2014 3/20/2014	0.160 0.058	3.5 1.5	<0.054 <0.043	0.340	<0.010 <0.010	<0.010 <0.010	<0.056 <0.044	<0.056 <0.050	<0.058 <0.046	<0.050 <0.040	<0.060 <0.048	<0.059 <0.047	<0.161 <0.124	<0.046 <0.036	<0.049 <0.039	<0.047 <0.037	<0.045 <0.036	<0.058 <0.046	<0.049 <0.039	<0.053 <0.042	<0.043 <0.034	<0.062 <0.049	<5.0 <5.0	12 92
D-20	6 0.5	3/20/2014 3/20/2014	0.150 0.130	3.6 3.7	<0.043 <0.046	0.240	<0.010 <0.010	<0.010 <0.010	<0.045 <0.048	<0.050 <0.050	<0.046 <0.049	<0.040 <0.043	<0.048 <0.051	<0.047 <0.050	<0.126 <0.134	<0.036 <0.039	<0.040 <0.042	<0.038 <0.040	<0.036 <0.038	<0.046 <0.050	<0.039 <0.042	<0.042 <0.045	<0.035 <0.037	<0.050 <0.053	<5.0 <5.0	41 44
B-29	3	3/20/2014	1.10	54.0	<0.046	2.70	<0.010	<0.010	<0.048	<0.050	<0.050	<0.043	<0.052	<0.051	<0.135	<0.039	<0.042	<0.040	<0.039	<0.050	<0.042	<0.045	<0.037	<0.053	<5.0	37
	6 0.5	3/20/2014 3/20/2014	<0.010 <0.010	0.89	<0.051 <0.052	0.063	<0.010 <0.010	<0.010 <0.010	<0.053 <0.054	<0.053 <0.054	<0.055 <0.056	<0.048 <0.049	<0.057 <0.059	<0.056 <0.057	<0.148 <0.149	<0.043 <0.044	<0.047 <0.048	<0.045 <0.046	<0.043 <0.044	<0.055 <0.056	<0.046 <0.047	<0.050 <0.052	<0.041 <0.042	<0.059 <0.061	<5.0 <5.0	30 110
B-30	3	3/20/2014 3/20/2014	1.7 0.130	62.0 2.4	0.054 <0.053	5.0 0.160	<0.010 <0.010	<0.010 <0.010	<0.049 <0.055	<0.050 <0.055	<0.051 <0.057	<0.044 <0.049	<0.053 <0.059	<0.052 <0.058	<0.139 <0.150	<0.040 <0.045	<0.044 <0.048	<0.041 <0.046	<0.040 <0.044	<0.051 <0.057	<0.043 <0.048	<0.047 <0.052	<0.038 <0.042	<0.055 <0.061	<5.0 <5.0	30 15
B-31	0.5	3/20/2014 3/20/2014	49.0 <0.010	85 1.7	2.10 <0.068	29.0 3.70	0.520	1.5 0.22	<0.080 <0.071	0.890 0.560	4.80 0.930	<0.089 <0.064	0.250 <0.076	1.50 11.00	5.680 12.10	0.180 0.140	<0.078 0.200	<0.074 <0.060	0.097	<0.092 <0.074	0.150 0.110	<0.084 <0.067	<0.069 <0.055	<0.089 <0.079	<5.0 <5.0	310 60
2.01	6	3/20/2014	0.310	1.8	<0.008	0.170	<0.010	<0.010	<0.071	<0.058	<0.060	<0.004	<0.070	0.091	<0.163	<0.047	<0.051	<0.000	<0.047	<0.074	<0.057	<0.055	<0.035	<0.079	<5.0	11

Sample	Sample Depth	Date											Detected	d Volitile Organic	Compounds ^a										Requeste	d Metals
Sample Identification	(Feet)	Collected	Tetrachloro- ethene (PCE)	Trichloro- ethene (TCE)	trans-1,2- Dichloroethene	cis-1,2- Dichloroethene	1,1- Dichloroethene	Vinyl Chloride	Chloroform	4-Methyl-2- Pentanone	Toluene	1,1,1- Trichloroethane	1,1,2- Trichloroethane	Ethylbenzene	Total Xylenes	Styrene	lsopropyl- benzene	n-Butylbenzene	1,3,5- Trimethylbenzene	tert-Butylbenzene	1,2,4- Trimethylbenzene	s-Butylbenzene	P- Isopropyltoluene	Naphthalene	Chromium (VI) ^b	Chromium ^c
B-32	0.5	3/20/2014	<0.010	0.16	<0.047	<0.052	<0.010	<0.010	<0.049	<0.050	<0.051	<0.044	<0.053	<0.052	<0.138	<0.040	<0.043	<0.041	<0.039	<0.051	<0.043	<0.046	<0.038	<0.055	<5.0	130
(NWP Property)	3 6	3/20/2014 3/20/2014	<0.010	0.110	<0.049 <0.059	<0.053 <0.064	<0.010 <0.010	<0.010 <0.010	<0.051 <0.061	<0.051 <0.060	<0.053 <0.063	<0.046 <0.055	<0.055 <0.065	<0.054 <0.064	<0.138 <0.175	<0.041 <0.049	<0.045 <0.054	<0.043 <0.051	<0.041 <0.049	<0.053 <0.063	<0.044 <0.053	<0.048 <0.058	<0.039 <0.047	<0.057 <0.068	<5.0 <5.0	83 41
	0.5	7/24/2014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.52	24
	3	7/24/2014	<0.01	<0.01 0.029	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.03	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	0.70 <0.59	28
B-32 (Perine Property)	9	7/24/2014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.51	9.3
	12	7/24/2014	<0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.03 <0.03	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	0.54 <0.59	73 59
	18	7/24/2014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.0	42
B-33	0.5	7/24/2014	<0.01	<0.01 0.016	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.03	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.54 <0.55	26 22
	12	7/24/2014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.52	13
	0.5	7/24/2014	<0.01	0.010	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01	<0.03	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.51 <0.57	26 27
B-34	12	7/24/2014	<0.01	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.63	10
	13	7/24/2014	<0.01	0.011 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.03 <0.03	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	2.8 <0.59	160 33
	18	7/24/2014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.55	20
B-35	0.5	7/24/2014	<0.01	0.018	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.03	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.51 <0.53	22 29
	12	7/24/2014	<0.01	0.027	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.60	10
	0.5 5	7/24/2014	<0.01	0.029	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.03 <0.03	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.53 <0.53	29 29
B-36	12	7/24/2014	0.013	0.330	<0.01	0.015	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.51	9.4
	13 16	7/24/2014	0.013 <0.01	0.470 <0.01	<0.01	0.019 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.03	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.55 <0.57	21 150
	18	7/24/2014	<0.01	0.049	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.55	61
B-37	4 9	7/29/2014	<0.01	<0.01 0.020	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01	<0.03	<0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.57 <0.52	50 14
	0.5	7/28/2014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.54	34
D 20	4 9	7/28/2014	<0.01	<0.01 0.024	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.03	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.71 <0.55	30 11
B-38	12	7/28/2014	<0.01	0.048	<0.01	0.011	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.64	28
	14 16	7/28/2014	<0.01	<0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01	<0.03 <0.03	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.63 <0.62	22 20
B-39	0.5	7/29/2014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	< 0.03	<0.01	<0.01	<0.01	< 0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.52	36
B-40	0.5	7/29/2014 7/29/2014	<0.01 0.030	<0.01 1.3	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.046 <0.051	<0.05 <0.051	<0.047 <0.053	<0.041 <0.046	<0.049 <0.055	<0.048	<0.129 <0.143	<0.037 <0.042	<0.041 <0.045	<0.039 <0.043	<0.037 <0.041	<0.048 <0.053	<0.04 <0.044	<0.043 <0.048	<0.036 <0.04	<0.051 <0.057	<0.54 <0.62	35 42
	9	7/29/2014	< 0.01	0.17 0.011	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.059 <0.01	<0.059 <0.05	<0.061	<0.053 <0.01	<0.063 <0.01	<0.062 <0.01	<0.164 <0.03	<0.048	<0.052 <0.01	<0.049 <0.01	<0.047 <0.01	<0.061 <0.01	<0.051 <0.01	<0.056 <0.01	<0.046 <0.01	<0.066 <0.01	<0.52 <0.53	8.5
B-41	0.5 5	7/29/2014	<0.01	0.011	<0.01	0.01	<0.01	<0.01 <0.01	<0.01	<0.05	<0.01 <0.01	<0.01	<0.01	<0.01	<0.03	<0.01 <0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.53	35 49
	9 0.5	7/29/2014	<0.01	0.110 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.03 <0.03	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.51 <0.53	10 18
B-42	4	7/29/2014	<0.01	2.8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.57	56
	9	7/29/2014	<0.01	<0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.55 <0.53	17 26
B-43	6	7/25/2014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.53	30
	11.5	7/25/2014	<0.01	0.019	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.52	9.0 27
- ···	11.5	7/25/2014	<0.01	5.0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.54	14
B-44	13	7/25/2014	<0.01	0.049 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01	<0.03	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.53 <0.63	10 22
	18.5	7/25/2014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.56	22
B-45	6	7/25/2014	<0.01	0.017 0.030	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01	<0.03 <0.03	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.51 <0.53	25 25
	11.5	7/25/2014	-	0.043	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.52	9.4
	1 6	7/28/2014 7/28/2014		<0.01 0.014	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.03 <0.03	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.53 <0.54	27 28
B-46	11.5 13	7/28/2014		0.013 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.03 <0.03	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.54 <0.59	8.7 200
	16	7/28/2014		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.57	200
	18	7/28/2014	-	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.03 <0.01	<0.01	<0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.56 <0.53	21 27
B-47	6	7/28/2014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.52	23
	12 0.5	7/28/2014 3/2/2015	<0.01	<0.01 <0.010	<0.01 <0.010	<0.01 <0.010	<0.01 <0.010	<0.01 <0.010	<0.01	<0.05 <0.05	<0.01 <0.010	<0.01 <0.010	<0.01 <0.010	<0.01 <0.010	<0.01 <0.03	<0.01	<0.01 <0.010	<0.01 <0.010	<0.01 <0.010	<0.01 <0.010	<0.01 <0.010	<0.01 <0.010	<0.01 <0.010	<0.01 <0.010	<0.52 <5.0	8.2 25
B-48	4.5	3/2/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.05	<0.010	<0.010	<0.010	<0.010	<0.03	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	24
	7	3/2/2015 3/2/2015	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.05 <0.05	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.03 <0.03	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	29 8.1
	0.5	3/2/2015	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.05	<0.010	<0.010	<0.010	<0.010	<0.03	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	27
B-49	5 8	3/2/2015 3/2/2015	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.05 <0.05	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.03 <0.03	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	26 23
	12	3/2/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.05	<0.010	<0.010	<0.010	<0.010	<0.03	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	8.5
D 60	0.5 5	3/2/2015 3/2/2015	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.05 <0.05	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.03 <0.03	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	28 30
B-50	8	3/2/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.05	<0.010	<0.010	<0.010	<0.010	<0.03	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	25
	12 0.5	3/2/2015 3/2/2015	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.05 <0.050	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.03 <0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	9.1 24
	5	3/2/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	27
B-51	8	3/2/2015 3/2/2015	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.050 <0.050	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.030	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	38 14
	14	3/2/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	14
	18	3/2/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	18

													Detected	I Volitile Organic	Compounds ^a										Requeste	ed Metals
Sample Identification	Sample Depth (Feet)	Date Collected	Tetrachloro- ethene	Trichloro- ethene	trans-1,2- Dichloroethene	cis-1,2- Dichloroethen	1,1- e Dichloroethene	Vinyl Chloride	Chloroform	4-Methyl-2- Pentanone	Toluene	1,1,1- Trichloroethane	1,1,2- Trichloroethane	Ethylbenzene	Total Xylenes	Styrene	lsopropyl- benzene	n-Butylbenzene	1,3,5- Trimethylbenzene	tert-Butylbenzene	1,2,4- Trimethylbenzene	s-Butylbenzene	P- Isopropyltoluene	Naphthalene	Chromium (VI) ^b	Chromium ^c
	0.5	3/2/2015	(PCE) <0.010	(TCE) <0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	29
B-52	5	3/2/2015	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030 <0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<5.0	29 25
	0 12	3/2/2015 3/2/2015	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.050 <0.050	<0.010	<0.010 <0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<5.0 <5.0	8.6
	0.5	3/2/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	27
	0.5 (duplicate) 5	3/2/2015 3/2/2015	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.050 <0.050	<0.010	<0.010 <0.010	<0.010	<0.010	<0.030 <0.030	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	46 28
B-53	8	3/2/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	28
	11	3/2/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	49
	14	3/2/2015 3/2/2015	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.050 <0.050	<0.010	<0.010 <0.010	<0.010	<0.010	<0.030 <0.030	<0.010	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	9.6 76
	0.5	3/3/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	29
B-54	5	3/3/2015 3/3/2015	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.050 <0.050	<0.010	<0.010 <0.010	<0.010	<0.010	<0.030 <0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	26 21
	8 (duplicate)	3/3/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	29
	12	3/3/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	15
	0.5	3/3/2015 3/3/2015	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.050 <0.050	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.030 <0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	32 34
B-55	8	3/3/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	28
	12 0.5	3/3/2015 3/9/2015	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.050 <0.050	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.030 <0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	8.1 33
B-56	4	3/9/2015	<0.010	20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	29
	9	3/9/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	8.8
	0.5	3/9/2015 3/9/2015	<0.010 <0.010	<0.010 0.30	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.050 <0.050	<0.010	<0.010 <0.010	<0.010	<0.010	<0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	21 34
B-57	6	3/9/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	7.9
2.01	9 15	3/9/2015 3/9/2015	<0.010 <0.010	0.032 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.050 <0.050	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.030 <0.030	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	13 16
	18	3/9/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	35
	0.5	3/9/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	34
B-58	5	3/9/2015 3/9/2015	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.050 <0.050	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.030 <0.030	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	8.2 8.1
	9 (duplicate)	3/9/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	10
B-59	0.5	3/9/2015	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.050	<0.010	<0.010 <0.010	<0.010	<0.010	<0.030	<0.010	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	17
B-39	9	3/9/2015 3/9/2015	<0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.050 <0.050	<0.010	<0.010	<0.010	<0.010	<0.030 <0.030	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<5.0	9.6 8.2
	0.5	3/9/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	4.8
	4	3/9/2015 3/9/2015	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.050 <0.050	<0.010	<0.010 <0.010	<0.010	<0.010	<0.030 <0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	40 8.3
B-60	12	3/9/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	13
	15 18	3/9/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	25
	18 (duplicate)	3/9/2015 3/9/2015	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.050 <0.050	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.030 <0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	18 24
B-61	5	3/9/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	9.3
	10 0.5	3/9/2015 3/4/2015	<0.010	<0.010 80	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.050 <0.050	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.030 <0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<5.0 <5.0	8.3 1,800
B-62	3	3/4/2015	0.030	45	<0.010	0.036	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	380
	6	3/4/2015	<0.010	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	< 0.030	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<5.0	13
B-63	0.5	3/4/2015 3/4/2015	<0.010 <0.010	<0.010 0.026	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.050 <0.050	<0.010	<0.010 <0.010	<0.010	<0.010	<0.030 <0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<5.0 <5.0	19
	7	3/4/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	190
B-64	0.5	3/4/2015 3/4/2015	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.050 <0.050	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.030 <0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	32
	7	3/4/2015		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	17
B-65	4	3/4/2015 3/4/2015		<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.050 <0.050	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.030	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<5.0	53
	0.5	3/4/2015		<0.010	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.050	<0.010	<0.010 <0.010	<0.010	<0.010	<0.030 <0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010	<5.0 <5.0	19 76
B-66	3	3/4/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	11
	6 0.5	3/4/2015 3/4/2015		<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.050 <0.050	<0.010	<0.010 <0.010	<0.010	<0.010	<0.030 <0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<5.0 <5.0	27 44
B-67	6	3/4/2015		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	57
B-68	1	3/4/2015		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050 <0.050	<0.010	<0.010	<0.010 <0.010	<0.010	<0.030	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<5.0	22 8.1
D-00	5	3/4/2015 3/4/2015		<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.050	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.030 <0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<5.0 <5.0	8.1 9.2
	0.5	3/4/2015	<0.010	0.061	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	140
B-69	4	3/4/2015 3/4/2015		<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.050 <0.050	<0.010	<0.010 <0.010	<0.010	<0.010	<0.030 <0.030	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<5.0 <5.0	12 8.7
	7(duplicate)	3/4/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	9.5
B-70:8	8	5/26/2015		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	7.9
P-08	0.5	5/16/2016 5/16/2016		<0.010 0.036	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010			<0.010 <0.010	<0.010													
	8	5/16/2016	6 <0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010			<0.010	<0.010													
P-09	0.5	5/16/2016		<0.010 4.4	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010			<0.010 <0.010	<0.010 <0.010													
	8	5/16/2016		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		-	<0.010	<0.010				-									
D 40	0.5	5/16/2016		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010			<0.010	<0.010													
P-10	4.5 8	5/16/2016		0.044 <0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010			<0.010 <0.010	<0.010													
	0.5	5/16/2016	6 <0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010			<0.010	<0.010													
P-11	4.5	5/16/2016		2.5 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010			<0.010 <0.010	<0.010 <0.010													
MW-4i	5	11/20/201	5 <0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	-	-	<0.010	<0.010	-	-		-				-		-		<5.0	8.2
MW-7s	10 8	11/20/201 4/30/2015	5 <0.010 5 <0.010	<0.010 0.12	<0.010 <0.063	<0.010 0.27	<0.010 <0.010	<0.010 0.14	<0.010 <0.065	<0.065	0.24	<0.010 <0.059	<0.010 <0.070	0.67	3.92	<0.053	<0.058	<0.055	<0.053	<0.068	0.16	<0.062	 <0.051	<0.073	<5.0 <5.0	26 68
11111-13	0	4/30/2018	-0.010	J.12	~0.003	0.21	~0.010	0.14	~0.000	~0.000	0.24	-0.009	~0.070	0.07	3.32	~0.000	~0.000	-0.000	~0.000	~0.000	0.10	~0.00Z	-0.001	-0.073	~3.0	00

	le Depth												Detected	Volitile Organic (Compounds ^a										Requeste	ed Metals
	Feet) 0	Date - Collected	Tetrachloro- ethene (PCE)	Trichloro- ethene (TCE)	trans-1,2- Dichloroethene	cis-1,2- Dichloroethene	1,1- Dichloroethene	Vinyl Chloride	Chloroform	4-Methyl-2- Pentanone	Toluene	1,1,1- Trichloroethane	1,1,2- Trichloroethane	Ethylbenzene	Total Xylenes	Styrene	lsopropyl- benzene	n-Butylbenzene	1,3,5- Trimethylbenzene	tert-Butylbenzene	1,2,4- Trimethylbenzene	s-Butylbenzene	P- Isopropyltoluene	Naphthalene	Chromium (VI) ^b	Chromiur
		11/23/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		-	<0.010	<0.010		-				-	-			-	-	<5.0	56
		11/23/2015	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	-	-	<0.010	<0.010		-	-			-	-		-		-		-
55		11/23/2015 11/23/2015	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010		-	<0.010 <0.010	<0.010 <0.010		-	-				-		-		-		
WW-7ir 50		11/23/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	-	-	<0.010	<0.010		-	-			-	-		-	-	-		-
70	70 1	11/23/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	-	-	<0.010	<0.010		-	-			-	-		-		-		
80		11/23/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	-	-	<0.010	<0.010		-	-			-	-		-		-		
		11/23/2015 6/2/2015	<0.010 3.1	<0.010 51	<0.010 <0.010	<0.010 0.73	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	- <0.050	- <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	- <0.030	 <0.010	<0.010	<0.010	- <0.010	- <0.010	<0.010	 <0.010		- <0.010	<5.0	
4W-15i 0		6/2/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	19
	40 1	11/19/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010			<0.010	<0.010												<5.0	53
		11/19/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010			<0.010	<0.010												<5.0	46
50		11/19/2015 11/19/2015	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010			<0.010 <0.010	<0.010 <0.010												<5.0 <5.0	54 85
/W-15d 60		11/19/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010			<0.010	<0.010												<5.0	72
		11/19/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010			<0.010	<0.010												<5.0	72
80	80 1	11/20/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010			<0.010	<0.010												<5.0	90
90		11/20/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010			<0.010	<0.010												<5.0	54
1/W-20		7/25/2014	<0.01	0.033	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.50	25
(W-20s) 5		7/25/2014	<0.01	0.038	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.51	24
· 11.		7/25/2014	<0.01	0.044	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.51	9.5
		4/30/2015	<0.010	1.2	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	250
/W-24s 5		4/30/2015	<0.010	1.0	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	140
8	-	4/30/2015	<0.010	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	13
		5/26/2015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	8.3
		6/2/2015	<0.010	0.023	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<5.0	10
becific Soil RELs Deve Groundwater-Indoor A	•		4.4	0.2	9.3	880	NVE	0.2	NVE	NVE	NVE	390	NVE	NVE	NVE	NVE	NVE	NVE	NVE	NVE	NVE	NVE	NVE	NVE	3,610 ^e	188,038°
A Method C Soil Clear	eanup Level	el for Soil	1.0 ^e	0.05 ^e	1,600 ^f	7,000 ^f	175,000 ^f	0.04 ^e	4,230 ^f	280,000 ^f	280,000 ^f	89 ^e	2,300 ^f	350,000 ^f	700,000 ^f	700,000 ^f	350,000 ^f	NVE	35,000 ^f	NVE	NVE	NVE	NVE	70,000 ^f	10,500 ^f	5,520,000 ^f

_				Detected V	olitile Organic C	ompounds ^a			Request	ed Metals
Sample Identification	Date Collected	Tetrachloro- ethene (PCE) ^a	Trichloro-ethene (TCE) ^a	trans-1,2- Dichloro- ethene ^a	cis-1,2- Dichloro- ethene ^a	1,1-Dichloro- ethene ^b	Vinyl Chloride ^a	1,1,1-Trichloro- ethane ^a	Chromium (VI) ^b	Chromium
B-1:RGW	3/18/2014	15	590	2.4	160	<2.0	<0.20	<2.0	<10	47
B-2:RGW B-3:RGW	3/17/2014 3/18/2014	9.1 5.1	510 500	2.5 4.7	140 280	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<10 <10	160 46
B-4:RGW	3/17/2014	2.9	150	<2.0	17	<2.0	<0.20	<2.0	1,600	1,600
B-5:RGW	3/18/2014	3.9	290	<2.0	58	<2.0	<0.20	<2.0	<10	62
B-7:RGW	3/17/2014	3.8	760	5.9	280	<2.0	<0.20	<2.0	<10	280
B-8:RGW	3/17/2014	<2.0	58	<2.0	15	<2.0	<0.20	<2.0	120	370
B-9:RGW	3/17/2014	<2.0	79	<2.0	16	<2.0	<0.20	<2.0	<10	1,200
B-10:RGW	3/17/2014	<2.0	36	<2.0	8.4	<2.0	<0.20	<2.0	<10	1,300
B-11:RGW B-12:RGW	3/17/2014	<2.0	72	<2.0	18	<2.0	<0.20	<2.0	<10	930
B-12:RGW	3/18/2014 3/18/2014	<2.0	9.6 66	<2.0	2.8 4.6	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	70,000 <10	57,000 520
B-14:RGW	3/18/2014	<2.0	6.1	<2.0	<2.0	<2.0	<0.20	<2.0	570	480
B-15:RGW	3/18/2014	<2.0	14	<2.0	<2.0	<2.0	<0.20	<2.0	<10	73
B-16:RGW	3/18/2014	<2.0	7.2	<2.0	<2.0	<2.0	<0.20	<2.0	13	100
B-17:RGW	3/20/2014	<2.0	2.7	<2.0	<2.0	<2.0	<0.20	<2.0	17	1,100
B-18:RGW	3/20/2014	<2.0	7.0	<2.0	<2.0	<2.0	<0.20	<2.0	<10	1,200
B-19:RGW	3/19/2014	<2.0	88	<2.0	<2.0	<2.0	<0.20	<2.0	<10	170
B-20:RGW	3/19/2014	<2.0	6.6	<2.0	<2.0	<2.0	<0.20	<2.0	<10	72
B-21:RGW B-22:RGW	3/19/2014 3/20/2014	<2.0 <2.0	34 43	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<10 <10	150 86
B-23:RGW	3/20/2014	<2.0 42	43	<2.0	<2.0 52	<2.0	<0.20	<2.0	<10	530
B-24:RGW	3/19/2014	3.7	160	<2.0	10	<2.0	<0.20	<2.0	<10	310
B-25:RGW	3/19/2014	23	2,700	<2.0	32	<2.0	<0.20	2.1	<10	210
B-26:RGW	3/20/2014	8.0	1,400	4.7	210	<2.0	<0.20	<2.0	<10	870
B-27:RGW	3/20/2014	15	1,700	2.7	280	<2.0	<0.20	<2.0	<10	1,500
B-28:RGW	3/20/2014	15	1,700	3.3	130	<2.0	<0.20	<2.0	<10	160
B-29:RGW	3/20/2014	4.9	590	3.0	100	<2.0	<0.20	<2.0	<10	860
B-30:RGW	3/20/2014 3/20/2014	13	1,300	3.0	250	<2.0	<0.20	<2.0	<10	200
B-31:RGW B-32:RGW	3/20/2014	28 <2.0	950 <2.0	3.4 <2.0	200 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<10 <10	1,300 190
B-32W-S (Perine)	7/24/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	190
B-32W-D (Perine)	7/24/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	10
B-33W-S	7/24/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	7.7
B-34W-S	7/24/2014	<2.0	5.7	<2.0	<2.0	<2.0	<2.0	<2.0	<10	8.9
B-34W-D	7/24/2014	<2.0	2.3	<2.0	<2.0	<2.0	<2.0	<2.0	<10	180
B-35W-S	7/24/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	15
B-36W-S	7/24/2014	<2.0	120	<2.0	6.5	<2.0	<2.0	<2.0	<10	32
B-36W-D B-37W	7/24/2014	<2.0	77	<2.0	6.0	<2.0	<2.0	<2.0	<10	23
B-38W-S	7/29/2014 7/28/2014	2.5 6.3	360 370	3.0 <2.0	34 16	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<10 <10	190 550
B-38W-D	7/29/2014	<2.0	48	<2.0	5.4	<2.0	<2.0	<2.0	<10	760
B-40W	7/29/2014	<2.0	120	<2.0	2.3	<2.0	<2.0	<2.0	<10	1,900
B-41W	7/29/2014	<2.0	40	<2.0	<2.0	<2.0	<2.0	<2.0	<10	28
B-42W	7/29/2014	<2.0	18	<2.0	<2.0	<2.0	<2.0	<2.0	<10	29
B-43W	7/25/2014	<2.0	140	<2.0	2.5	<2.0	<2.0	<2.0	<10	49
B-44W-S	7/25/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	92
B-44W-D	7/25/2014	<2.0	4.9	<2.0	<2.0	<2.0	<2.0	<2.0	<10	140
B-45W B-46W-S	7/25/2014 7/28/2014	<2.0 <2.0	<2.0 <2.0	<2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<10 <10	210 120
B-46W-D	7/28/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	46
B-47W	7/28/2014	<2.0	10	<2.0	<2.0	<2.0	<2.0	<2.0	<10	40 50
B-48:RGW	3/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	50
B-49:RGW	3/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	20
B-50:RGW	3/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	13
B-51:RGW	3/3/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	57
B-52:RGW	3/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	120
B-53:RGW	3/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	3.5
B-54:RGW B-55:RGW	3/3/2015 3/3/2015	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<10 <10	18 3.8
B-55:RGW B-56:RGW	3/3/2015	<2.0	<2.0 20	<2.0	<2.0	<2.0	<2.0	<2.0	<10 <10	3.8 17
B-57:RGW	3/9/2015	<2.0	20 <2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	21
B-58:RGW	3/9/2015	<2.0	3.5	<2.0	<2.0	<2.0	<2.0	<2.0	<10	34
B-59:RGW	3/9/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	15
B-60:RGW	3/9/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	110
B-61:RGW	3/9/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	7.8
B-62:RGW	3/4/2015	4.9	420	4.7	54	<0.20	<0.20	<2.0	<10	73
B-65:RGW	3/4/2015	<2.0	12	<2.0	<2.0	<0.20	<0.20	<2.0	1,200	1,100
B-66:RGW	3/4/2015	<2.0	<2.0	<2.0	<2.0	<0.20	<0.20	<2.0	<10	18
B 67-DOW	3/4/2015	<2.0	<2.0	<2.0	<2.0	<0.20	<0.20	<2.0	<10	380
B-67:RGW										
B-67:RGW B-67:RGW (duplicate)	3/4/2015	<2.0	<2.0	<2.0	<2.0	<0.20	<0.20	<2.0	65	310
B-67:RGW	3/4/2015 3/4/2015	<2.0 <2.0	<2.0 2.3	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<0.20	<2.0 <2.0	65 <10	310 41

				Detected V	/olitile Organic Co	ompounds ^a			Request	ed Metals
Sample Identification	Date Collected	Tetrachloro- ethene (PCE) ^a	Trichloro-ethene (TCE) ^a	trans-1,2- Dichloro- ethene ^a	cis-1,2- Dichloro- ethene ^a	1,1-Dichloro- ethene ^b	Vinyl Chloride ^a	1,1,1-Trichloro- ethane ^a	Chromium (VI) ^b	Chromium ^c
SBB-1:RGW	3/9/2015	<2.0	<2.0	<2.0	<2.0	<0.20	<0.20	<2.0	<10	4.3
Site-Specific Groun Developed for the C Indoor Air Pa	Groundwater-		37	NVE	NVE	NVE	30	52,340	NVE	NVE
Site-Specific Gro CULs Develope Groundwater-Ir Pathway	ed for the ndoor Air	101	8.4	NVE	NVE	NVE	6.8	11,930	NVE	NVE
Groundwater CUI from ODE		5,600	3,000	1,800	180,000	44,000	960	1,100,000	9,400	NVE

Notes:

All samples were analyzed by EPA Method 8260 and results are presented in micrograms/liter (μ g/L).

Bold Bold results indicate that analyte is detected at a concentration greater than the laboratory reporting limit.

Shading indicates that analyte is detected at a concentration greater than the Site-specific remediation level.

Indicates that the analyte is not detected at a concentration greater than the laboratory reporting limit. <

Sample was not analyzed for this compound. ---

REL Remediation level.

NVE No cleanup value has been established for this compound.

NR Not researched.

CUL Cleanup level.

Analyzed by EPA Method 8260. а

b Analyzed by EPA Methold 7196.

Analyzed by EPA Methold 200.8. С

Site-Specific Groundwater RELs Developed for the Groundwater-Indoor Air Pathway for a construction worker reasonable maximum exposure (RME) scenario. d

е Site-Specific Groundwater CULs Developed for the MTCA Method C Groundwater-Indoor Air CUL.

f Oregon Department of Environmental Quality (ODEQ) Risk-Based Cleanup Levels for direct contact with groundwater in an excavation for a construction worker (http://www.deq.state.or.us/lq/pubs/docs/RBDMTable.pdf).

Qualifiers:

Laboratory estimated concentration J

Table 5 Summary of Groundwater Analytical Results for Volatile Organic Compounds (in μg/L) Remedial Investigation Report Former Northwest Plating 825 South Dakota Street and 812 and 820 South Adams Street, Seattle, Washington

Sample Identification	Date Collected	Tetrachloro- ethene (PCE) ^a	Trichloroethene (TCE) ^a	trans-1,2- Dichloro- ethene ^a	cis-1,2- Dichloro- ethene ^ª	1,1-Dichloro- ethene ^b	Vinyl Chloride ^a	1,1,1-Trichloro- ethane ^a	1,1,2-Trichloro- ethane ^b	Chloroform ^a
	3/23/1989 9/21/1989	86 <100	9,500 6,900	4.1 <100	390 210	<2.0 <100	<5.0 <250	12 <100	<2.0 <100	3.5 <100
	4/27/1999	36	4,100	5.0	140		~230 2	4.3		1.6
MW-1	9/22/2014	4	230	5.4	<100	<2.0	8.5	<2.0	<2.0	<2.0
(MW-1s)	6/9/2015	5.2	420	5.9 3.9	110 57	<2.0	12	<2.0	<2.0	<2.0 <2.0
	9/16/2015 12/4/2015	4.7 22	240 890	3.9	200	<2.0 <2.0	25 4	<2.0 <2.0	<2.0 <2.0	<2.0
	3/16/2016	22	910	2.8	190	<2.0	0.77	<2.0	<2.0	<2.0
	11/5/2013	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	11/5/13 Dup-1 8/26/2014	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	6/9/2015	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-1i	6/9/15 Dup-3	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/15/2015	<2.0	2.9	<2.0	<2.0	<2.0	<0.20	<2.0 <2.0	<2.0	<2.0 <2.0
	9/15/15 Dup-1 12/3/2015	<2.0 <2.0	2.6 2.2	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0	<2.0 <2.0	<2.0 <2.0
	3/15/2016	<2.0	2.9	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/23/1989	0.5	170	0.5	7.6	<0.2	<0.5	0.5	<0.2	0.4
	9/21/1989 4/27/1999	<0.2 <1.0	50 19	<0.2 <1.0	6.4 4	<0.2	<0.5 <1.0	<0.2 <1.0	<0.2	3.4 <1.0
	11/5/2013	<2.0	7.0	<2.0	4.6	<2.0	<0.20	<2.0	<2.0	<2.0
MW-2	8/27/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/9/2015	<2.0	0.62	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/16/2015 12/2/2015	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	3/16/2016	<2.0 <2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0 <2.0
	3/16/2016 - DUP-2	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/23/1989	130	8,300	11	2,700	3.0	7.5	8.2	2.8	2.0
	9/22/1989 4/28/1999	<100 15.0	5,400 1,000	<100 <10	1,600 780	<100	<250 <10	<100 <10	<100	<100 <10
	11/5/2013	6.6	200	<2.0	170	2.4	15	<2.0	<2.0	<2.0
MW-3	11/6/2013			<2.0						
	8/26/2014	3.3	130	<2.0	150	<2.0	7.4	<2.0	<2.0	<2.0
	6/8/2015 9/15/2015	<2.0 5.4	81 280	<2.0 3.8	93 420	<2.0 9.2	2.7 44	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	12/3/2015	5.4 8.8	290	2	160	<2.0	5.7	<2.0	<2.0	<2.0
	3/15/2016	23	440	2.7	150	<2.0	0.41	<2.0	<2.0	<2.0
	3/23/1989	0.3	94	<0.2	<0.2	<0.2	<0.5	1.0	<0.2	< 0.2
	9/21/1989 4/27/1999	<0.2 <1.0	72 8.5	<0.2 <1.0	<0.2 <1.0	<0.2	<0.5 <1.0	1.1 <1.0	<0.2	<0.2 <1.0
	11/4/2013	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-4	8/27/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/9/2015	<2.0	1.9	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/16/2015 12/2/2015	<2.0 <2.0	<2.0 4.9	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	3/17/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016 - DUP-3	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-4i	12/4/2015 12/4/2015 DUP-4	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	3/17/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/21/1989 4/27/1999	<0.2 <1.0	<0.2 <1.0	 <1.0	<0.2 <1.0		 <1.0	 <1.0		 <1.0
	11/4/2013	<2.0	<1.0	<2.0	<1.0	<2.0	<0.20	<2.0	<2.0	<1.0
	8/27/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-5	6/9/2015	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/16/2015 12/2/2015	<2.0	<2.0	<2.0	<2.0	Not Sampled	<0.20	<2.0	<2.0	<2.0
	12/2/15 DUP-2	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/16/2016	<2.0 <2.0	<2.0 <2.0	<2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	8/27/2014 6/10/2015	<2.0 <2.0	<0.40	<2.0 <2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-5B	9/16/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/16/2016 3/17/2011	<2.0 1.1	<2.0 81	<2.0 <1	<2.0 1.2	<2.0	<0.20 <0.2	<2.0	<2.0	<2.0
	8/27/2014	<2.0	110	<2.0	2.5	<2.0	<0.20	<2.0	<2.0	<2.0
MW-05	6/9/15	<2.0	61	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
(MW-05s)	6/9/15 Dup-2	<2.0	66	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	42172 12/2/15	<2.0 4.2	100 240	<2.0 <2.0	3.2 3.6	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	3/17/2016	3.1	210	<2.0	3.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/9/15	<2.0	3.6	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-05i	9/17/15	<2.0	4.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/15 3/17/2016	<2.0 <2.0	<2.0 67	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	6/9/2015	13	810	7.9	380	<2.0	1.1	<2.0	<2.0	<2.0
MW-7s	9/15/2015	-50			I 0.00	Not Sampled Dry	-0.00		1	
	12/3/2015 3/16/2016	<50 32	1,200 880	5.5 4.5	340 290	<2.0 <2.0	<0.20 0.74	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	11/4/2013	<2.0	<2.0	<2.0	5.3	<2.0	0.72	<2.0	<2.0	<2.0
MW-7i	8/26/2014	<2.0	<2.0	<2.0	3.6	<2.0	0.38	<2.0	<2.0	<2.0
	6/10/2015	<2.0	<0.40	<2.0	3.4	<2.0	0.32	<2.0	<2.0	<2.0
	9/16/2015 12/3/2015	<2.0 3.4	<2.0 72	<2.0 <2.0	3.0 27	<2.0 <2.0	0.28 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
MW-7ir	3/16/2016	3.4 <2.0	5.5	<2.0	27 84	<2.0	<0.20 28	<2.0	<2.0 <2.0	<2.0 <2.0
	9/21/1989	<0.2	6.6		<0.2					
	4/27/1999	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0		<1.0
MW-7	9/22/2014 6/10/2015	<2.0 <2.0	<2.0 0.50	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
(MW-7d)	9/16/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/4/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/18/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0

Table 5 Summary of Groundwater Analytical Results for Volatile Organic Compounds (in μg/L) Remedial Investigation Report Former Northwest Plating 825 South Dakota Street and 812 and 820 South Adams Street, Seattle, Washington

ample Identification	Date Collected	Tetrachloro- ethene (PCE) ^a	Trichloroethene (TCE) ^a	trans-1,2- Dichloro- ethene ^a	cis-1,2- Dichloro- ethene ^a	1,1-Dichloro- ethene ^b	Vinyl Chloride ^ª	1,1,1-Trichloro- ethane ^a	1,1,2-Trichloro- ethane ^b	Chloroforr
	3/17/2011	<1	<1	<1	<1		<0.2			
	8/27/2014 6/9/15	<2.0 <2.0	<2.0 <0.40	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
MW-07	9/17/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/15	<2.0	2.5	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/8/2015	2.5	390	4.1	240	<2.0	4.5	<2.0	<2.0	<2.0
MW-8s	9/16/2015 12/2/2015	2.5 6.8	250 490	3.6 2.9	240 130	<2.0 <2.0	6.8 5.6	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	3/16/2016	10	870	2.9	190	<2.0	2.2	<2.0	<2.0	<2.0
	9/21/1989	<0.2	13		3.7					
	11/4/2013	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.0
	8/26/2014	<2.0	<2.0	<2.0	<2.0	<2.0	1.1	<2.0	<2.0	<2.0
MW-8	6/8/2015	<2.0	0.80	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
(MW-8i)	6/8/15 Dup-1	<2.0	0.62	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/16/2015 12/2/2015	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	0.91 0.84	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	3/16/2016	<2.0	<2.0	<2.0	<2.0	<2.0	0.72	<2.0	<2.0	<2.0
	9/21/1989	<0.2	<0.2		<0.2					
	11/4/2013	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	8/26/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-9	6/8/2015	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/16/2015	<2.0	<2.0	<2.0	<2.0	<2.0	0.27	<2.0	<2.0	<2.0
	9/16/15 Dup-3	<2.0	<2.0	<2.0	<2.0	<2.0	0.29	<2.0	<2.0	<2.0
	12/1/2015 3/16/2016	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	0.27 0.41	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	9/21/1989	<1.0	<1.0		45					
	11/4/2013	<2.0	<2.0	<2.0	<2.0	<2.0	2.5	<2.0	<2.0	<2.0
MW-10	8/26/2014	<2.0	<2.0	<2.0	<2.0	<2.0	3.0	<2.0	<2.0	<2.0
(MW-10s)	6/8/2015	<2.0	<0.40	<2.0	<2.0	<2.0	1.0	<2.0	<2.0	<2.0
, , , , , , , , , , , , , , , , , , ,	9/16/2015	<2.0	<2.0	<2.0	<2.0	<2.0	3.2	<2.0	<2.0	<2.0
	12/1/2015	<2.0	<2.0	<2.0	2.3	<2.0	3.6	<2.0	<2.0	<2.0
	3/16/2016 6/8/2015	<2.0 <2.0	<2.0 <0.40	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	4.2 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	9/16/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-10i	12/1/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/16/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/21/1989	<100	4,300		670					
	11/4/2013	2.6	89	<2.0	35	<2.0	<0.20	<2.0	<2.0	<2.0
MW-11	8/26/2014	<2.0	100	<2.0	45	<2.0	<0.20	<2.0	<2.0	<2.0
	6/8/2015	<2.0	54	<2.0	49	<2.0	<0.20	<2.0	<2.0	<2.0
	9/15/2015 12/1/2015	<2.0 <2.0	36 90	<2.0 <2.0	25 33	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	3/15/2016	2.6	100	<2.0	56	<2.0	0.22	<2.0	<2.0	<2.0
	9/21/1989	0.2	0.5		<0.2					
	11/4/2013	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	8/26/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-12	6/8/2015	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/16/2015 9/16/15 Dup-2	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	12/1/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/15/2016	<2.0	<2.0	<2.0	<2.0	<2.0	< 0.20	<2.0	<2.0	<2.0
MW-13	10/11/1989		130					<8		
	10/11/1989		580					<8		
	11/5/2013	<2.0	3.2	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	11/5/2013 Dup-2	<2.0	3.8	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-14	8/28/2014 6/10/2015	<2.0 <2.0	4.1 7.8	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
1VIVV - 1mp	6/10/2015 6/10/15 Dup-4	<2.0	7.8	<2.0	<2.0 <2.0	<2.0	<0.20	<2.0	<2.0 <2.0	<2.0 <2.0
	9/18/2015	<2.0	2.8	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/3/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016	<2.0	19	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	10/11/1989		56,000					<150		
	4/27/1999	9.1	2,600	3.7	180		<1.0	<1.0		1.0 J
MW-15	11/6/2013 8/28/2014	8.2	820	6.8	230 490	<2.0 <2.0	0.65	<2.0	<2.0	<2.0
(MW-15 (MW-15s)	6/11/2015	8.0 12	1,600 2,100	4.8 4.7	490 530	<2.0	<0.20 0.35	2.1 <2.0	<2.0 <2.0	<2.0 <2.0
. /	9/18/2015	12	1,700	5.4	460	<2.0	0.35	<2.0	<2.0	<2.0
	12/4/2015	<2.0	25	<2.0	89	<2.0	0.61	<2.0	<2.0	<2.0
	3/18/2016	4.4	670	2.5	<2.0	<2.0	0.22	<2.0	<2.0	<2.0
	6/11/2015	4.8	210	<2.0	7.1	<2.0	<0.20	<2.0	<2.0	<2.0
	9/18/2015	3.1	130	<2.0	6.5	<2.0	<0.20	<2.0	<2.0	<2.0
MW-15i	12/3/15	<2.0	9.3	<2.0	150	<2.0	0.52	<2.0	<2.0	<2.0
	3/18/2016 3/18/2016 - DUP-4	<2.0 <2.0	2.6 3.2	<2.0 <2.0	71 36	<2.0 <2.0	27 18	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	10/11/1989		9,600					2.0		
	11/6/2013	<2.0	29	<2.0	14	<2.0	1.2	<2.0	<2.0	<2.0
	8/28/2014	<2.0	<2.0	<2.0	2.4	<2.0	<0.20	<2.0	<2.0	<2.0
MW-16	6/10/2015	<2.0	14	<2.0	6.4	<2.0	2.1	<2.0	<2.0	<2.0
	9/17/2015	<2.0	2.2	<2.0	3.7	<2.0	1.5	<2.0	<2.0	<2.0
	12/3/2015	<2.0	14	<2.0	9.7	<2.0	5.3	<2.0	<2.0	<2.0
MW-16PP*	3/17/2016	<2.0	8.5	<2.0	3.4	<2.0	0.23	<2.0	<2.0	<2.0
	8/28/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0 <8	<2.0	<2.0
MW-17	10/11/1989 4/27/1999	 <1.0	1,850 21.0	 <1.0	 11		 <1.0	<8 <1.0		 <1.0
	712111333	~1.0		<u></u> ,	I		<u>∼1.∪</u>		I	<u> </u>

Table 5 Summary of Groundwater Analytical Results for Volatile Organic Compounds (in μg/L) Remedial Investigation Report Former Northwest Plating 825 South Dakota Street and 812 and 820 South Adams Street, Seattle, Washington

ample Identification	Date Collected	Tetrachloro- ethene (PCE) ^a	Trichloroethene (TCE) ^a	trans-1,2- Dichloro- ethene ^ª	cis-1,2- Dichloro- ethene ^a	1,1-Dichloro- ethene ^b	Vinyl Chloride ^ª	1,1,1-Trichloro- ethane ^a	1,1,2-Trichloro- ethane ^b	Chlorofor
	10/11/1989 11/4/2013		260		 Not sa	 mpled, well inacce	 essible	<8		
	8/27/2014	<2.0	53	<2.0	8.4	<2.0	<0.20	<2.0	<2.0	<2.0
MW-18	6/10/2015	<2.0	22	<2.0	5.7	<2.0	<0.20	<2.0	<2.0	<2.0
	9/18/2015	<2.0	38	<2.0	6.9	<2.0	<0.20	<2.0	<2.0	<2.0
	12/3/2015 3/17/2016	<2.0 <2.0	13 24	<2.0 <2.0	2.9 4.7	<2.0 <2.0	<0.20 <0.20	<2.0	<2.0 <2.0	<2.0 <2.0
	10/11/1989		53					<8		
	11/4/2013				Not sa	mpled, well inacce	essible			L
	8/27/2014	<2.0	190	<2.0	33	<2.0	<0.20	<2.0	<2.0	<2.0
MW-19	6/10/2015	<2.0	180	<2.0	22	<2.0	<0.20	<2.0	<2.0	<2.0
	9/18/2015 12/4/2015	2.8	470	<2.0	40	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016	<2.0 <2.0	180 17	<2.0 <2.0	16 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	8/27/2014	<2.0	16	<2.0	55	<2.0	<0.20	<2.0	<2.0	<2.0
MW-20	6/9/15	<2.0	54	<2.0	14	<2.0	<0.20	<2.0	<2.0	<2.0
(MW-20s)	9/17/2015	2.3	160	<2.0	27	<2.0	<0.20	<2.0	<2.0	<2.0
, , , , , , , , , , , , , , , , , , ,	12/2/15	9.5	860	3.5	120	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016	16	890	<2.0	31	<2.0	< 0.20	<2.0	<2.0	<2.0
	6/9/15 9/17/2015	<2.0 <2.0	0.74 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
MW-20i	9/17/15 Dup-4	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/15	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016	<2.0	13	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	8/27/2014	<2.0	24	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-21	6/9/15	<2.0	2.1	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
(MW-21s)	9/15/2015	<2.0	17	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/15 3/15/2016	<2.0 <2.0	12 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	6/9/15	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-21i	9/15/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
10100-211	12/2/15	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/15/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/9/15	<2.0	<0.40	<2.0	<2.0	<2.0	< 0.20	<2.0	<2.0	<2.0
MW-22s	9/15/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/15 3/15/2016	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0	<0.20 <0.20	<2.0	<2.0 <2.0	<2.0 <2.0
	6/9/15	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-22i	9/15/15	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/15	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/15/2016	<2.0	<2.0	<2.0	<2.0	<2.0	< 0.20	<2.0	<2.0	<2.0
	6/9/15 9/17/15	<2.0 <2.0	<0.40 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
MW-23s	12/2/15	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/9/15	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-23i	9/17/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/15	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016 6/9/2015	<2.0 <2.0	<2.0 38	<2.0 2.9	<2.0 24	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	6/15/2015	4.3	220	<2.0	24	<2.0	<0.20	<2.0	<2.0	<2.0
MW-24s	12/3/2015	3.1	430	3	36	<2.0	<0.20	<2.0	<2.0	<2.0
	3/15/2016	3.1	180	4.2	45	<2.0	<0.20	<2.0	<2.0	<2.0
	3/15/2016 - DUP-1	2.5	140	4.7	50	<2.0	<0.20	<2.0	<2.0	<2.0
	6/9/2015	<2.0	0.67	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-24i	9/15/2015 12/3/2015	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0	<2.0 <2.0	<2.0 <2.0
	3/15/2016	<2.0	8.1	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-24ir	12/3/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
10100-2-411	3/15/2016	<2.0	<2.0	<2.0	<2.0	<2.0	< 0.20	<2.0	<2.0	<2.0
	6/8/2015	<2.0 <2.0	0.45	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20	<2.0	<2.0	<2.0 <2.0
MW-25s	9/16/2015 12/1/2015	<2.0 <2.0	<2.0 4.8	<2.0	<2.0 <2.0	<2.0	<0.20 <0.20	<2.0	<2.0 <2.0	<2.0 <2.0
	3/16/2016	<2.0	4.0 <2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/8/2015	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/16/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-25i	12/1/2015 12/1/15 DUP 1	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0	<2.0 <2.0	<2.0 <2.0
	3/16/2016	<2.0 <2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	< <u>2.0</u> <2.0
	6/8/2015	<2.0	9.5	<2.0	31	<2.0	0.94	<2.0	<2.0	<2.0
MW-26s	9/15/2015	<2.0	8.0	<2.0	27	<2.0	0.67	<2.0	<2.0	<2.0
	12/1/2015	<2.0	6.3	<2.0	25	<2.0	<0.20	<2.0	<2.0	<2.0
	3/15/2016	<2.0	11	<2.0	26	<2.0	0.65	<2.0	<2.0	<2.0
	6/8/2015 9/15/2015	<2.0 <2.0	<0.40 <2.0	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
MW-26i	12/1/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/16/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/8/2015	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	4.3
MW-27s	9/15/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/1/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/16/2016 6/8/2015	<2.0 <2.0	<2.0 <0.40	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	9/15/2015	<2.0 <2.0	<0.40	<2.0	<2.0 <2.0	<2.0	<0.20 0.31	<2.0	<2.0	<2.0 <2.0
MW-28s	12/1/2015	<2.0	<2.0	<2.0	<2.0	<2.0	0.31	<2.0	<2.0	<2.0
	3/15/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/10/2015	<2.0	6.3	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/18/2015	<2.0	2.2	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-29s	12/3/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/3/15 DUP-3 3/17/2016	<2.0 <2.0	<2.0 36	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<0.20 <0.20	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0
	6/10/2015	<2.0	29	<2.0	15	<2.0	<0.20	<2.0	<2.0	<2.0
SBW-1	9/17/2015	<2.0	55	<2.0	6.7	<2.0	<0.20	<2.0	<2.0	<2.0
3000-1	12/2/2015	<2.0	11	<2.0	10	<2.0	<0.20	<2.0	<2.0	<2.0
	3/15/2016	<2.0	15	<2.0	14	<2.0	<0.20	<2.0	<2.0	<2.0

Table 5 Summary of Groundwater Analytical Results for Volatile Organic Compounds (in μ g/L) **Remedial Investigation Report** Former Northwest Plating 825 South Dakota Street and 812 and 820 South Adams Street, Seattle, Washington

Sample Identification	Date Collected	Tetrachloro- ethene (PCE) ^a	Trichloroethene (TCE) ^a	trans-1,2- Dichloro- ethene ^a	cis-1,2- Dichloro- ethene ^a	1,1-Dichloro- ethene ^b	Vinyl Chloride ^ª	1,1,1-Trichloro- ethane ^a	1,1,2-Trichloro- ethane ^b	Chloroform ^a
	6/10/2015	36	1,400	6.1	310	<2.0	0.23	<2.0	<2.0	<2.0
SBW-2	9/17/2015	29	1,600	6.5	350	<2.0	<0.20	<2.0	<2.0	<2.0
3000-2	12/1/2015	30	1,900	6.5	510	<2.0	<0.20	<2.0	3.2	<2.0
	3/16/2016	37	1,000	4.2	390	<2.0	<0.20	<2.0	2.0	<2.0
	6/8/2015	<2.0	70	<2.0	22	<2.0	<0.20	<2.0	<2.0	<2.0
SBW-3	9/15/2015	<2.0	110	<2.0	25	<2.0	<0.20	<2.0	<2.0	<2.0
	12/1/2015	<2.0	96	<2.0	22	<2.0	<0.20	<2.0	<2.0	<2.0
	3/15/2016	2.0	100	<2.0	28	<2.0	<0.20	<2.0	<2.0	<2.0
	6/8/2015	<2.0	0.47	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
SBW-4	9/15/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
300-4	12/1/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/15/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
Site-Specific Groundwater RELs Developed for the Groundwater-Indoor Air Pathway ^c		440	37	NVE	NVE	NVE	30	52,340	NVE	NVE
Site-Specific Groundwater CULs Developed for the Groundwater-Indoor Air Pathway ^d		101	8.4	NVE	NVE	NVE	6.8	11,930	NVE	NVE
Groundwater CULs Adopted from ODEQ ^e		5,600	3,000	1,800	180,000	44,000	960	1,100,000	49	720

Notes:

All samples were analyzed by EPA Method 8260 and results are presented in micrograms/liter (µg/L).

Bold Bold results indicate that analyte is detected at a concentration greater than the laboratory reporting limit.

Shading indicates that analyte is not detected at a concentration greater than the Site-specific remediation level. Indicates that the analyte is not detected at a concentration greater than the laboratory reporting limit.

<

Sample was not analyzed for this compound.

REL Remediation level.

NVE No cleanup value has been established for this compound.

Cleanup level. CUL

MW-16PP collected before low-flow purging.

Samples collected in March 1989, September 1989 and October 1989 were analyzed by EPA Method 8010. Samples collected in April 1999 were analyzed by EPA Methold 8260. а

Samples collected in March 1989, September 1989 and October 1989 were analyzed by EPA Metthod 8010. b

Site-Specific Groundwater RELs Developed for the Groundwater-Indoor Air Pathway for a construction worker reasonable maximum exposure (RME) scenario. с

Site-Specific Groundwater CULs Developed for the MTCA Method C Groundwater-Indoor Air CUL. d

Oregon Department of Environmental Quality (ODEQ) Risk-Based Cleanup Levels for direct contact with groundwater in an excavation for a construction worker (http://www.deq.state.or.us/lq/pubs/docs/RBDMTable.pdf). е

Qualifiers:

Laboratory estimated concentration. J

Table 6 Summary of Groundwater Analytical Results for Metals and Cyanide (in μg/L) Remedial Investigation Report Former Northwest Plating 825 South Dakota Street and 812 and 820 South Adams Street, Seattle, Washington

Iontitoring Well	Date Collected	Arsenic ^a	Cadmium ^b	Chromium (Hexavalent) ^c	Total Chromium ^d	Copper ^a	Lead ^a	Nickel ^e	Zinc ^f	Cyanide
	3/23/1989	<5	170	<25	30	100	<5	90	130	2,700
	9/21/1989		500	<10	20			80	700	1,400
MW-1	4/27/1999 9/22/2014		373	<10 <10	14 6.0				583	25 <50
(MW-1s)	6/9/15			<10	6.0 12					<00
()	9/16/2015			<10	9.0					
	12/4/15			18	27					
	3/16/2016			16	28					
	11/5/2013			<10	<2.0					
	11/5/2013 Dup-1			<10	<2.0					<50
	8/26/2014			<10	<2.0					<50
	6/9/15			<10	4.6					
MW-1i	6/9/15 Dup-3			<10	<2.0					
	9/15/2015			<10	<2.0					
	9/15/15 Dup-1			<10	<2.0					
	12/3/15			<10 <10	11 4.2					
	3/15/2016 3/23/1989	 <5	160	<10 110,000	4.2	60	 <5	90	60	520
	9/21/1989		700	280,000	280,000			200	400	30
	4/27/1999		44	8,100	8,260				400 <4	<5
	11/5/2013			54	150					<50
	8/27/2014			<10	23					<50
MW-2	6/9/15			<10	36					
	9/16/2015			<10						
	12/2/15			<10	56					
	3/16/2016			<10	95					
	3/16/2016 - DUP-2			<10	81					
	3/23/1989	<5	70	25,000	30,000	20	<5	2,400	80	110
	9/22/1989		8	20	50			60	<10	150
	4/27/1999		48	3,400	455				7	33
MW-3	11/5/2013			<10						
	11/6/2013				390					<50
	8/26/2014			<10						
	8/27/2014				57					<50
	6/8/2015			<10						
	6/9/2015			<10	230					
	9/15/2015			<10	340					
	12/3/15			320	690					
	3/15/2016			3000	3400					
	3/23/1989 9/21/1989	<5	5	300	430	<20	<5	<30	<10	30
	4/27/1999		<5 <2	<10 <10	<10 <5			<10	<10 <4	10 <5
	11/4/2013			<10	<2.0					<50
MW-4	8/27/2014			<10	<2.0					<50
	6/9/2015			<10	<2.0					
	9/16/2015			<10	<2.0					
	12/2/15			<10	<2.0					
	42446			<10	2.2					
	3/17/2016 - DUP-3			<10	2.0					
	12/4/15			<10	<2.0					
MW-4I	12/4/15 DUP-4			<10	<2.0					
	3/17/2016		<5	<10 <10	<2.0 <10				 <10	<10
	9/21/1989 4/27/1999		<pre><3 </pre>	<10	<10 <5			<10	<10	<10
	11/4/2013			<10	<2.0					<50
	8/27/2014			<10	-2.0 10					<50
MW-5	6/9/2015			<10	2.6					
	9/15/2015			1		Not Sampled	I		L	
	12/2/15			<10	<2.0					
	12/2/15 DUP-2			<10	<2.0					
	3/16/2016			<10	6.2					
	8/27/2014			<10	<2.0					<50
MW-5B	9/16/2015			<10	<2.0					
	12/2/15 3/16/2016			<10 270	<2.0 <2.0					
	3/16/2016 8/27/2014			270 <10	<2.0 15					<50
	6/9/15			<10	8.4					
MW-05	6/9/15 Dup-2			<10	8.4 8.4					
(MW-05s)	9/17/2015	1.7	2.2	<10	20	<2.0	<1.0			
- · ·	12/2/15			38	36					
	3/17/16			<10	6.7					
	6/9/15			<10	5.8					
	9/17/2015			<10	2.6					
MW-05i	12/2/15			<10	3.5					
	3/17/2016			<10	<2.0					
	6/9/2015			12	43					
						Not Sampled Dr	у	······		
MW-7s	9/15/2015				40			1		
MW-7s	12/3/15			24	40					
MW-7s	12/3/15 3/16/2016			15	39					
MW-7s	12/3/15 3/16/2016 11/4/2013			15 <10	39 <2.0					 <50
MW-7s MW-7i	12/3/15 3/16/2016			15	39					

Table 6 Summary of Groundwater Analytical Results for Metals and Cyanide (in μg/L) Remedial Investigation Report Former Northwest Plating 825 South Dakota Street and 812 and 820 South Adams Street, Seattle, Washington

Montitoring Well	Date Collected	Ar senic ^a	Cadmium ^b	Chromium (Hexavalent) ^c	Total Chromium ^d	Copper ^a	Lead ^a	Nickel ^e	Zinc ^f	Cyanide
MW-7IR	12/3/15 3/16/2016			<10 <10	<2.0 <2.0					
	9/21/1989		<5	<10	<10			<10	<10	<10
	4/27/1999		<2	<10	<5				<4	<5
MW-7	9/22/2014			<10	<2.0					<0.050
(MW-7d)	9/16/2015			<10	<2.0					
	12/4/15			<10	3.2					
	3/18/2016 8/27/2014			<10 <10	<2.0 <2.0					<50
	6/9/15			<10	<2.0					
MW-07	9/17/2015			<10	<2.0					
	12/2/15			<10	<2.0					
	3/17/2016			<10	<2.0					
	6/8/2015			<10	17					
MW-8s	9/16/2015			<10	18					
	12/2/15 3/16/2016			<10 <10	25 21					
	9/21/1989		<5	<10	21			30	50	30
	11/4/2013			<10	2.7					<50
	8/26/2014			<10	2.3					<50
MW-8	6/8/2015			<10	<2.0					
(MW-8i)	6/8/15 Dup-1			<10	3.3					
	9/16/2015			<10	<2.0					
	12/2/15			<10	<2.0					
	3/16/2016			<10	2.5					
	9/21/1989		10	<10	<10			10	30	<10
	11/4/2013			<10	15					<50
	8/26/2014			<10	<2.0					<50
MW-9	6/8/2015 9/16/2015			<10 <10	6.0 6.7					
	9/16/15 Dup-3			<10	6.4					
	12/1/15			<10	9					
	3/16/2016			<10	8.1					
	9/21/1989		<5	<10	<10			<10	<10	<10
	11/4/2013			<10	8.9					<50
MW-10	8/26/2014			<10	3.8					260
(MW-10s)	6/8/2015			<10	4.9					
	9/16/2015			<10	9.8					
	12/1/15			<10	8.6					
	3/16/2016 6/8/2015			<10 <10	8.9 12					
	9/16/2015			<10	8.8					
MW-10i	12/1/15			<10	18					
	3/16/2016			<10	26					
	9/21/1989		<5	2,500	2,600			90	<10	80
	11/4/2013			70	83					<50
	8/26/2014			59	65					<50
MW-11	6/8/2015			23	35					
	9/15/2015			27	53					
	12/1/15 3/15/2016			51 57	58 56					
	9/21/1989		<5	<10	<10			<10	<10	<10
	11/4/2013			<10	<2.0					<50
	8/26/2014			<10	<2.0					<50
MW-12	6/8/2015			<10	<2.0					
.v.vv−1∠	9/16/2015			<10	<2.0					
	9/16/15 Dup-2			<10	<2.0					
	12/1/15			<10	<2.0					
MW-13	3/15/2016			<10	<2.0					
10100-13	10/11/1989 10/11/1989		20 1.2	17,000 230	17,000 240			50 <30	200 30	2,100 40
	11/5/2013			230 16	240 19					40 <50
	11/5/2013 Dup-2			17	21					<50
	8/28/2014			19	25					<50
MW-14	6/10/2015			55	52					<50
	6/10/2015 Dup-4			57	53					
	9/18/2015			<10	25					
	12/3/15			13	12					
	3/17/2016			58	60					
	10/11/1989		50	20	20			350	210	4,300
	4/27/1999		13	820	918				519	370
MW-15	11/6/2013 8/28/2014			<10 <10	28 73					<50
(MW-15 (MW-15s)	6/11/2015	 	 	<10 <10	73 7.4				 	
	9/18/2015			<10 <10						
	12/4/15			<10	25 12					
	3/18/2016			<10	28					
	6/11/2015			<10	4.0					
		4.0	-4.0	Z40	4.8	<2.0	<1.0			
	9/18/2015	1.9	<1.0	<10	4.0	~2.0	<1.0			
MW-15i	9/18/2015 12/3/15 3/18/2016	1.9 		<10	4.8 3.9					

Table 6 Summary of Groundwater Analytical Results for Metals and Cyanide (in μg/L) Remedial Investigation Report Former Northwest Plating 825 South Dakota Street and 812 and 820 South Adams Street, Seattle, Washington

Montitoring Well	Date Collected	Ars enic ^a	Cadmium ^b	Chromium (Hexavalent) ^c	Total Chromium ^d	Copper ^a	Lead ^a	Nickel ^e	Zinc ^f	Cyanide
	10/11/1989		34	<10	<20			100	50	10,000
	11/6/2013			<10						
MW-16	6/10/2015 9/17/2015			<10 <10	29 2.5					
	12/3/15			<10	<u> </u>					
	3/17/2016			<10	2.8					
MW-16PP*	8/28/2014			<10	2.8					<50
	10/11/1989		270	200,000	200,000			410	160	200
MW-17	4/27/1999 11/4/2013		18	6,900	8,160	ipled, well inac	 		48	7
	10/11/1989		11,000	430,000	440,000			7,400	9,200	<100
	11/4/2013		1	1	.	npled, well inac	 cessible	1,400		1
	8/27/2014			580	860					<50
MW-18	6/10/2015			300	640					<50
	9/18/2015			620	1,500					
	12/3/15			2,600	3,500					
	3/17/2016 10/11/1989		20	5,300 150	4,500 490			50	40	13,00
	11/4/2013			1	L	npled, well inac	 cessible	.1	1	10,00
	8/27/2014			<10	1,500					0.26
MW-19	6/10/2015			<10	23					0.26
	9/18/2015			<10	41					
	12/4/15			120	120					
	3/17/2016 8/27/2014			<10 <10	1700 7.0					
	6/9/15			<10	9.9					
MW-20 (MW-20s)	9/17/2015			<10	8.6					
(10100-205)	12/2/15			<10	34					
	3/17/2016			<10	45					
	6/9/15			<10	2.2					
MW-20i	9/17/2015			<10	<2.0 <2.0					
10100-201	9/17/15 Dup-4 12/2/15			<10 <10	<2.0 <2.0					
	3/17/2016			<10	<2.0					
	8/27/2014			<10	<2.0					<50
MW-21	6/9/15			<10	3.0					
(MW-21s)	9/15/2015			<10	<2.0					
	12/2/15			<10	<2.0					
	3/15/2016 6/9/15			<10 <10	<2.0 <2.0					
MW-21i	9/15/2015			<10	<2.0					
	12/2/15			<10	<2.0					
	3/15/2016			<10	<2.0					
	6/9/15			<10	<2.0					
MW-22s	9/15/2015			<10	<2.0					
	12/2/15 3/15/2016			<10 <10	<2.0 <2.0					
	6/9/15			<10	<2.0					
MW-22i	9/15/2015			<10	<2.0					
10100-221	12/2/15			<10	<2.0					
	3/15/2016			<10	<2.0					
	6/9/15			<10	4.1	 Not Sampled Dr				
MW-23s	9/17/2015 12/2/15			<10	<2.0		y 		T	
	3/17/2016			<10	<2.0					
	6/9/15			<10	<2.0					
MW-23i	9/17/2015			<10	<2.0					
	12/2/15			<10	<2.0					
	3/17/2016 6/9/15			<10 <10	<2.0 7.3					+
	9/15/2015			<10	11 / .s			 		
MW-24s	12/3/15			<10	6.8					
	3/15/2016			<10	9.9					
	3/15/2016 - DUP-1			<10	12					
	6/9/15			<10	4.5					
MW-24i	9/15/2015 12/3/15			<10 <10	2.2 <2.0					
	3/15/2016			<10	<2.0					
MW-24IR	12/3/15			<10	<2.0					
2711	3/15/2016			<10	<2.0					
	6/8/15			<10	<2.0					
MW-25s	9/16/2015 12/1/15			<10 <10	3.0 10					
MIN-203	12/1/15 Dup 1			<10	<2.0					
	3/16/2016			<10	<2.0					
	6/8/15			<10	<2.0					
MW-25i	9/16/2015			<10	<2.0					
	12/1/15 3/16/2016			<10 <10	<2.0 <2.0					
	6/8/15			<10	<2.0 9.2					
	9/15/2015	<1.0	<1.0	<10	5.8	<1.0	<1.0			
MW-26s	12/1/15			<10	6.1					
	3/15/2016			<10	25					

Table 6 Summary of Groundwater Analytical Results for Metals and Cyanide (in µg/L) **Remedial Investigation Report Former Northwest Plating** 825 South Dakota Street and 812 and 820 South Adams Street, Seattle, Washington

Montitoring Well	Date Collected	Arsenic ^a	Cadmium ^b	Chromium (Hexavalent) ^c	Total Chromium ^d	Copper ^a	Lead ^a	Nickel ^e	Zinc ^f	Cyanide ^g
	6/8/15			<10	4.9					
MW-26i	9/15/2015			<10	15					
10100-201	12/1/15			<10	15					
	3/16/2016			<10	17					
	6/8/15			<10	<2.0					
MW-27s	9/15/2015			<10	<2.0					
10100-275	12/1/15			<10	<2.0					
	3/16/2016			<10	6.5					
	6/8/15			<10	<2.0					
MW-28s	9/15/2015			<10	<2.0					
10100-205	12/1/15			<10	<2.0					
	3/15/2016			<10	2.8					
	6/8/2015			<10	7.1					
	9/18/2015			<10	18					
MW-29s	12/3/15			<10	6.6					
	12/3/15 DUP-3			<10	8.6					
	3/17/2016			<10	6.6					
	6/8/15			<10	<2.0					
SBW-1	9/17/2015			<10	<2.0					
00111	12/2/15			<10	2.7					
	3/15/2016			<10	<2.0					
	6/8/15			50	60					
SBW-2	9/17/2015			35	45					
00112	12/1/15			180	180					
	3/16/2016			<10	250					
	6/8/15			46	100					
SBW-3	9/15/2015			190	180					
000-0	12/1/15			150	140					
	3/15/2016			170	150					
	6/8/15			<10	14					
SBW-4	9/15/2015			13	12					
3DVV-4	12/1/15			<10	8.6					
	3/15/2016			12	12					
Groundwater CUL ODE		6,300	130,000	9,400	NVE	81,000	NVE	1.34E+07	NVE	81,000

Notes:

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

Bold results indicate that analyte is detected at a concentration greater than the laboratory reporting limit. Bold

Shading indicates that analyte is detected at a concentration greater than the Site-specific remediation level.

Indicates that the analyte is not detected at a concentration greater than the laboratory reporting limit. <

---Sample was not analyzed for this compound.

Cleanup level. CUL

No cleanup value has been established for this compound. NVE

MW-16PP collected before low-flow purging.

Method of analysis of arsenic, copper, and lead is unknown for samples dated 03/23/1989. а

Samples collected on 3/23/89, 9/21/89 and 4/27/99 were analyzed for cadmium by EPA Method 6010. Samples collected on 10/11/89 were analyzed by EPA Methods 7130 and 7131. b

All samples analyzed for hexavalent chromium by EPA Method 7196 for all dates except 4/27/99, when Method SM3500Cr-D was used. с

Samples collected on 8/26/14 were analyzed for total chromium by EPA Method 200.8. Samples collected on all other dates were analyzed for total chromium by EPA Method 6010. d

е Samples collected on 3/23/89 and 9/21/89 were analyzed for nickel by EPA Method 6010. Samples collected on 10/11/89 were analyzed by EPA Method 7520.

Samples collected on 3/23/89, 9/21/89 and 4/27/99 were analyzed for zinc by EPA Method 6010. Samples collected on 10/11/89 were analyzed by EPA Method 7950. Samples collected on 3/23/89, 9/21/89 and 10/11/89 were analyzed for cyanide by EPA Method 9012. Samples collected on 4/27/99 were analyzed by EPA Method 335.2. f

g

Oregon Department of Environmental Quality (ODEQ) Risk-Based Cleanup Levels for direct contact with groundwater in an excavation for a construction worker h (http://www.deq.state.or.us/lq/pubs/docs/RBDMTable.pdf).

Table 9
Summary of Soil Gas Analytical Results (in µg/m ³)
Remedial Investigation Report
Former Northwest Plating
825 South Dakota Street and 812 and 820 South Adams Street, Seattle, Washington

		Measured Volatile Organic Compounds ^a										
Sample Identification	Date Collected	Tetrachloro- ethene	Trichloro- ethene	trans-1,2- Dichloroethene	cis-1,2- Dichloroethene	1,1- Dichloroethene	Vinyl Chloride	1,1,1- Trichloro- ethane	1,1,2- Trichloro- ethane			
WISS-1	3/19/2013	670	72,000	<72	260	<72	<72	170	<72			
WISS-2	3/19/2013	6,200	1,200,000	<1,900	13,000	1,900	<1,900	<1,900	<1,900			
WISS-3	3/19/2013	<680	10,000	<680	1,200	<680	<680	<680	<680			
WISS-4	3/19/2013	2,800	59,000	460	6,000	<73	<73	<73	320			
VS-1	3/19/2013	2,200	150,000	<160	3,100	<160	<160	180	<160			
VS-1	8/7/2014	3,310	21,700	179	4,040		<1.74					
VS-2	3/19/2013	400	53,000	<60	410	<60	<60	85	<60			
V3-2	8/7/2014	1,180	19,000	59	1,100		<0.217					
VS-3	3/19/2013	<470	970	<470	<470	<470	<470	<470	<470			
V3-3	8/7/2014	4.83	42.5	<0.0238	<0.0793		<0.217					
VS-4	8/7/2014	1,730	18,800	182	4,810		0.302					
VS-5	8/7/2014	654	9,640	14.2	45		<0.217					
VS-6	8/7/2014	18.6	2,630	<0.0238	<0.0793		<0.217					
VS-7	7/1/2015	10.7	2.40	< 0.0793	<0.0793	<0.0793	<0.511	1.37	<2.73			
VS-8	7/1/2015	<2.03	<1.07	<0.0793	<0.0793	< 0.0793	<0.511	<1.09	<2.73			
DGV-1	7/1/2015	6,060	23,500	248	4,150	<0.0793	<0.511	62.3	<2.73			
DGV-2	7/1/2015	18.0	64.3	<0.0793	2.17	<0.0793	<0.511	<1.09	<2.73			
DGV-3	7/1/2015	13.7	5.52	<0.0793	<0.0793	<0.0793	<0.511	<1.09	<2.73			
Site-Specific S Gas Screen		5,833	293	NVE	NVE	NVE	800	731,000	NVE			
Sub-Slab Screenir MTCA M (Carcin	ig Level ethod B	321	12.3	NVE	NVE	3,050 ^d	9.33	76,200 ^d	5.21			
Sub-Slab Screenir MTCA M (Carcin	Soil Gas Ig Level ethod C	3,210	210	NVE	NVE	6,670 ^d	93.3	167,000 ^d	52.1			

Notes:

All results presented in micrograms/cubic meter (µg/m³).

Bold Indicates analyte detected at a concentration greater than the laboratory reporting limit.

Indicated concentration exceeds the applicable Soil Gas Screeing Level.

< Indicates the analyte was not detected at a concentration greater than the laboratory reporting limit.

-- Sample was not analyzed for this compound.

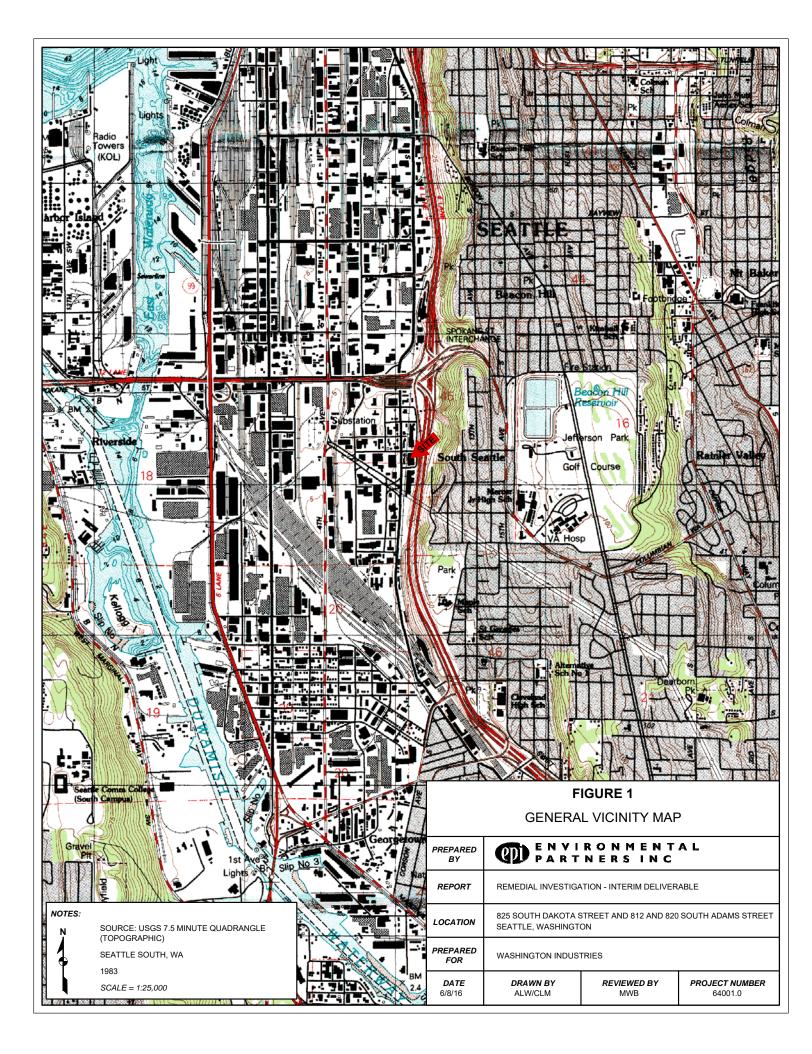
a Volatile Organic Compounds analysis in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999.

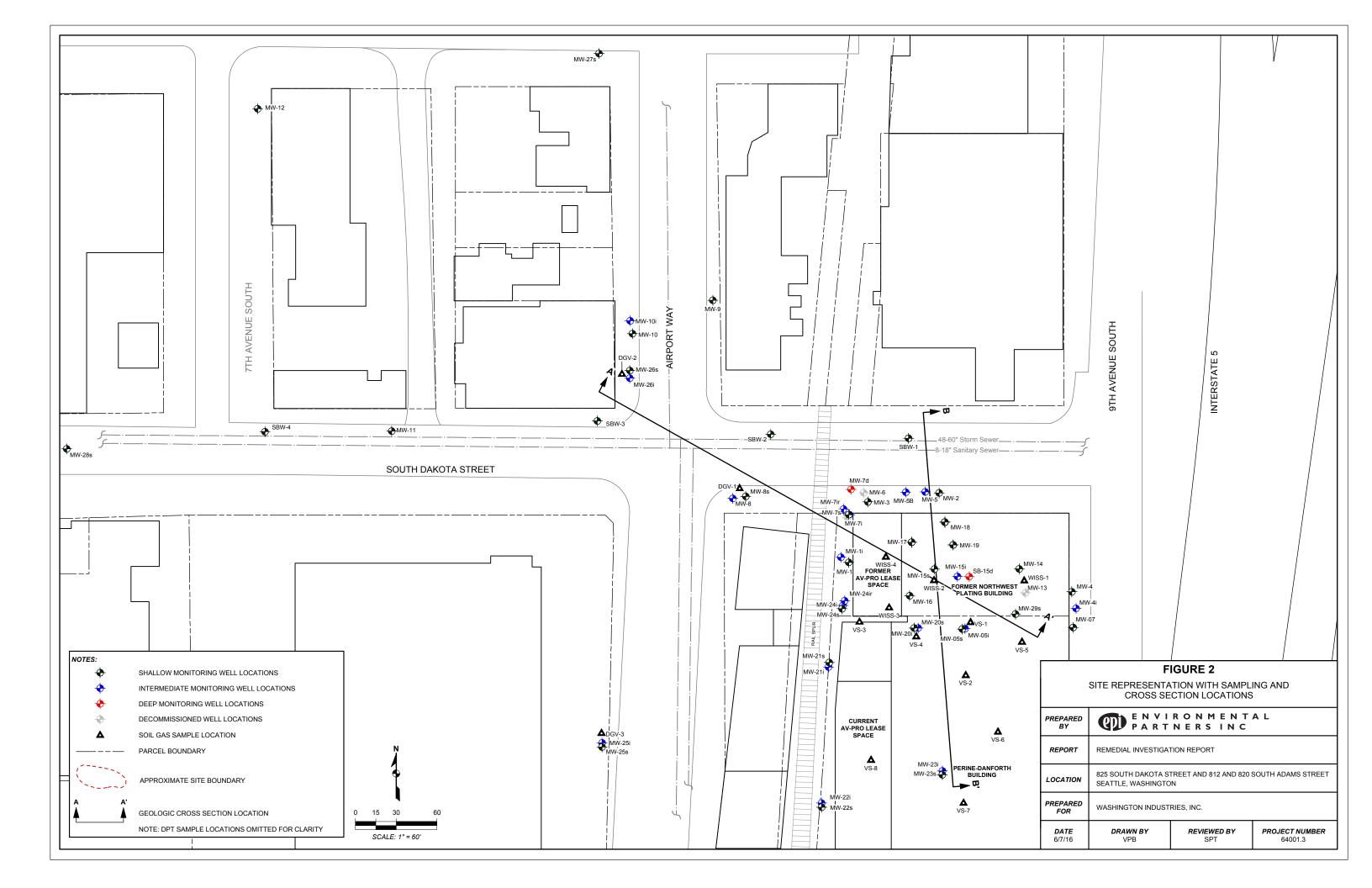
b Site-Specific Soil Gas screening level developed for the Groundwater-Indoor Air Pathway for a construction worker reasonable maximum exposure (RME) scenario.

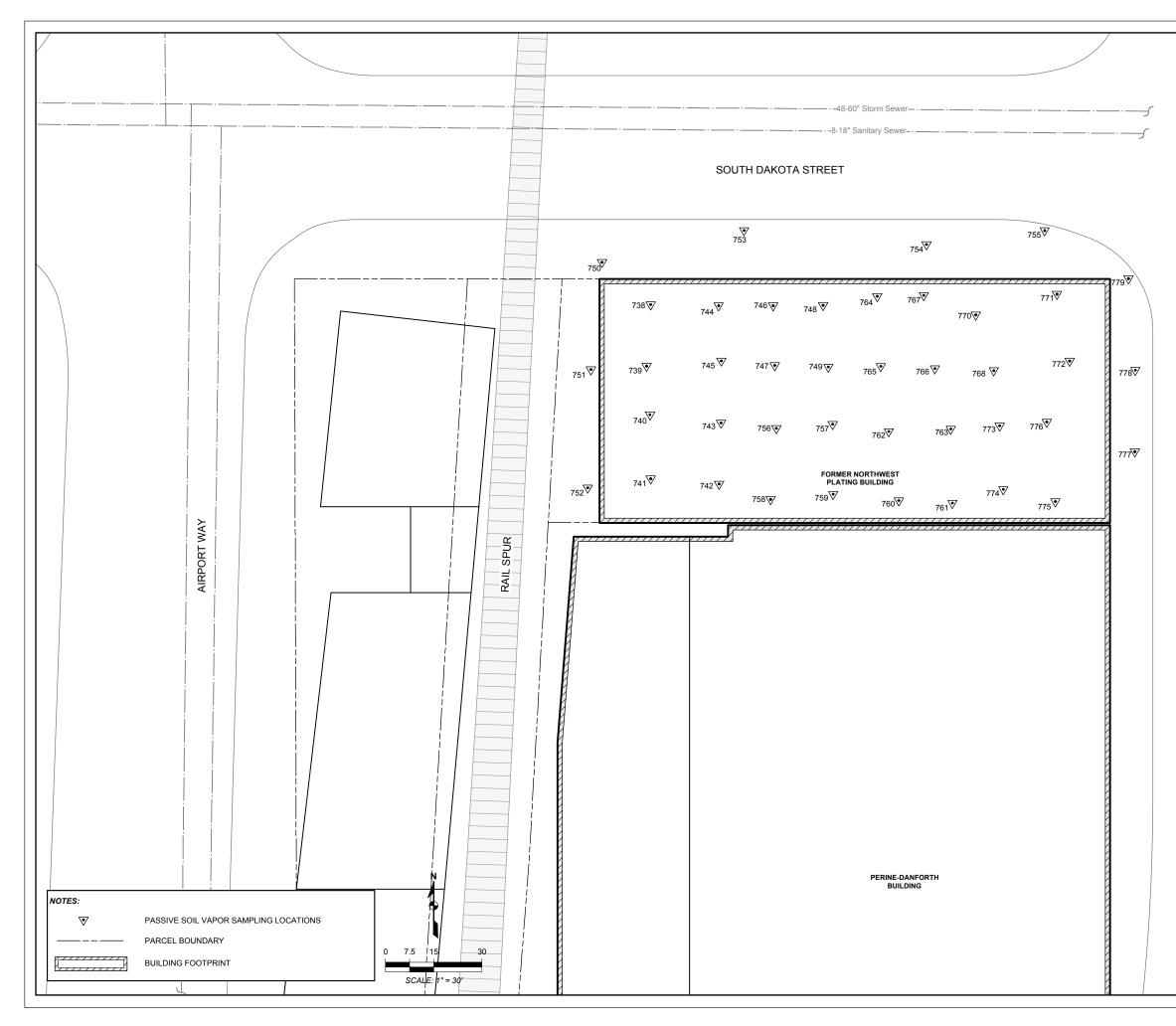
c Soil gas screening levels for soil gas "just beneath a building" from Vapor Intrusion Table, updated April 6, 2015, provided by Ecology.

c Soil gas screening levelsd Noncarcinogen value.

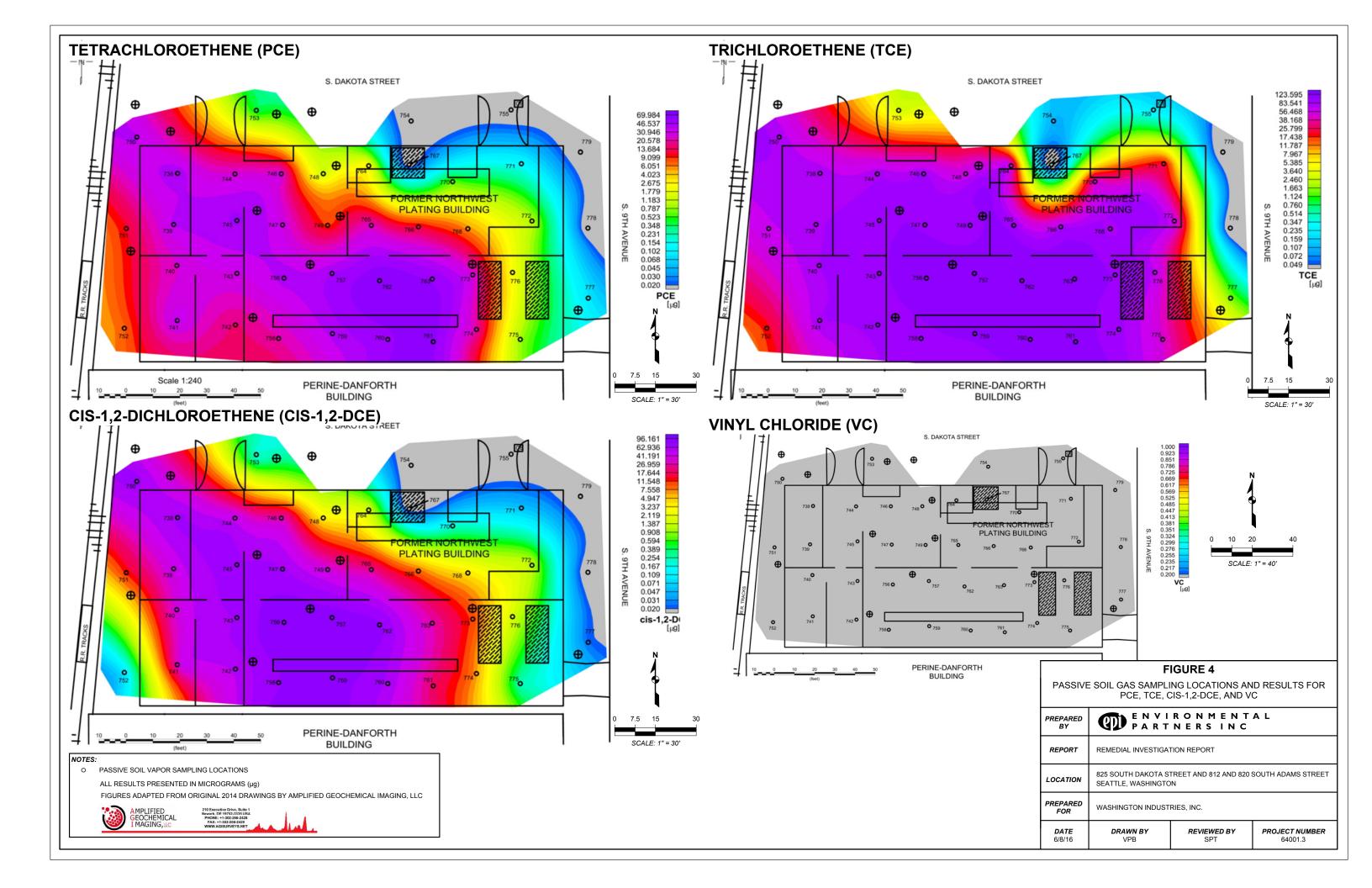
Figures

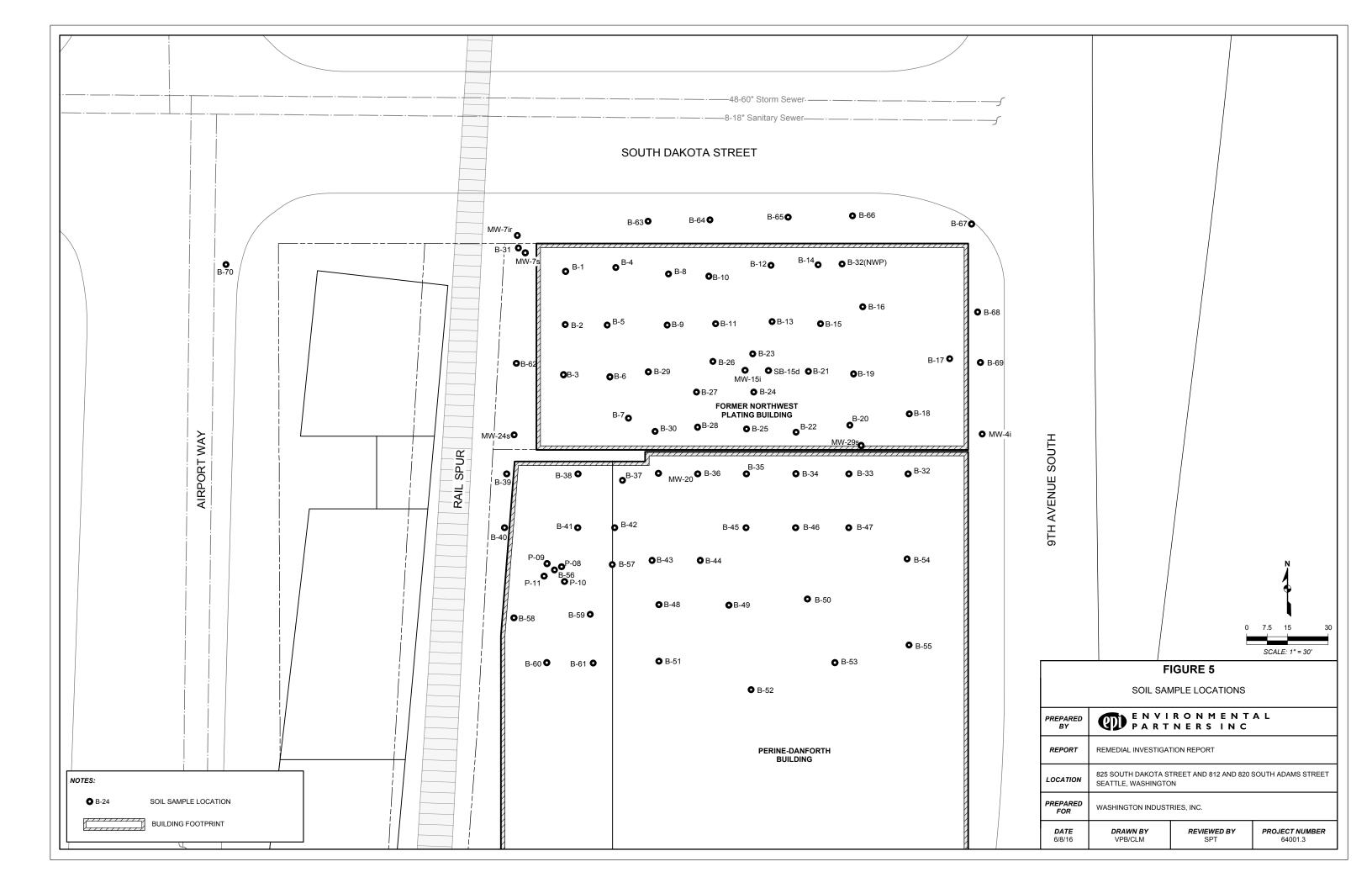


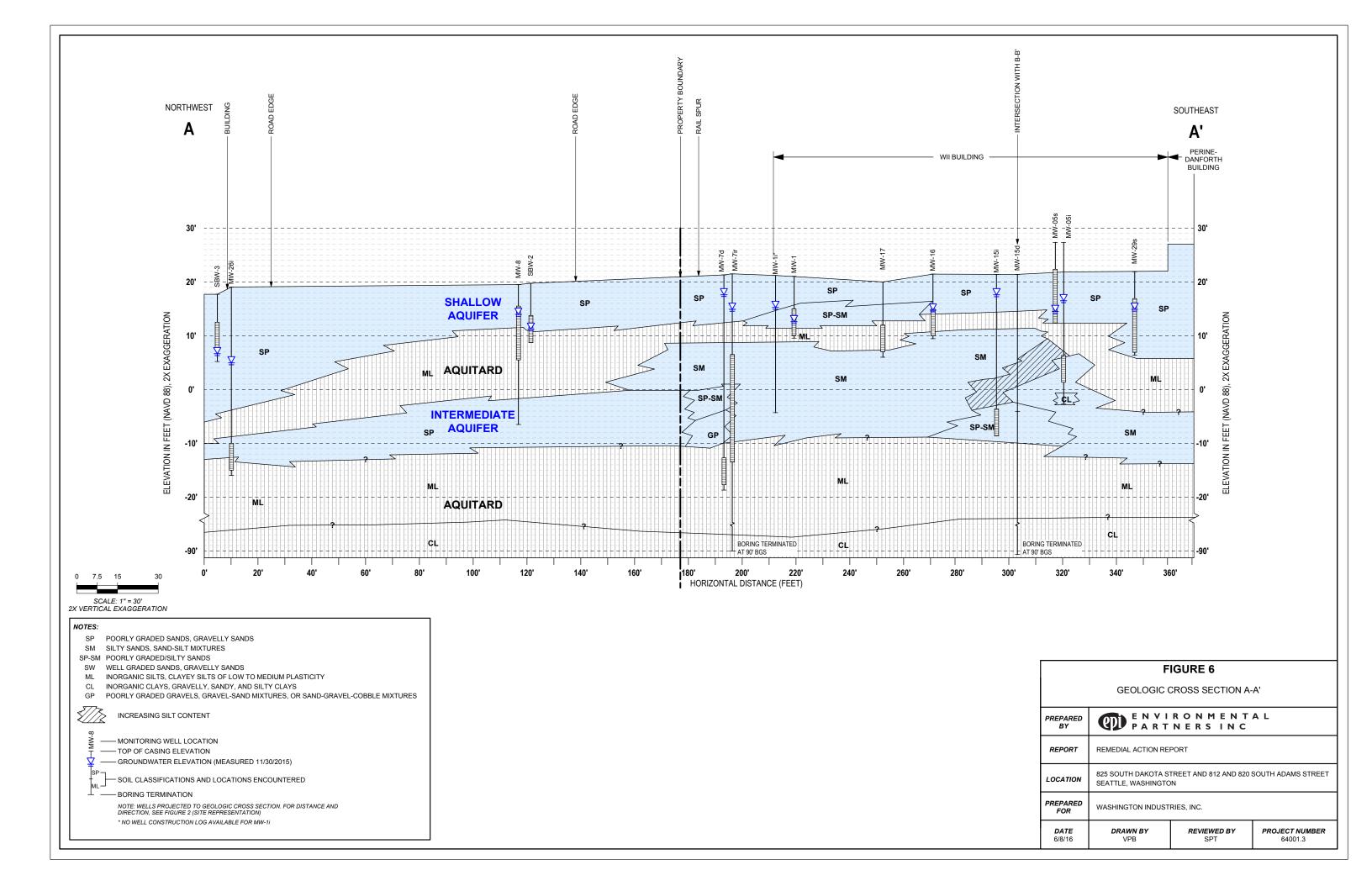




9TH AVENUE SOUTH	
PREPARED	FIGURE 3 PASSIVE SOIL GAS SAMPLING LOCATIONS
BY	PARTNERS INC
REPORT	REMEDIAL INVESTIGATION REPORT
LOCATION	825 SOUTH DAKOTA STREET AND 812 AND 820 SOUTH ADAMS STREET SEATTLE, WASHINGTON
PREPARED FOR	WASHINGTON INDUSTRIES, INC.
DATE	DRAWN BY REVIEWED BY PROJECT NUMBER







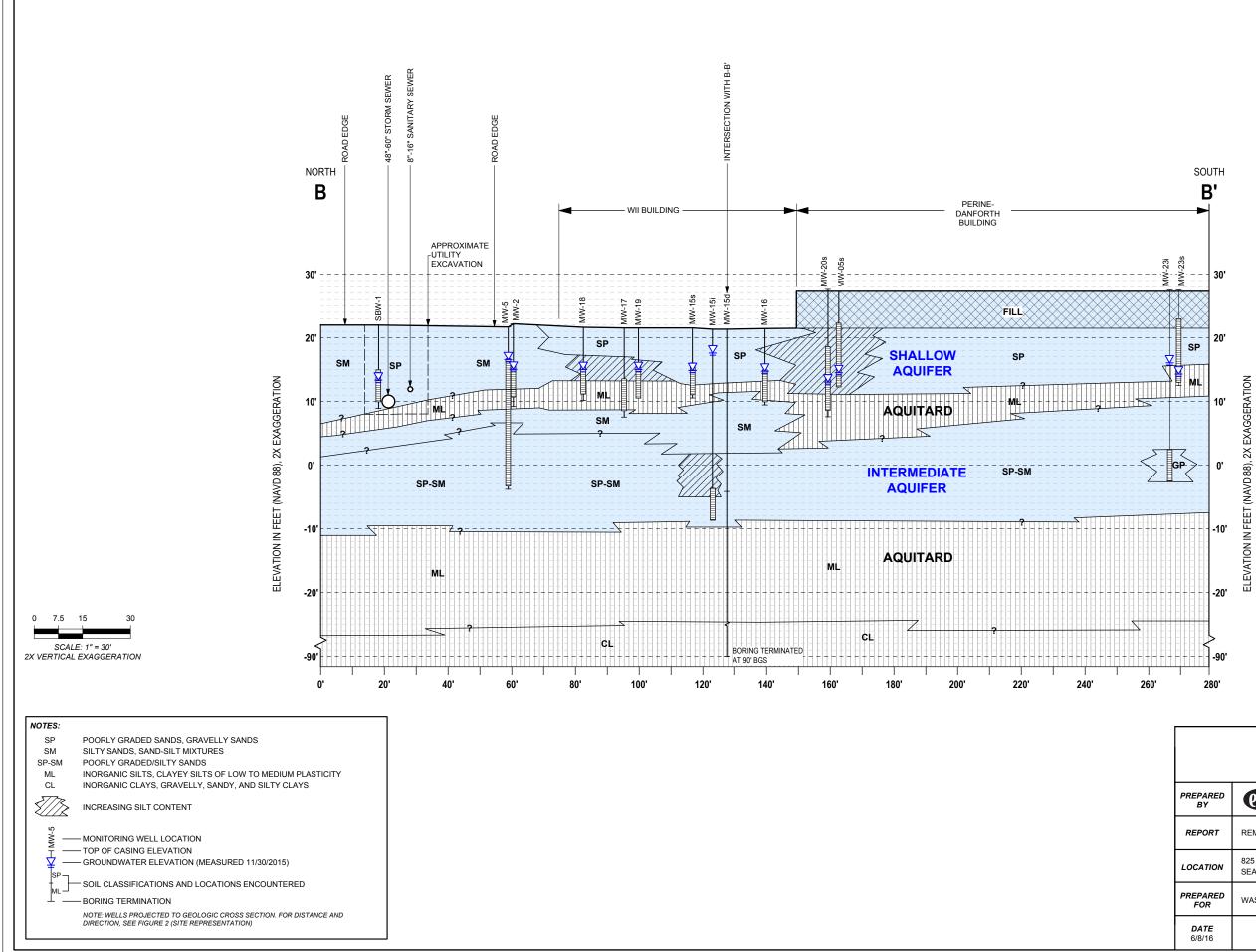
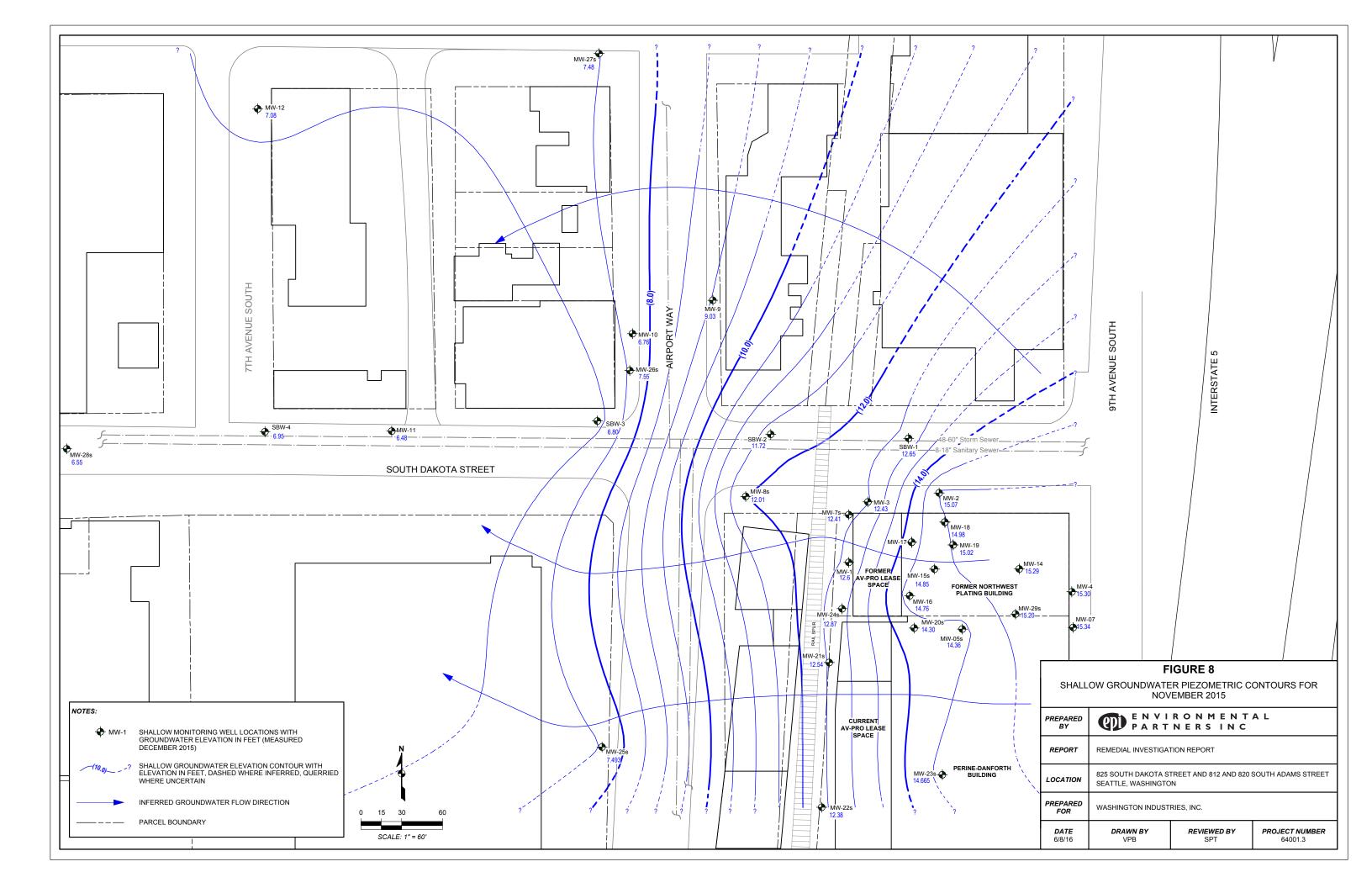
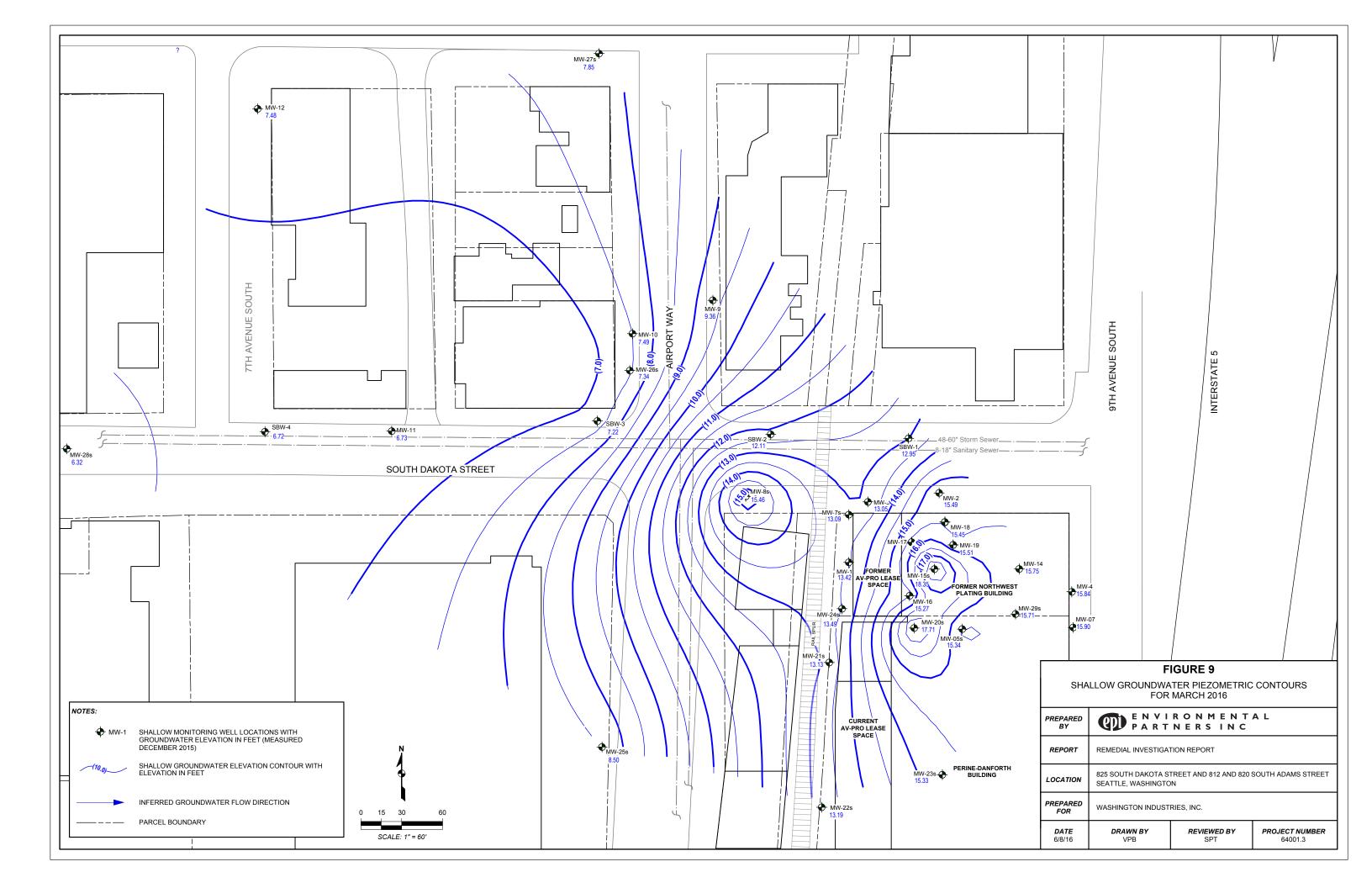
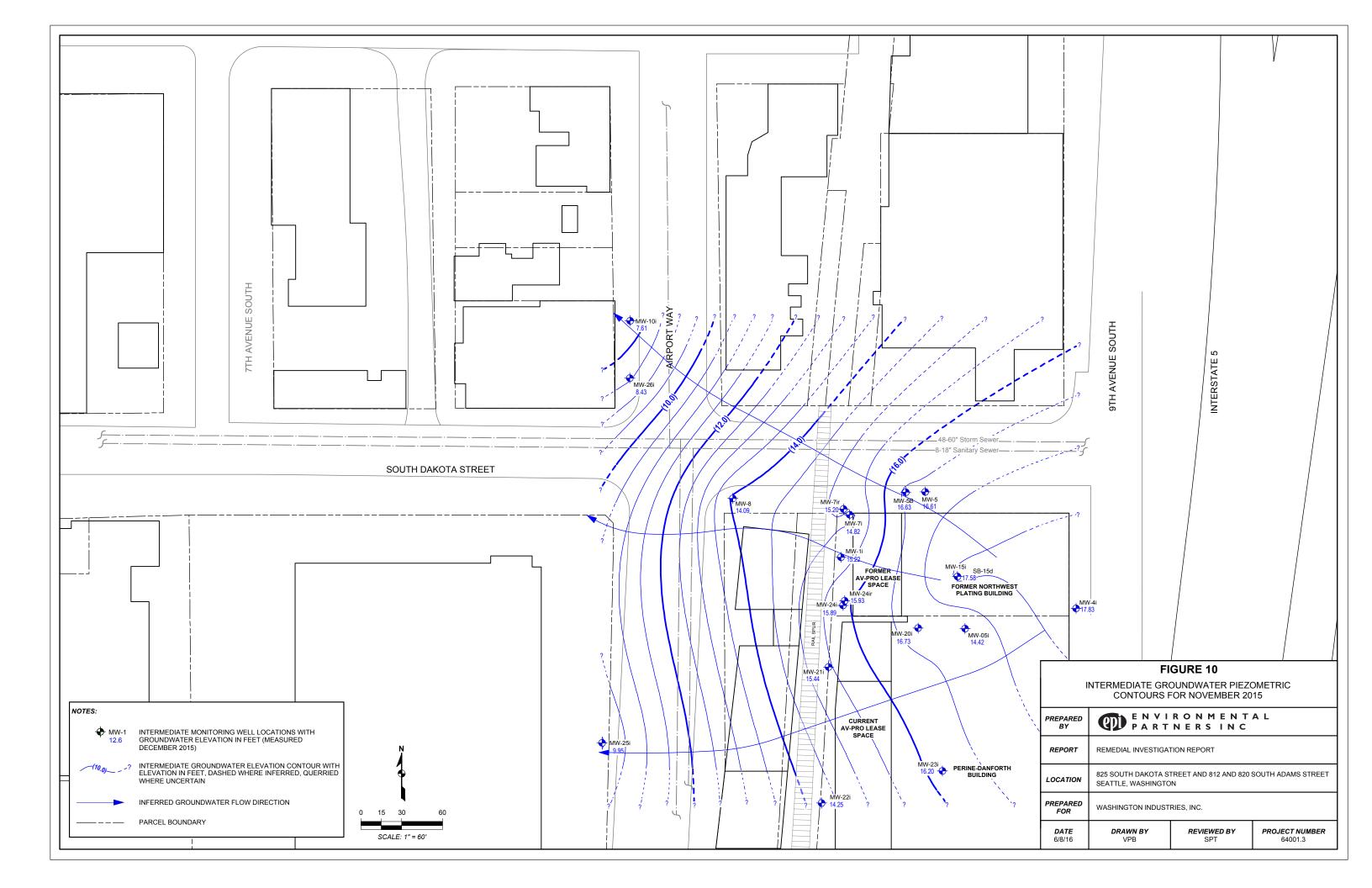
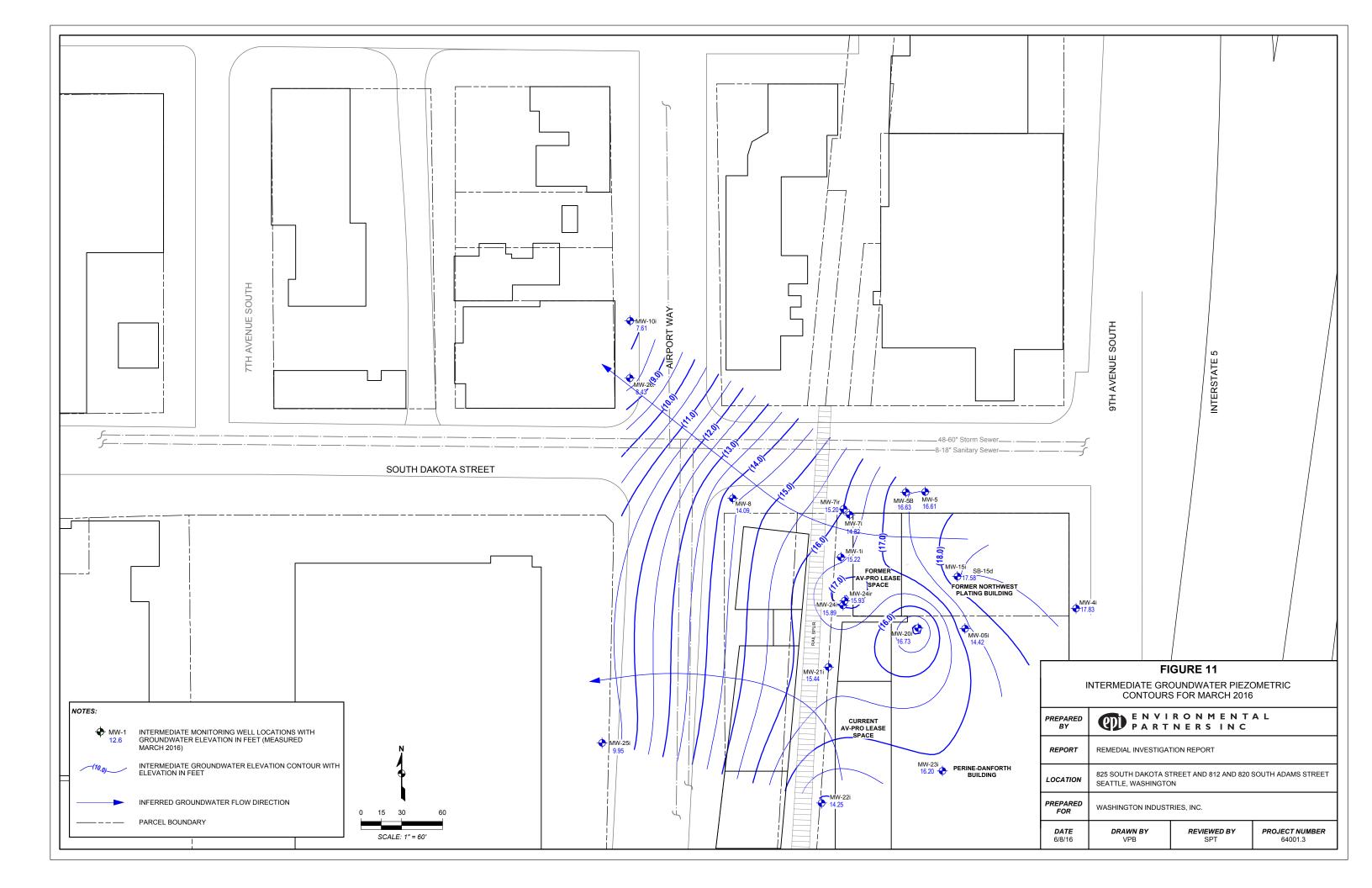


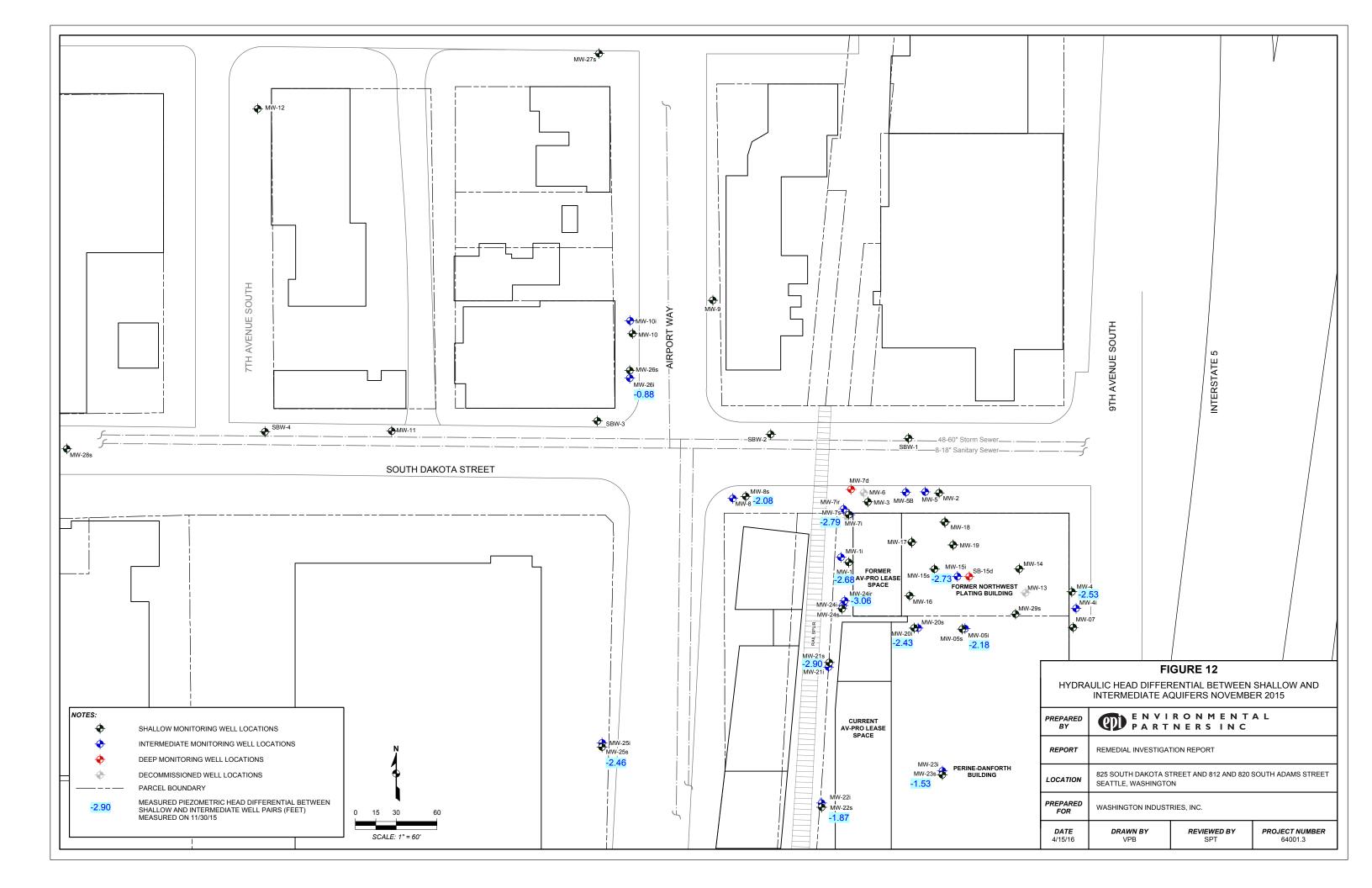
FIGURE 7								
GEOLOGIC CROSS SECTION B-B'								
PREPARED BY								
REPORT	REMEDIAL ACTION REPORT							
LOCATION	825 SOUTH DAKOTA S SEATTLE, WASHINGTO	FREET AND 812 AND 820	SOUTH ADAMS STREET					
PREPARED FOR	WASHINGTON INDUSTRIES, INC.							
DATE 6/8/16	DRAWN BY VPB REVIEWED BY SPT 64001.3							

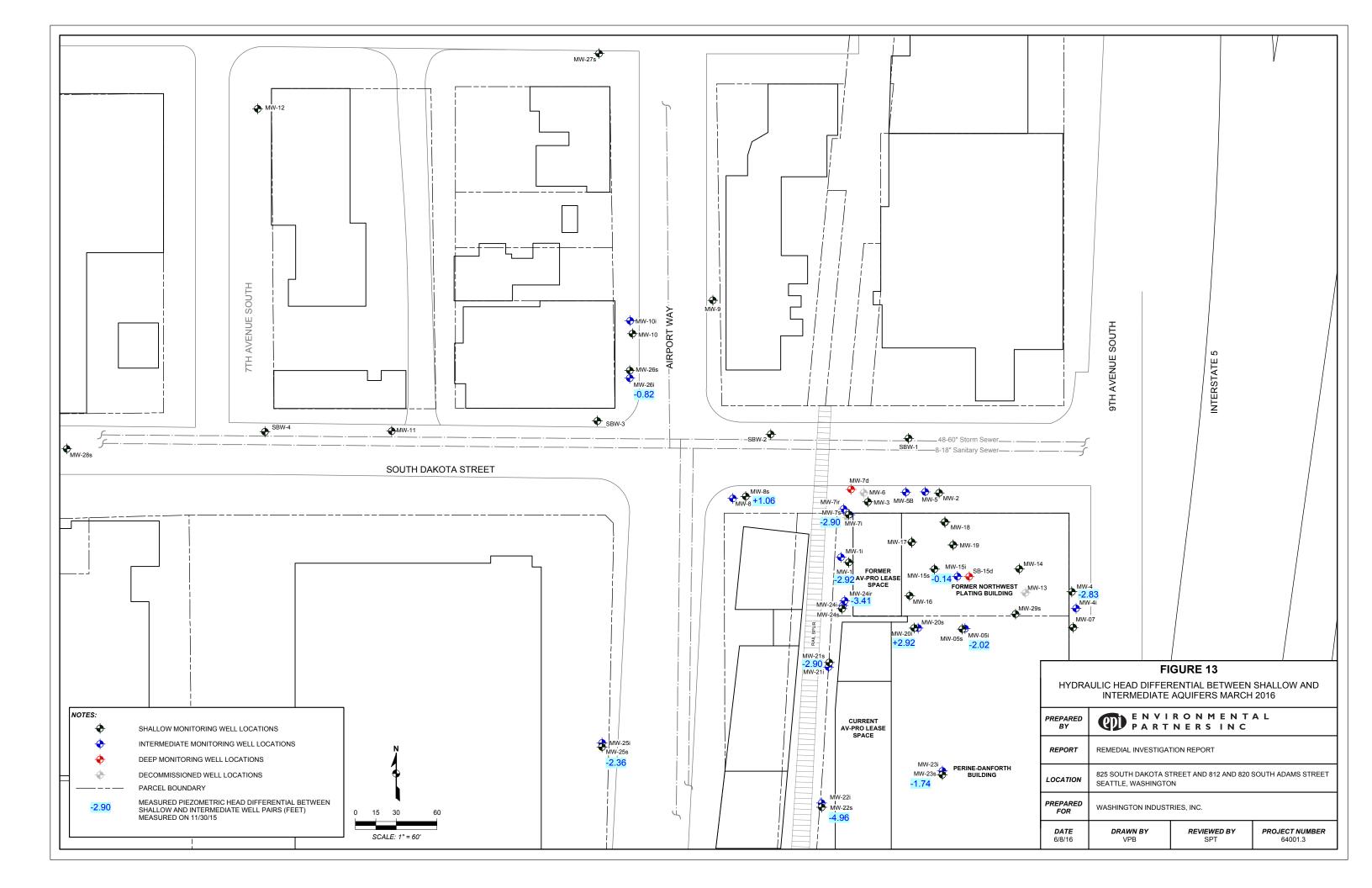


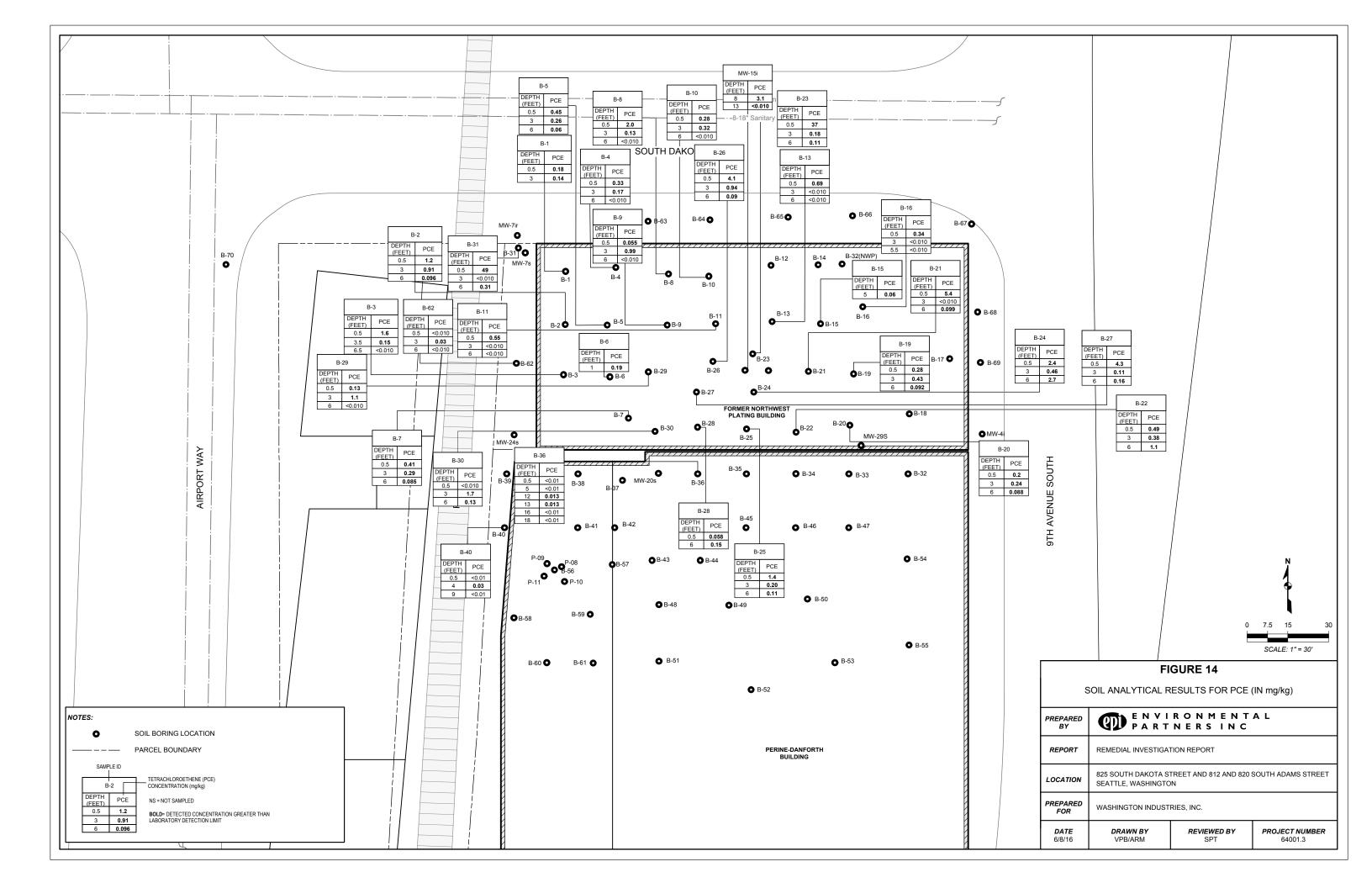


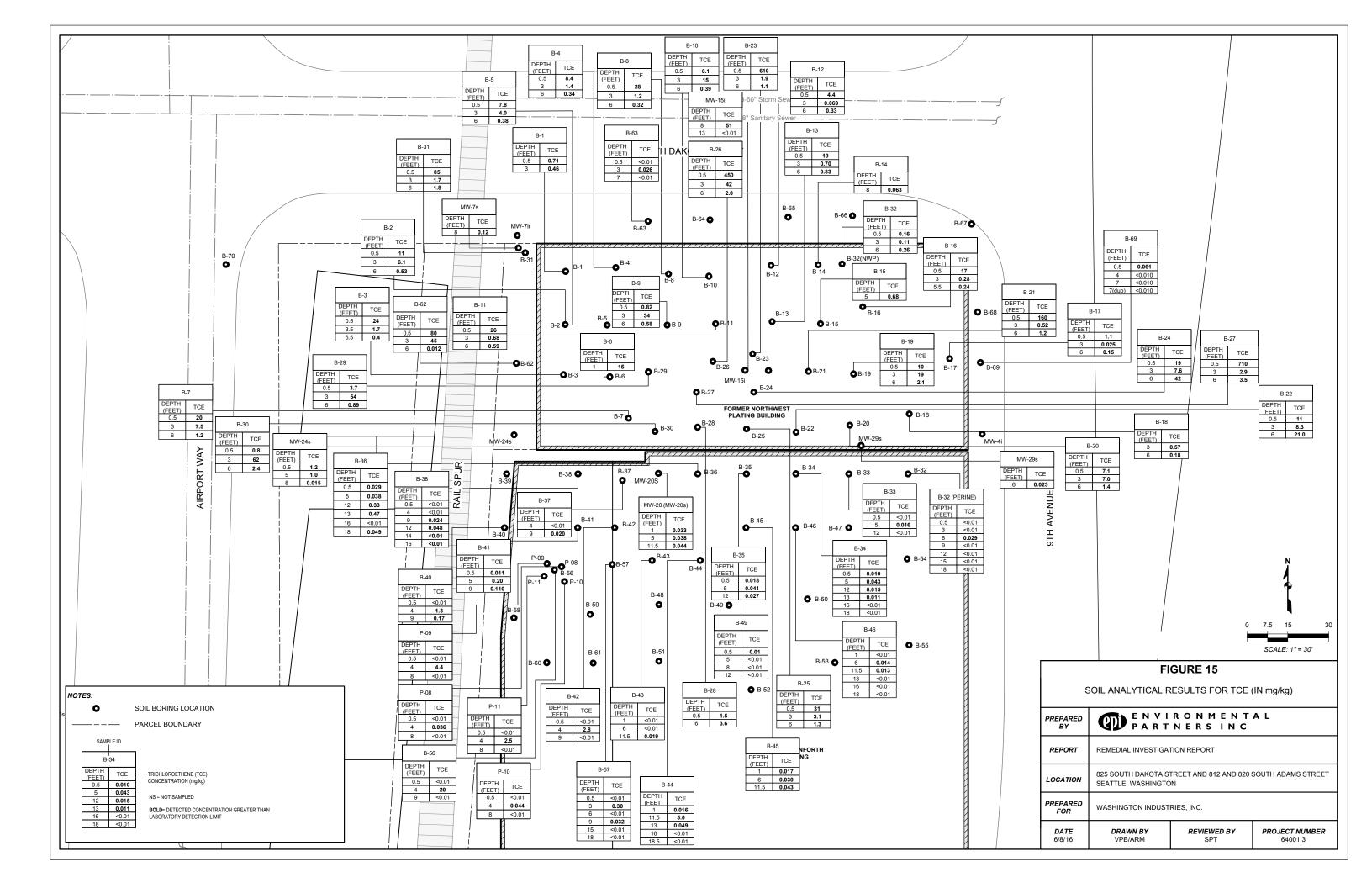


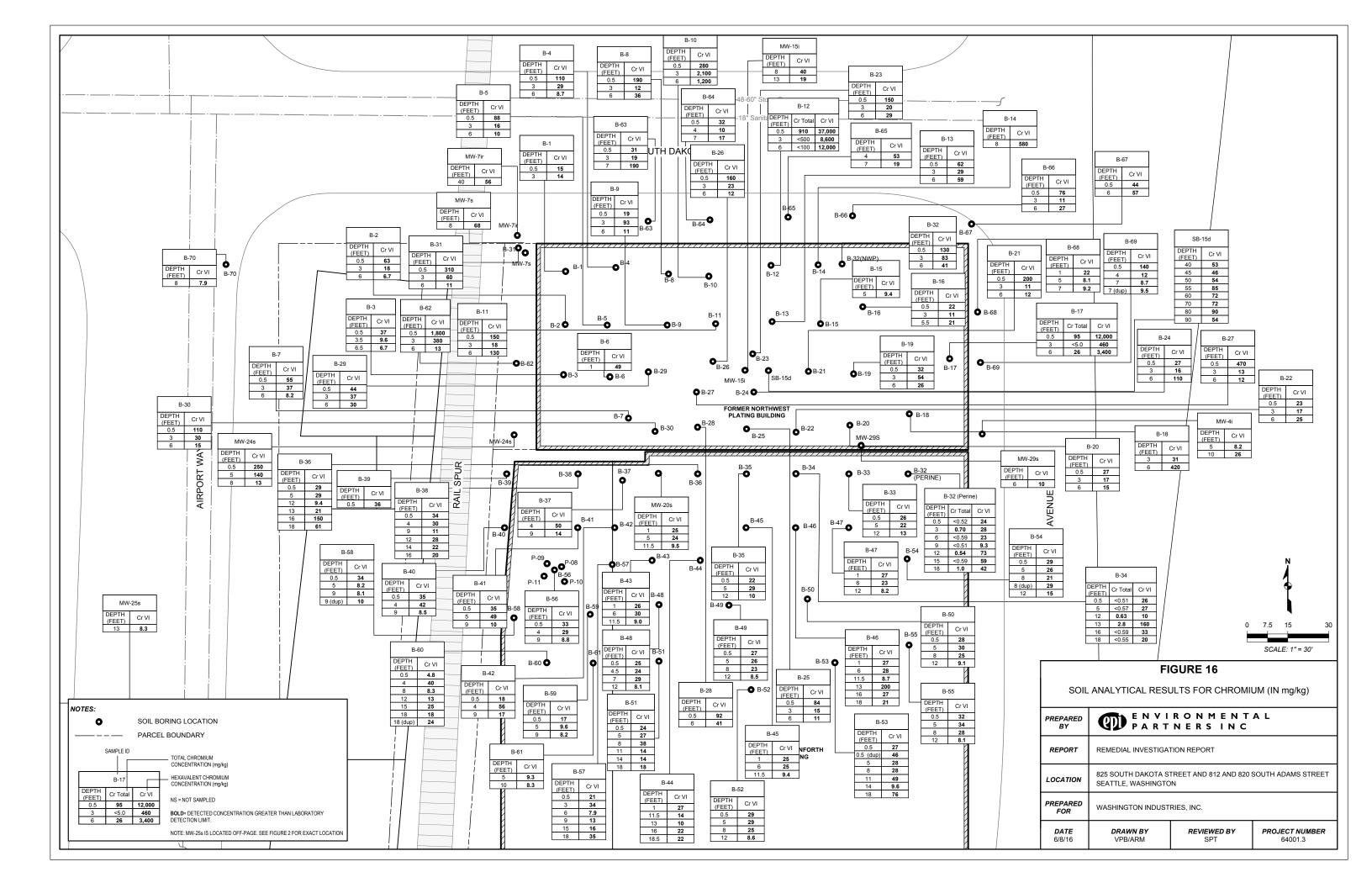


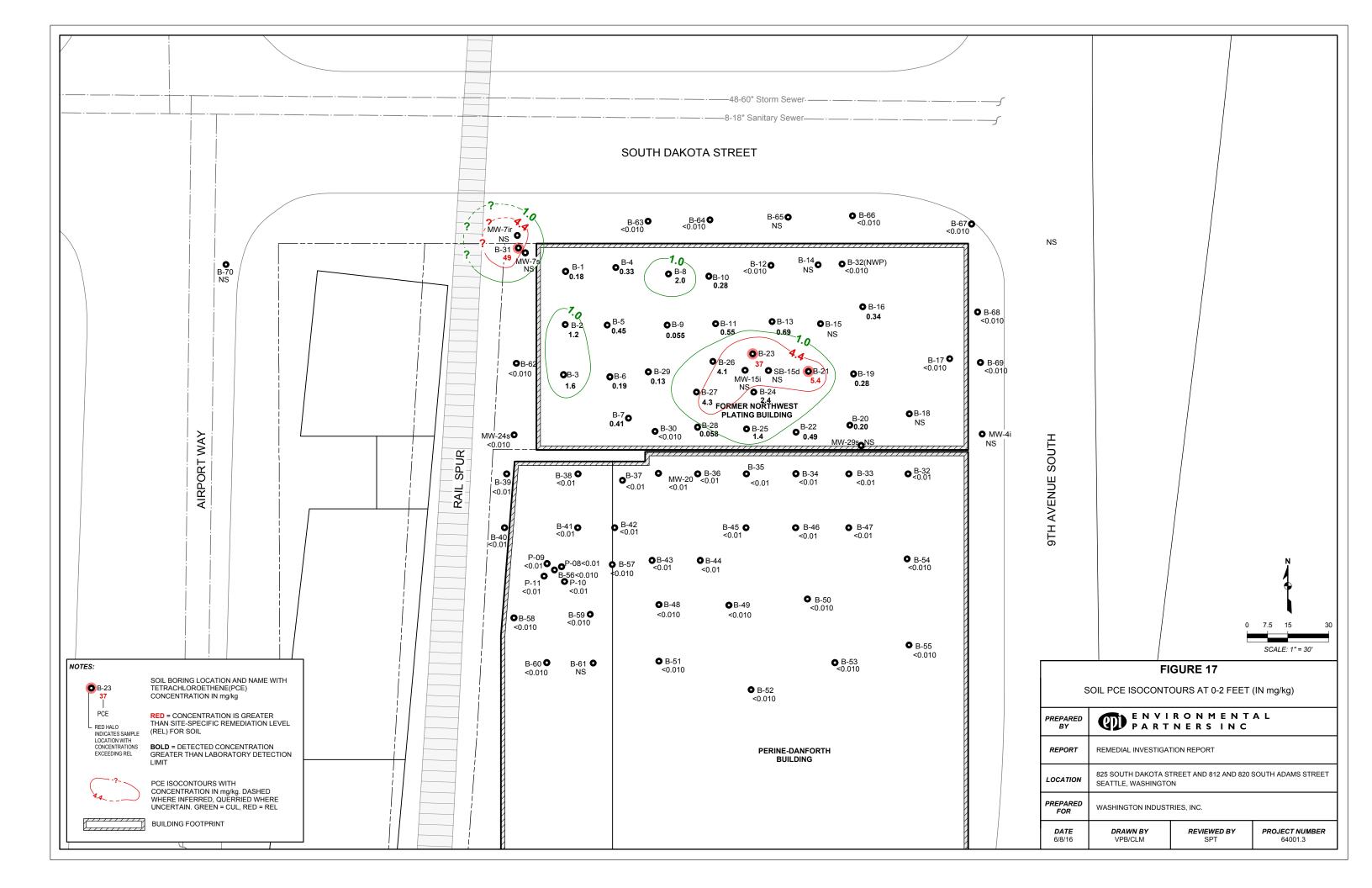


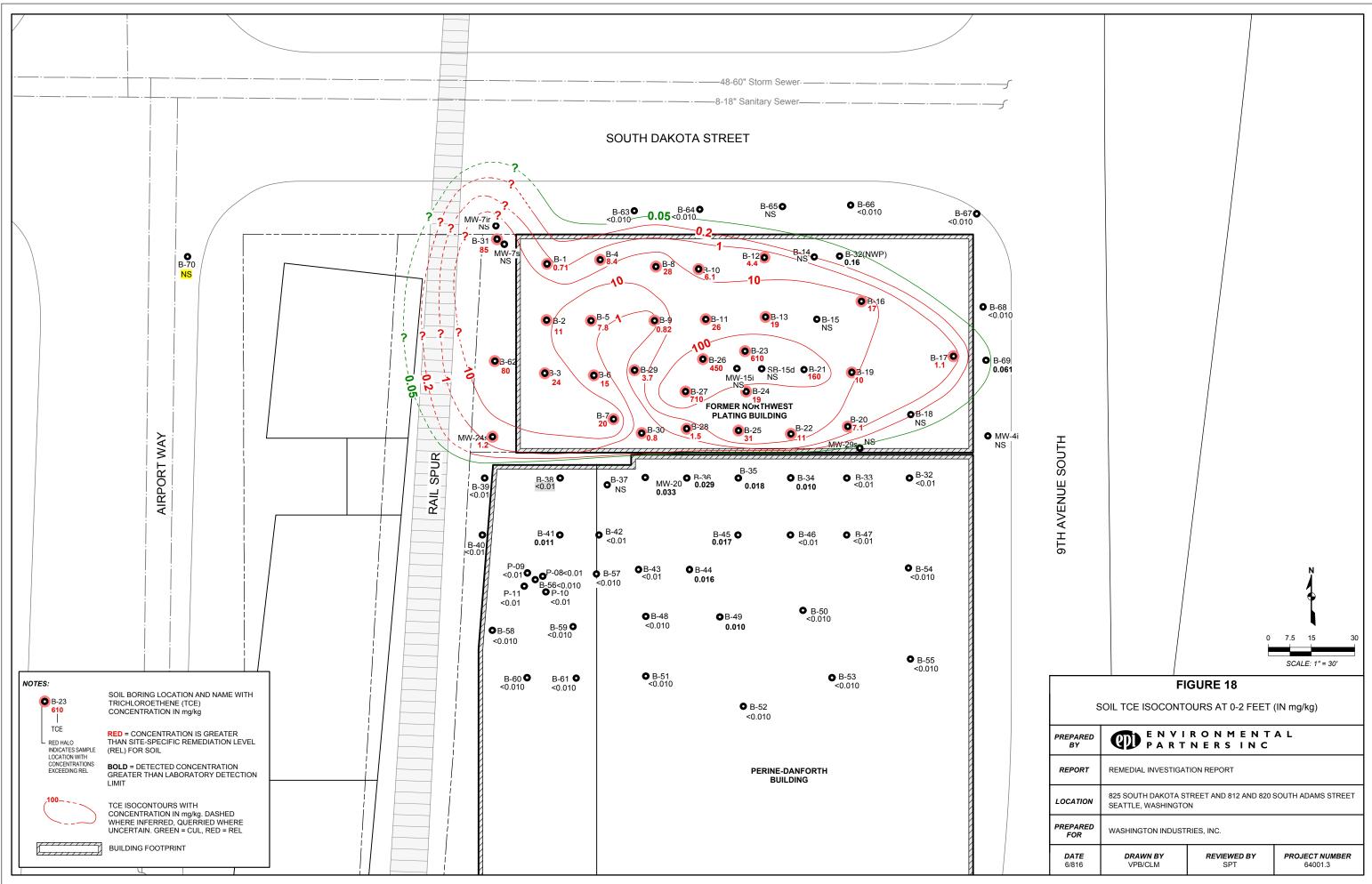


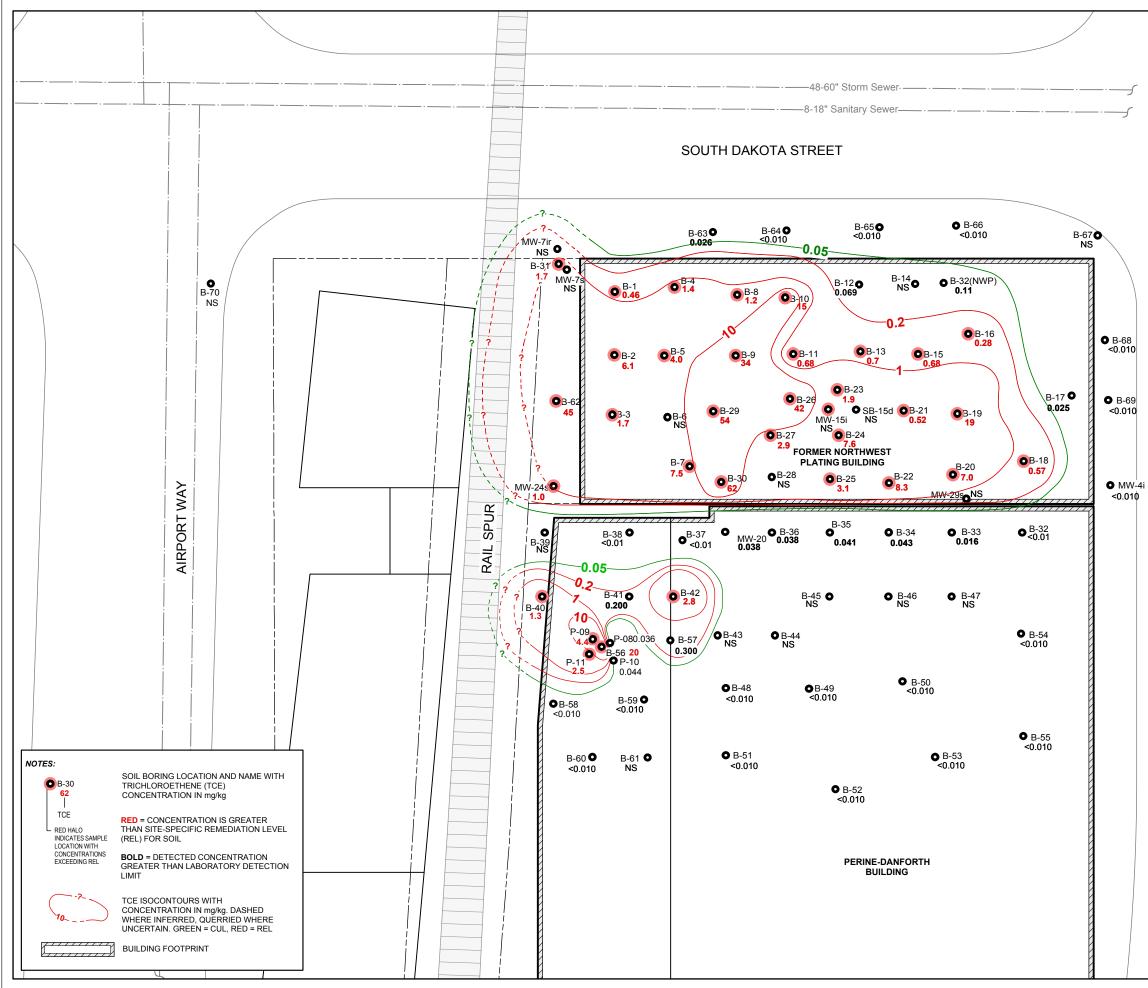


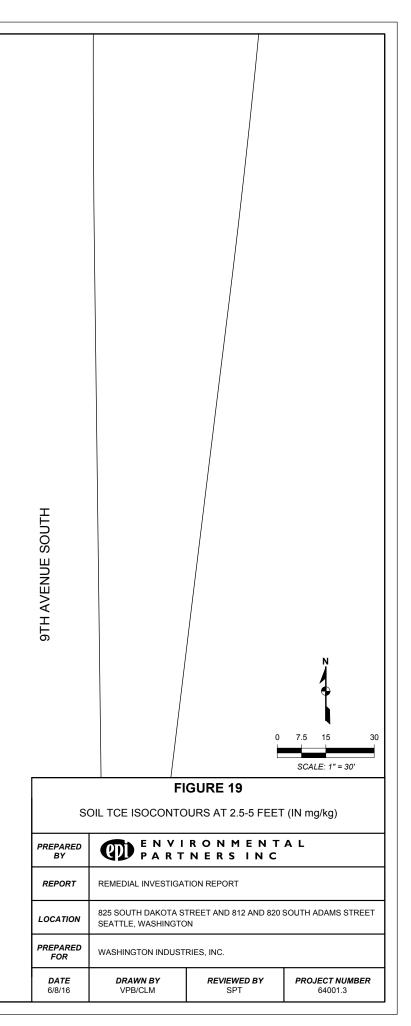


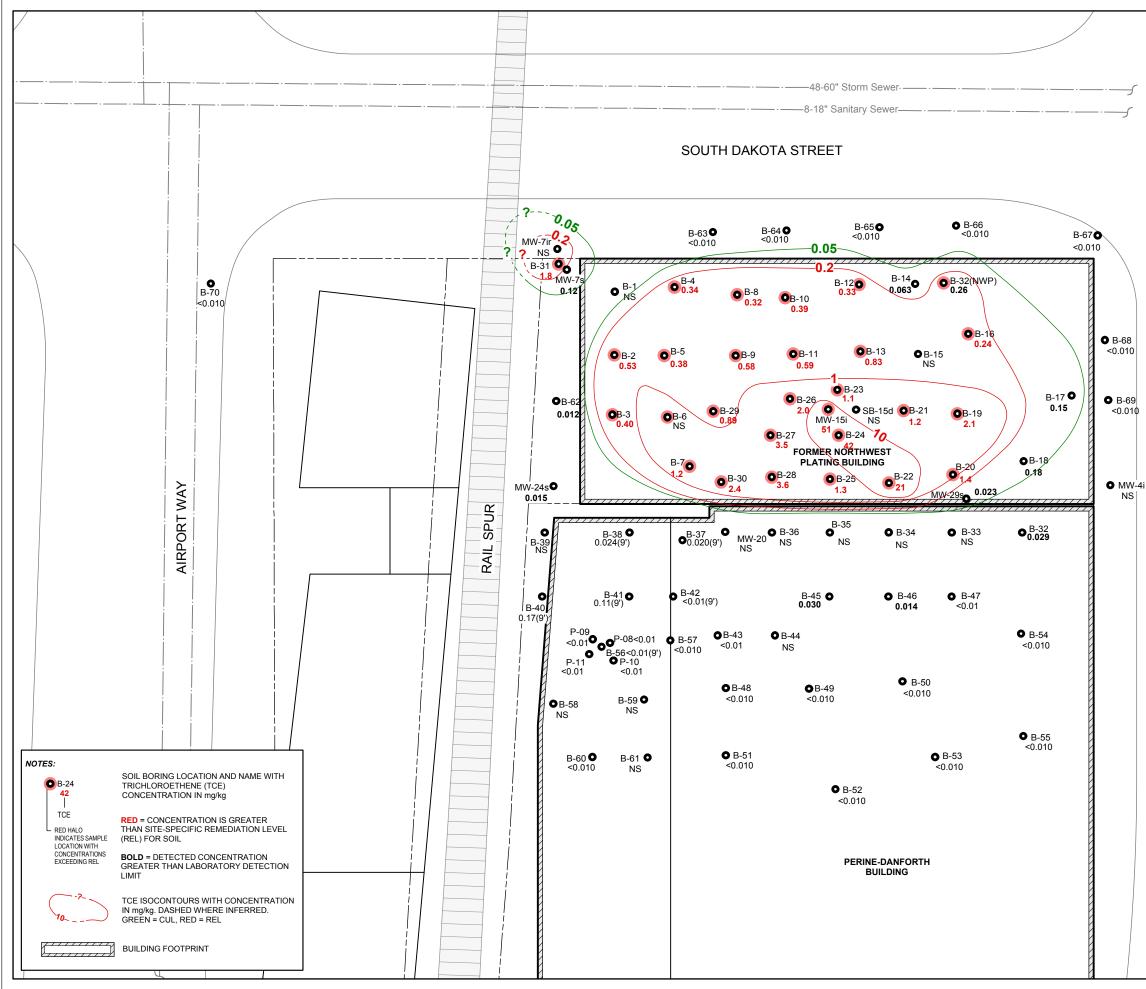


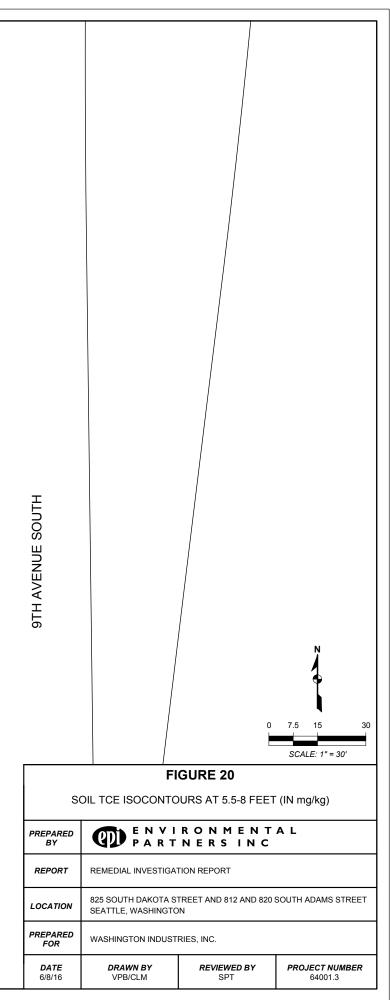


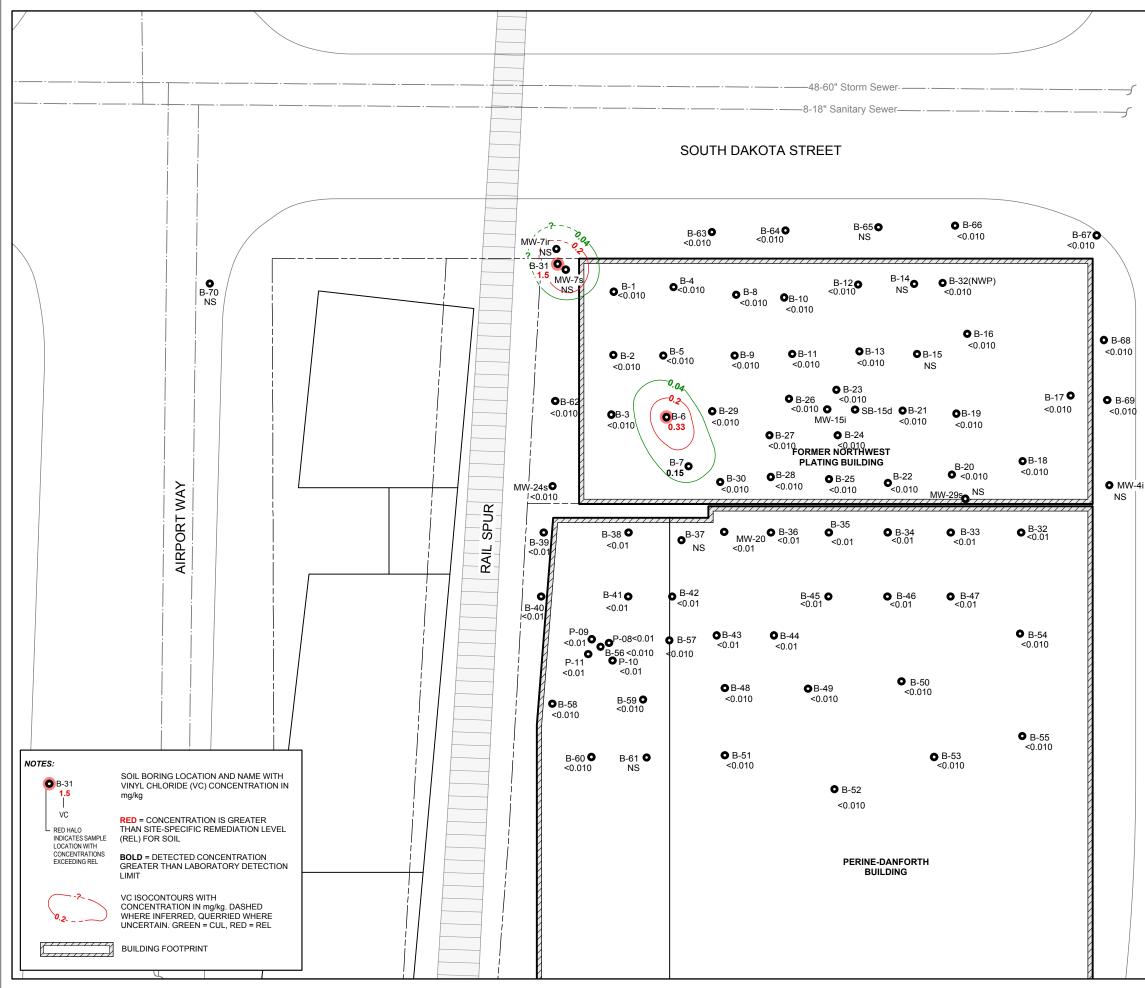


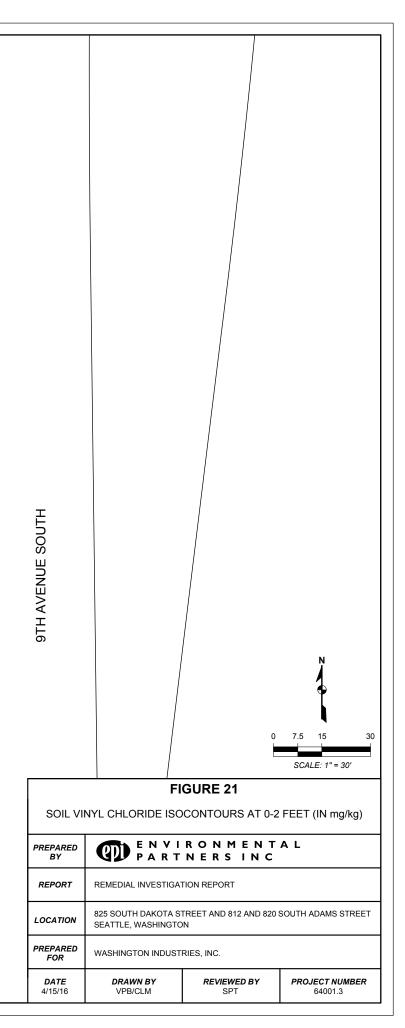


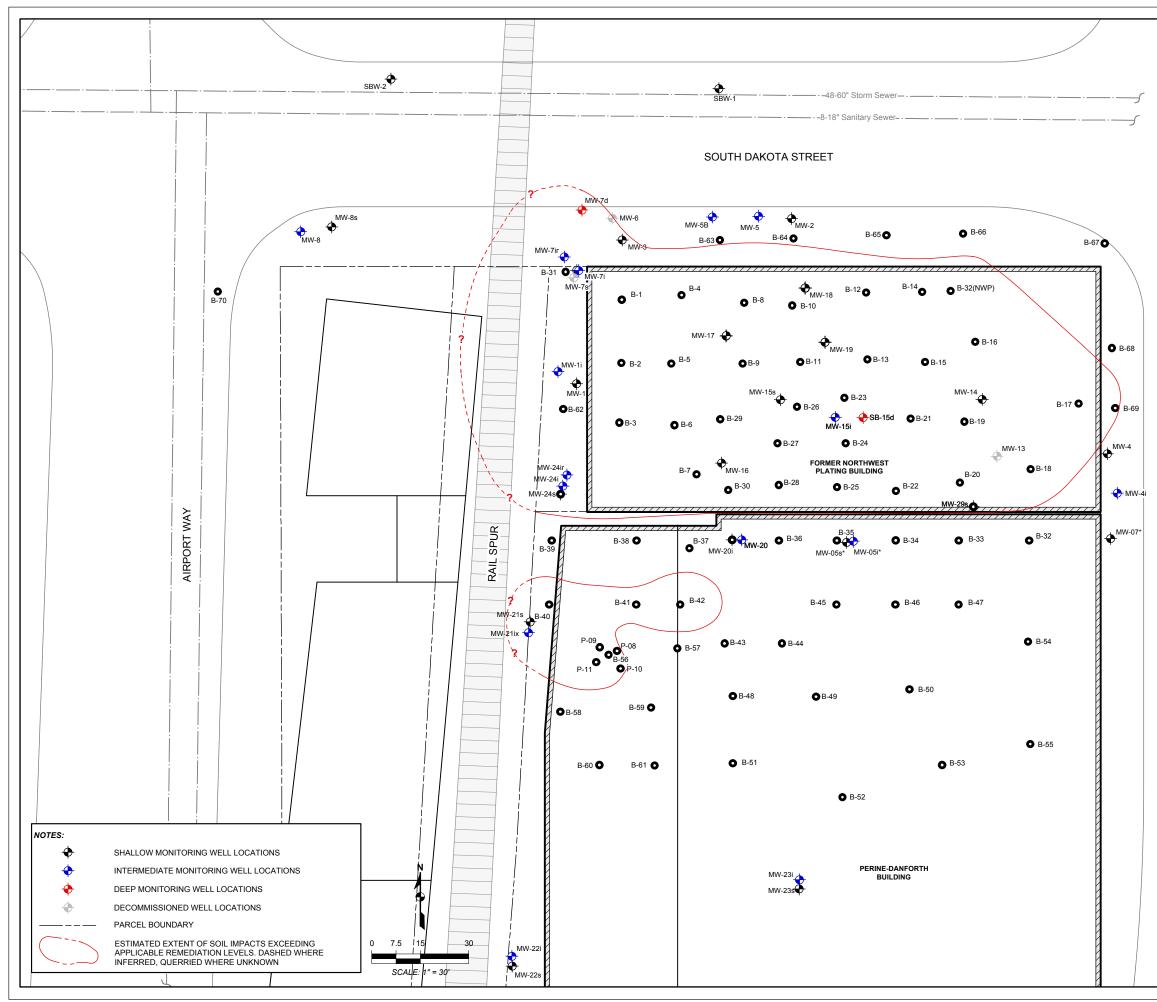




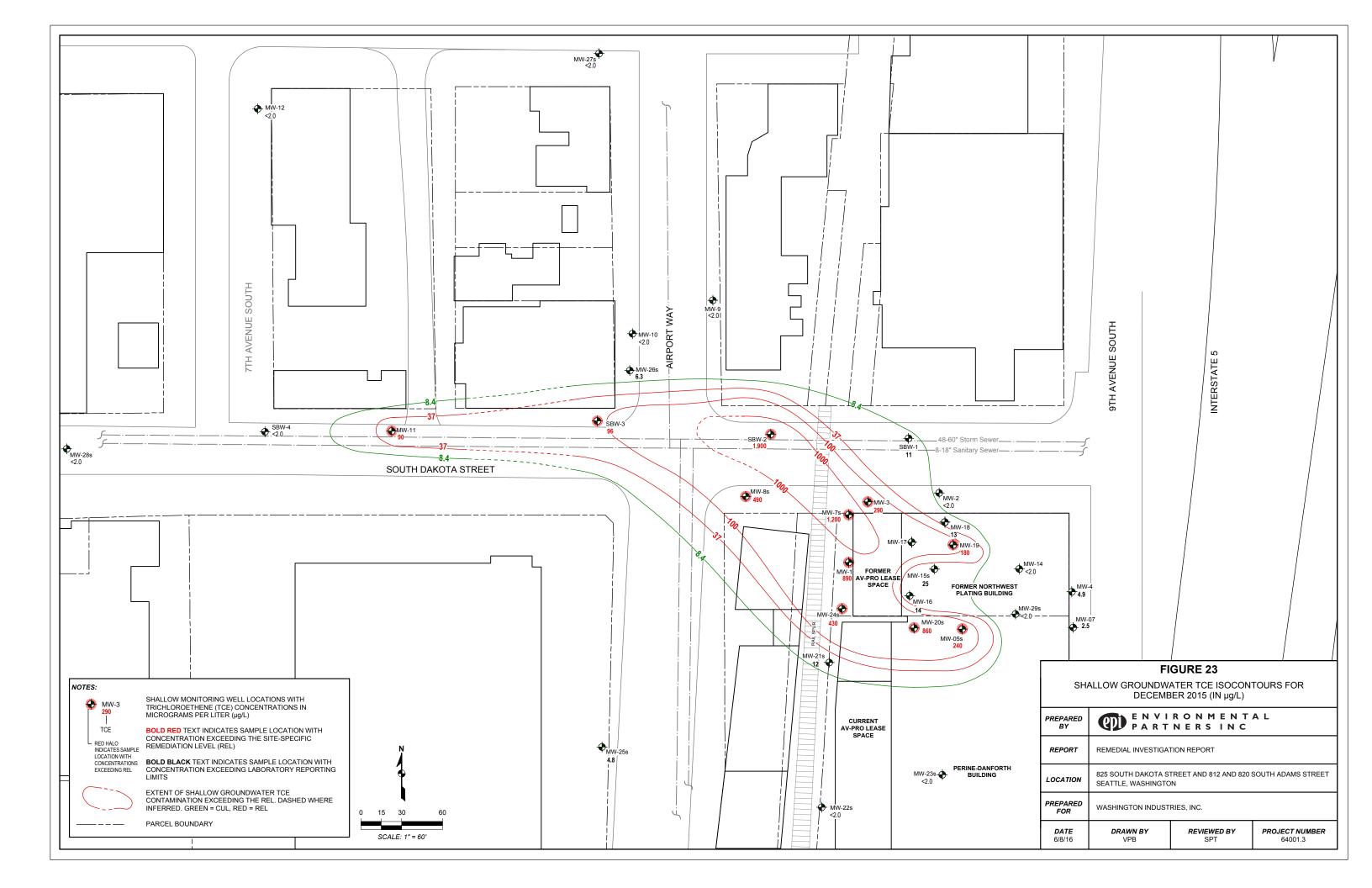


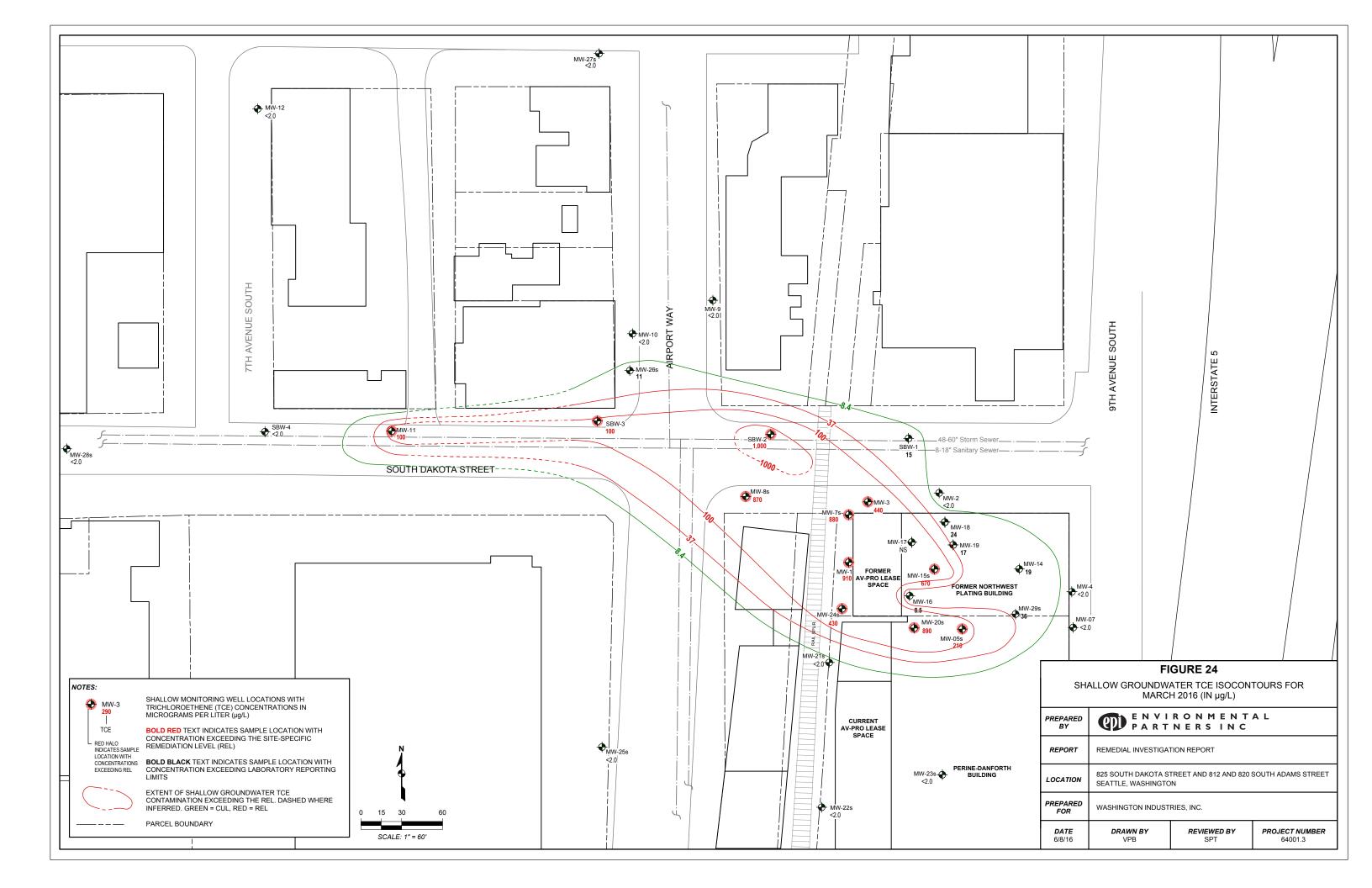


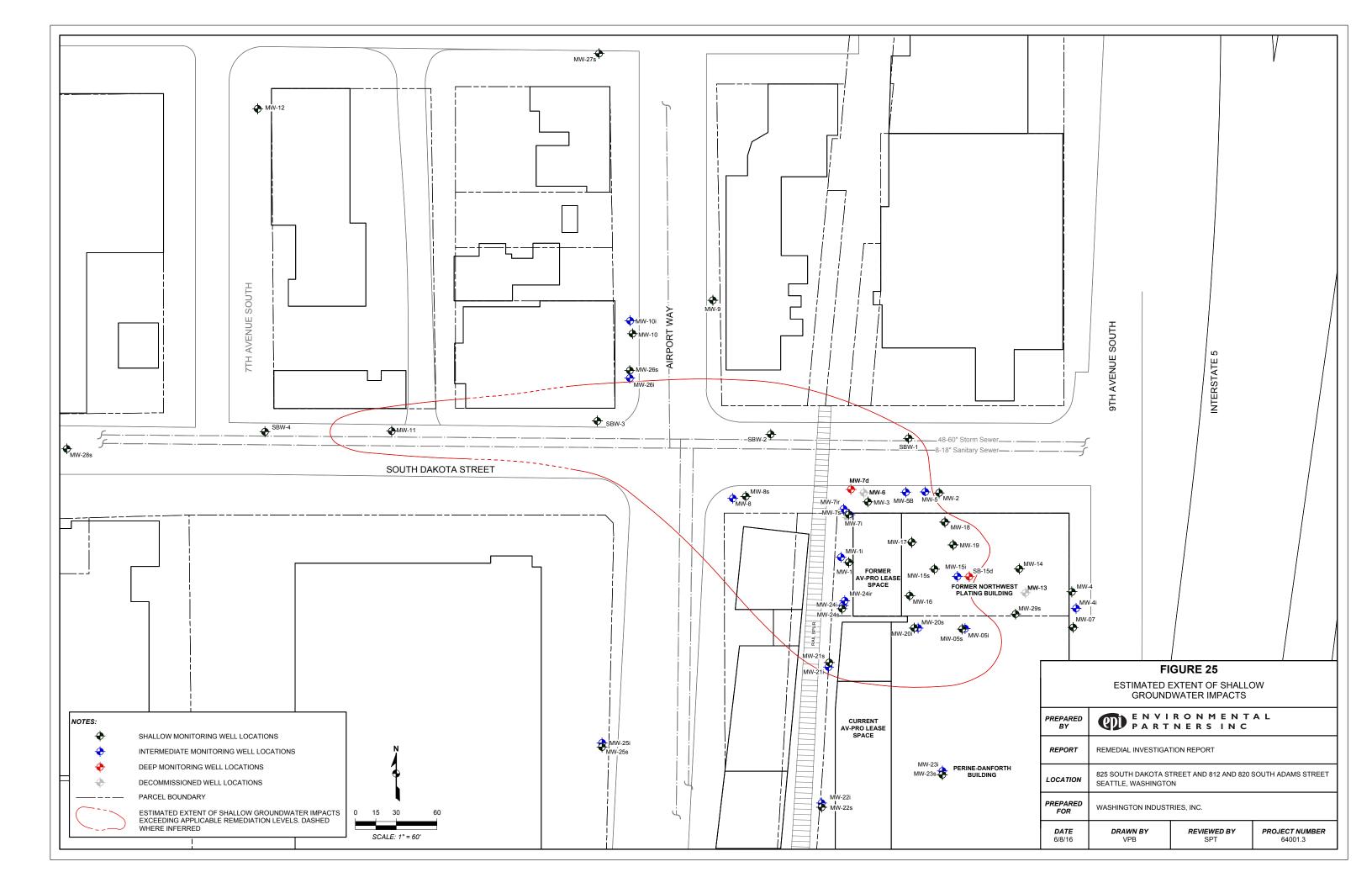




9TH AVENUE SOUTH				
			GURE 22 TENT OF SOIL IMP	ACTS
PREPAI			RONMENT NERSINC	A L
REPOI		REMEDIAL INVESTIGAT		
LOCAT	ION		TREET AND 812 AND 820	SOUTH ADAMS STREET
PREPA	RED	SEATTLE, WASHINGTO		
FOR	E	DRAWN BY	REVIEWED BY	PROJECT NUMBER
6/8/10	U	VPB	SPT	64001.3







Attachment A AGI Passive Soil Gas Mapping Report



Mapping Report

Site: Washington Industries, Inc. Seattle, WA

Prepared for:

Environmental Partners 295 NE Gilman Boulevard Issaquah, WA UNITED STATES

Prepared on: January 20, 2014



Project Summary

Amplified Geochemical Imaging, LLC. (AGI) provided the AGI Environmental Survey used at: **Washington Industries. Inc.**

Seattle, WA

The service provided by AGI included delivery of the required quantity of AGI Universal Samplers, analysis by the method described for the requested organic compounds, and reporting of the data. A Laboratory Report was issued previously which summarized the field sampling and analytical procedures, and contained the

Normally, when printed at scale, the maps are 11 x 17 inch in size. Other sizes are available upon request. General and project specific comments on the contouring and mapping can be found on the next page.

Maps prepared by:

Jim E Whetzel

Project Manager

Maps reviewed:

Dayna M Cobb

Project Manager

Report reviewed/ approved by:

Jay W Hodny

Project Manager



General Comments

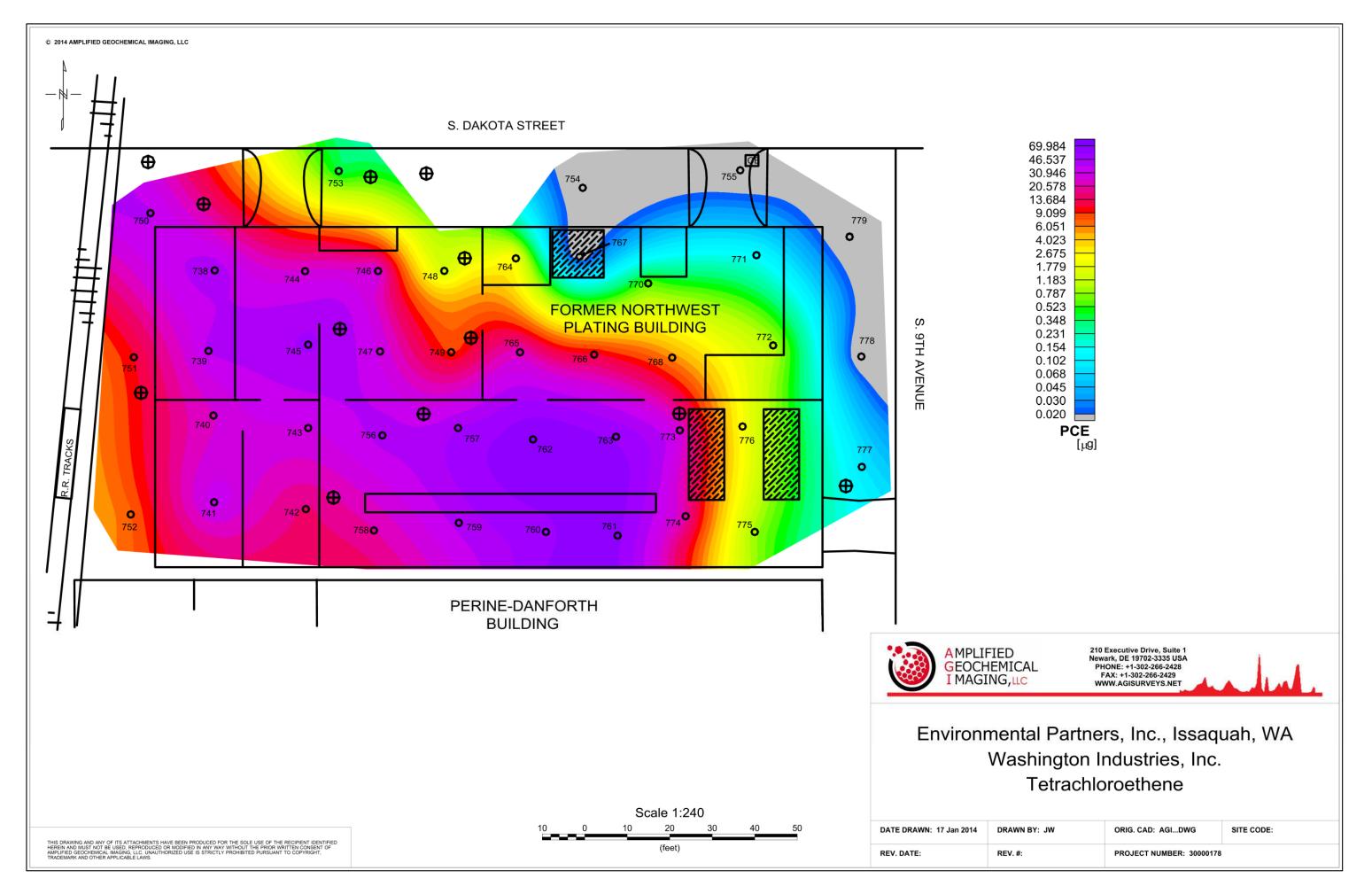
A minimum curvature algorithm was used to interpolate the data from the sample locations to a regularly-spaced grid. The resulting surface is considered to be the smoothest possible surface that will fit the observed values at each sample location (i.e., data honoring). The interpolation is performed in log space, with grid cell sizes approximately one-tenth the average distance between sample locations. For example, when AGI Universal Samplers are placed about 50 feet apart, the grid cell size is set to five feet.

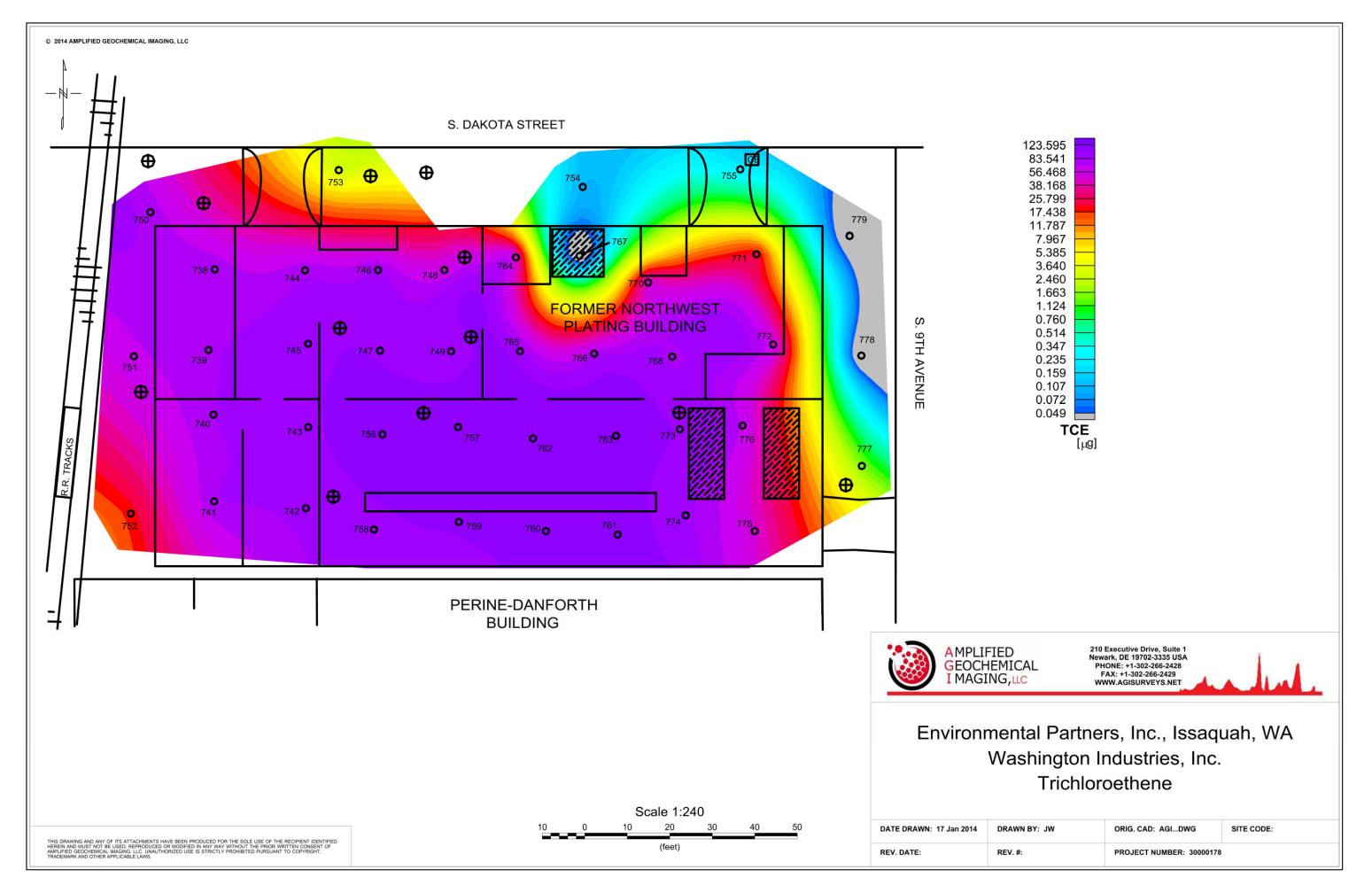
Where observations trend from lower to higher values, and moving towards the edge of the area sampled, the contour surface will continue to rise (showing warmer colors) as no additional data exist to constrain the interpolation. Where observations trend from high to low, towards the edge of the area sampled, the opposite is true.

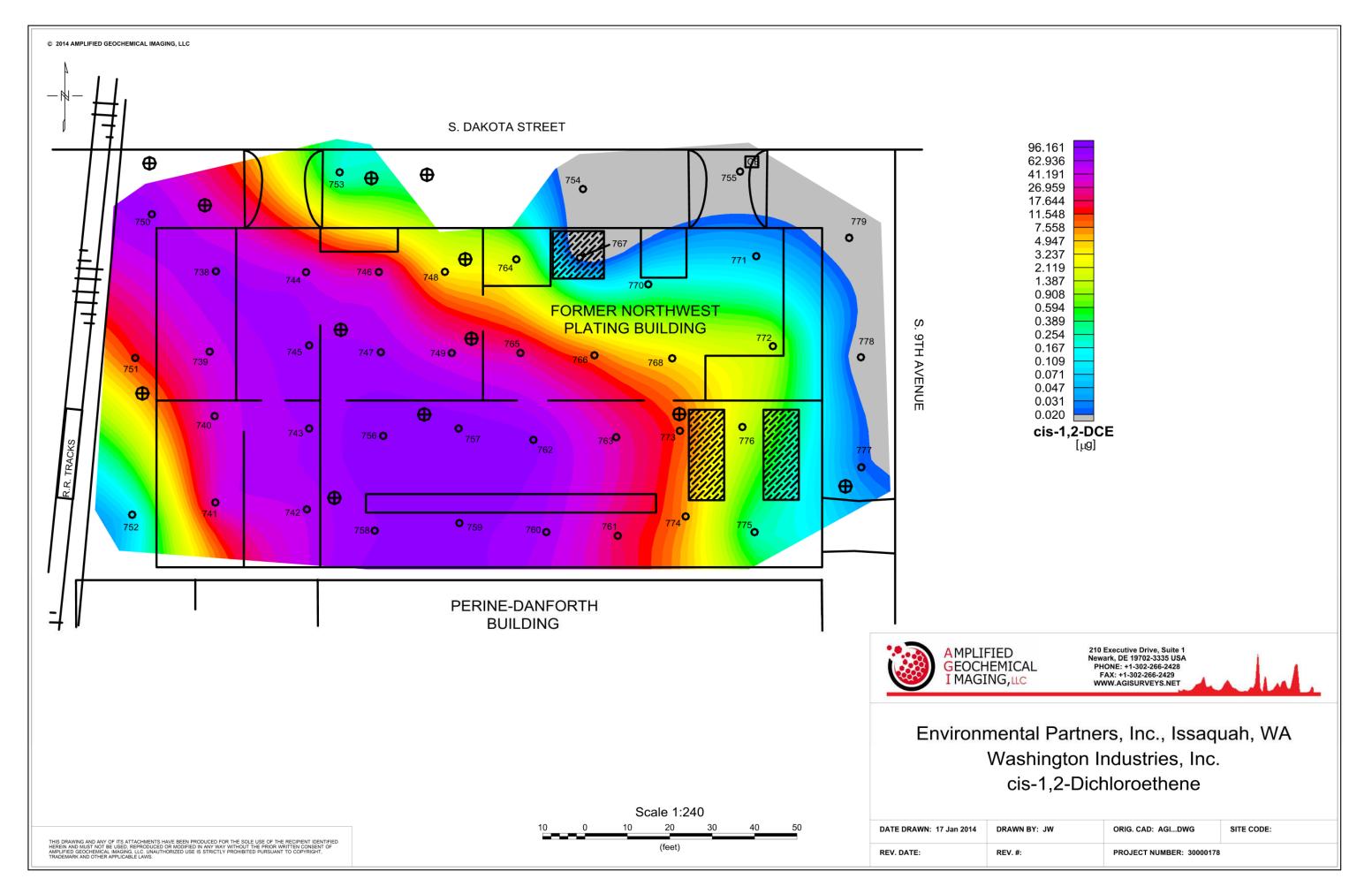
Contour minimums and maximums used in the color interval assignment are established based on the QA blank levels (trip and method blanks), method detection limits, and maximum values observed. The minimum contour level (gray color) is established using the maximum QA blank level or method detection limit, whichever is greater, per compound or groups of compounds. The maximum contour level is set at the maximum value observed, per compound or groups of compounds. Contour interval assignments can be modified at the client's request.

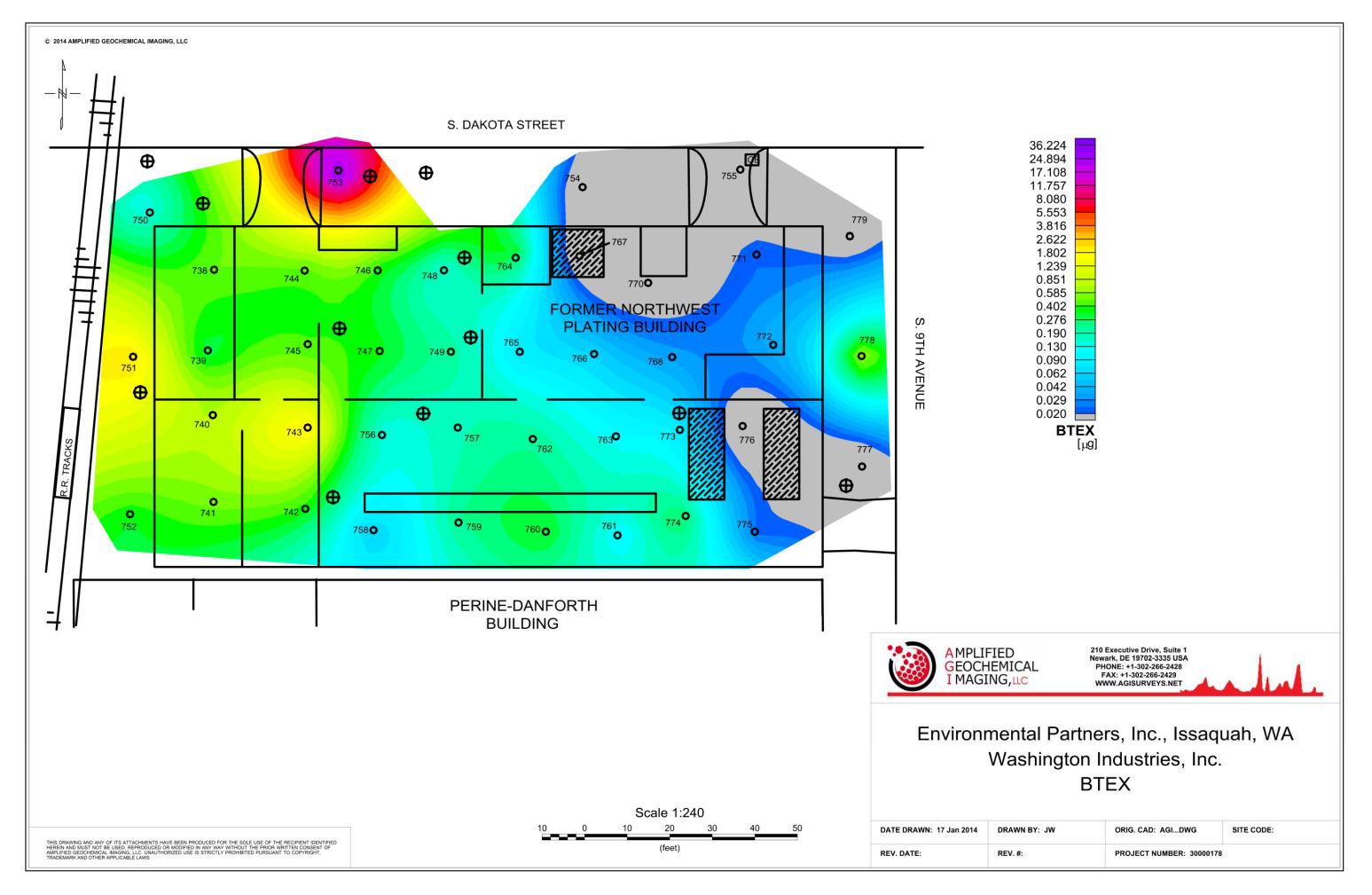
Project Specific Comments

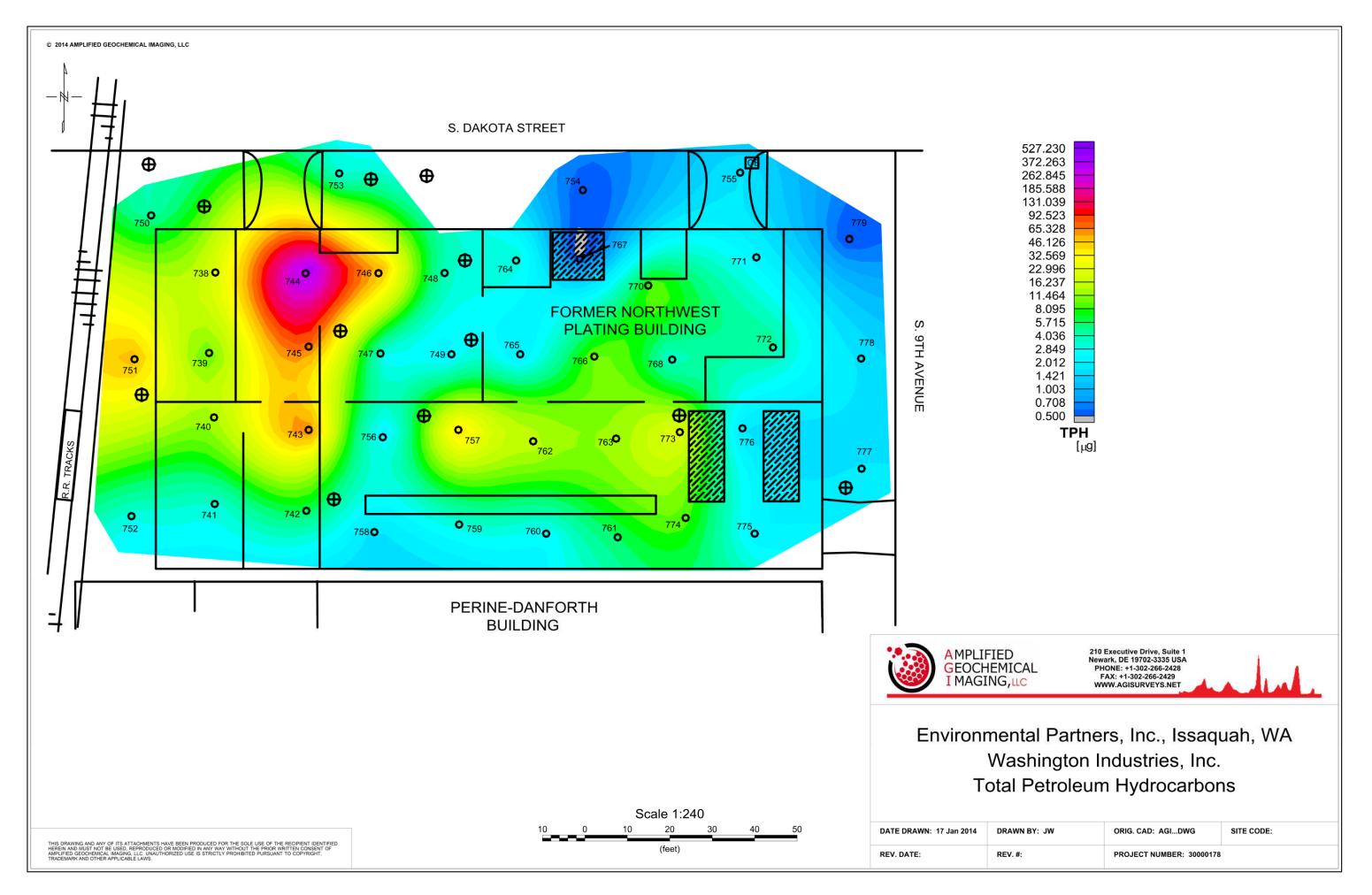
None











Amplified Geochemical Imaging, ILC 210 Executive Drive, Suite 1 Newark, DE 19702-3335 Phone: 302.266.2428 European Sales Office: +49.89.638.7927-12



AGIsurveys.net

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Attachment B Soil Boring Logs

edi	E N V P A R	IRONM TNERS	ENTAL INC		BORING	ID: MW-4i			
SITE A	DDRESS				CLIENT:			CASING MATERIAL	AND SIZE:
825 S	outh Da	kota Street, S	eattle, WA		Washingto	on Industries		2" PVC	
	NG CONTE				PROJECT #:			SCREEN SIZE:	
	ade Drill				64001.4			0.01	
	NG EQUIP				DATE:			SCREEN INTERVAL:	
Spide	r Sonic	Truck			11/25/15			25'-40'	
-	NG METH					RFACE ELEV. F1	AMSL:	FILTER PACK:	
Sonic					Not Measu	ired		Silica Sand	
LOGGE			BOREHOLE SIZE:		TOTAL DEPT	FILTER PACK INTER	VAL:		
Bryar	n Miles L	G.	2" PVC		40 fbg			23'-40'	
Depth (feet)	nscs	De USCS name: (escription Color; Moisture; Density; ncy; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Constr	uction
0 - 5 -	SM	grey with tan silt grain	sphalt surface ~ 8" thick; dark lenses; damp; dense; fine DED SAND; dark grey; moist; fine grain	- 100		MW-4i: 5	0.2		Cement
- 10	SP	Wet @ 9'		100		(1300) MW-4i: 10	0.1		
- 15 -		SILT; dark grey;	moist; hard; non-plasti; no	30		(1315)	3.8		Bentonite Chips
- 20	ML	odor or staining Some sand		100					Blank 2" PVC
- 25 -			DED SAND WITH SILT; moist; a sand; no odor or staining	100					
- 30 -	SP-SM			100					Sand
-				100					.010 slot 2" PVC
35 -		SILT; dark grey; very fine grain s	damp; hard; non-plasti; few and; no odor	- 100					
40 -		En	d of Borehole						
<u>45</u> NOT	ES: PID	lamp not wor	king				I	1	1 of 1

Y PAR	IRONMENTAL TNERSINC	BORING ID: N): IVIW-/S		
SITE ADDRESS		CLIE	NT:		CASING MATERIA	L AND SIZE:
25 S. Dakota	St. Seattle, WA	Was	shington	Industries	2-inch PVC Sch. 40	
RILLING CONTR			JECT #:		SCREEN SIZE:	
lolt Services		640	01		0.010"-Slot	
DRILLING EQUIPM	IENT:	DAT	E:		SCREEN INTERVA	AL:
Geoprobe 782	2DT	4/28	3/15		4'-14'	
DRILLING METHO	D:	GRC	UND SURF	ACE ELEV. FT AMSL:	FILTER PACK:	
Direct-Push Te	echnology				10/20 Prepack	Sand
OGGED BY:			AL DEPTH:		FILTER PACK INT	ERVAL:
A. Busbee		<mark>15'</mark>			3.5'-14'	
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	WellCon	struction
0 - SP 2	POORLY-GRADED SAND; brown; dry; fine sand with some fine gravel; no odor. SILT; gray; moist; silt with minor fine sand; no					Flush Monume Hydrated Bentonite 2-inch PVC
4 - ML	odor. POORLY-GRADED SAND; brown; moist; fine	80	0.8			Casing
6	sand; no odor.					10,20 0414
8 - _ SP		90	4.8	MW-7S:8		2-inch
10	Wet		1.7			0.010"-Slot Screen
14 - ML	SILT; gray; moist; silt with trace shells; no odor.	90	0			Hydrated
40	End of Borehole					Bentonite
16 -						
18 -						
20 -						
22 -						
24 -						
26 -						
28 - -						
30 - -						
32 -						
34 -						
<u>36</u>						
NOTES:						

ed		TNERS	ENTAL INC		BORING	ID: MW-7ir			
SITE AL	DDRESS				CLIENT:			CASING MATERIAL	AND SIZE:
825 Se	outh Da	kota Street, S	eattle, WA		Washingto	on Industries	2" PVC		
	NG CONTI		,		PROJECT #:			SCREEN SIZE:	
Casca	de Drill	ing			64001.4			0.01	
	NG EQUIP	-			DATE:			SCREEN INTERVA	:
Spide	r Sonic	Truck			11/23/15			15'-35'	
-						RFACE ELEV. F	F AMSL:	FILTER PACK:	
Sonic					Not Measu	red		Silica Sand	
OGGE	D BY:		BOREHOLE SIZE:		TOTAL DEPT	H:		FILTER PACK INTE	RVAL:
Bryan	Miles L	G.	2" PVC		90 fbg			13'-36'	
Depth (feet)	nscs	USCS name; C	escription Color; Moisture; Density; hcy; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Cons	truction
0	sw.	moist; dense; fin	O SAND; brown and dark grey; he to coarse grains	100			69		Cement
5 -	SP	POORLY-GRAD dense; fine grair	DED SAND; dark grey; moist; n	100			77		Bentonite Chip
10 -		some white flat	ry moist; stiff; non plastic; clam shells less than 1.5"	100			23		Blank 2" PVC
15 -		Increasing sand SILTY SAND; bi shells less than	rown; wet; few white flat clam 1.5" wide; very fine grain sand;				0.4		.010 slot 2"
20 -	SM	no odor Increasing sand		100			0.3		PVC
- 25 -			SAND WITH GRAVEL; dark	100			0.3		
 30 -	° sw °	grey; wet; dense shell fragments	e; fine to coarse sand; trace	100			0.3		Quark
	· .••· ·	SILT; bluish gre very fine grain s	y; damp; hard; low plast.; trace and	100			0.3		Sand
- 40 -	<u>m</u> L			100		MW-7ir: 40			
-	 мL	SANDY SILT; bl	uish grey; damp; hard; / fine grain sand	100		(1220) MW-7ir :45	0.3		
45 -		1 / 2	y; damp; hard; low plasti; trace	100		(1300) MW-7ir: 50	0.2		Bentonite Chip
50 -				_ 100		(1310)	0.2 0.2		
55 -	1 IML II I	\plastic; very fine CLAY; bluish gre	ey; damp; hard; high plasti;	100		MW-7ir: 55 (1320)			
60 -		inter trace white No shells	shell fragments	100		MW-7ir: 60 (1330)	0.2		
65 -							0.2		
70 -	CL			100		MW-7ir: 70 (1345)	0.3		
75 -		Clay; bluish gray	r; damp; hard; high plasticity	100			0.2		
80 -				100		MW-7ir: 80 (1400)	0.2		
- 85 -				100		. ,	0.7		
90 -				100		MW-7ir: 90	0.4		
95		En	d of Borehole			(1430)			
J				1			1		

	IRONMENTAL TNERS INC	во	RING I	D: MW-8s	
SITE ADDRESS		CLIE	NT:		CASING MATERIAL AND SIZE:
825 S. Dakota	St. Seattle, WA	Was	shington	Industries	2-inch PVC Sch. 40
DRILLING CONTR		PRO	JECT #:		SCREEN SIZE:
Holt Services		640	01		0.010"-Slot
DRILLING EQUIP	/ENT:	DAT	E:		SCREEN INTERVAL:
Geoprobe 782	2DT	5/28	3/15		4'-14'
DRILLING METHO	D:	GRC	UND SUR	ACE ELEV. FT AMSL:	FILTER PACK:
Direct-Push Te	echnology				10/20 Prepack Sand
LOGGED BY:			AL DEPTH:		FILTER PACK INTERVAL:
M. Busbee		15'			3.5'-14'
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction
0 2 - 4 - SP	POORLY-GRADED SAND; brown; dry; mostly fine sand; no odor.	40	0.8		Flush Monume Hydrated Bentonite 2-inch PVC Casing
6	Wet	80	1		
10 - - 12 - 14 - ML	SILT; gray; moist; silt; no odor.	20	0.4		10/20 Sand 2-inch 0.010"-Slot Screen
16 - 18 - 20 - 22 - 24 - 26 - 30 - 32 - 34 -	End of Borehole				
36 NOTES:					1 of 1

U PAR	IRONMENTAL TNERS INC	BC		D: MW-10i				
SITE ADDRESS		CLIE	ENT:		CASING	MATERIA	AND SIZE:	
825 S. Dakota	St. Seattle, WA	Wa	shington	Industries	2-inch	2-inch PVC Sch. 40		
DRILLING CONTR.		-	PROJECT #:		SCREEN SIZ			
Holt Services		640	01		0.010"-	Slot		
DRILLING EQUIPM	IENT:	DAT	E:		SCREEN	IINTERVA	L:	
Geoprobe 7822	2DT	5/27	7/15		29'-34'			
ORILLING METHO	D:	GRC	OUND SURF	ACE ELEV. FT AMSL:	FILTER F	PACK:		
Direct-Push Te	echnology				10/20 F	repack	Sand	
LOGGED BY:			AL DEPTH:			PACK INTE	RVAL:	
M. Busbee		35'			28.5'-3	4'		
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	\ \	VellCon	struction	
0 _ 2 - _ _ _ _ _ _ _ _ ML	SILT WITH GRAVEL; light brown; dry; mostly silt with minor gravel and few fine sand; no odor.	60	0				Flush Monumen	
4 6	POORLY-GRADED SAND; dark brown; damp; mostly fine sand; no odor.	-					2-inch PVC Casing	
8	Increased moisture	70	0					
12 - 14 - SP	Wet	90	0				Hydrated Bentonite	
16 - 18 - 20 -		100	0					
22 - 24 - 24 -	SILT; gray; damp; silt; no odor.	100	0					
26 - ML 28 - 		100	0				10/20 Sand	
30	No recovery	0					2-inch 0.010"-Slot Screen	
_	End of Borehole							
36	End of Borehole							

	IRONMENTAL TNERSINC	BC		D: MW-15i			
SITE ADDRESS		CLIE	ENT:		CASING MATERIAL AND		L AND SIZE:
325 S. Dakota	St. Seattle, WA	Wa	shington	Industries	2-inch PVC Sch. 40 SCREEN SIZE:		
DRILLING CONTR	RACTOR:		JECT #:				
Iolt Services		640	01		0.010"	-Slot	
DRILLING EQUIP	MENT:	DAT	E:		SCREE	N INTERVA	L:
Geoprobe 782	22DT	6/2/	/15		25'-30	•	
DRILLING METH	DD:	GRC	OUND SURF	ACE ELEV. FT AMSL:	FILTER	PACK:	
Direct-Push T	echnology				10/20	Prepack	Sand
OGGED BY:			AL DEPTH:			PACK INTE	RVAL:
A. Busbee		30'			24'-30		
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well Con	struction
0 2 - 4 -	Concrete POORLY-GRADED SAND; brown; dry; loose; mostly fine sand; no odor.	90	27				Flush Monumer
6 - SP	Increased moisture	90					Casing Hydrated Bentonite
8	SILTY SAND; gray; moist; mostly fine sand with some silt; no odor.		162				
12 - - 14 - - SM		80	1.7				
16 - - 18 - -		90	1.4				
20	SILT; gray; damp; stiff; silt; no odor. Wet and soft	100	0.1				
26 - - 28 - - - 30 -	POORLY-GRADED SAND WITH SILT; gray; wet; mostly fine sand with minor silt; no odor.	100	0.1				10/20 Sand 2-inch 0.010"-Slot Screen
30 _ 32 - _ 34 -	End of Borehole						
36 NOTES:							1 of 1

	TNERS			BORING ID: SB-15d						
SITE ADDRESS				CLIENT:			CASING MATERIAL AND SIZE:			
325 South Da	kota Street, Se	eattle, WA		Washingto	n Industries		N/A			
DRILLING CONTR		· - ,		PROJECT #:			SCREEN SIZE:			
Cascade Drill				64001.4						
DRILLING EQUIP	-			DATE:			SCREEN INTERVAL:			
Spider Sonic				11/19/15						
DRILLING METHO					RFACE ELEV. FT	AMSL:	FILTER PACK:			
Sonic				Not Measu	red	-	-			
OGGED BY:		BOREHOLE SIZE:		TOTAL DEPT			FILTER PACK INTERVAL:			
Bryan Miles				90 fbg						
Depth (feet) USCS	USCS name; C Plasticity; Dilaten	SCription olor; Moisture; Density; cy; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction			
0	CEMENT SURF/ POORLY-GRAD loose	ACE ED SAND; dark grey; moist;	100		MW-15d: 2 (1005)	2E+3				
5 – SP			100		MW-15d: 5 (1007)	3.8E+ 2				
10 - ML	abundant white fl SILTY SAND; da	very moist; stiff; non-plastic; lat clam shells less than 1.5" rk grey; wet; dense; abundar	nt		MW-15d: 10 (1015)	9.3				
- - - - - - - - - - - - - - - - - - -	white flat clam sh	nells up to 1.5"; very fine grai	n 100		MW-15d: 15	2.5				
	SII T: dark grev:	moist; hard; non-plastic	0		(1025)	2.5				
20 -	, <u>-</u> ,,									
25 -	POORLY-GRAD grey; wet; fine gr	ED SAND WITH SILT; dark	100							
SP-SM			100							
30	fine grain sand	rk grey; moist; dense; very ED SAND; dark grey; moist;	100			8 0.3				
35 - SP			_			1				
	SILT; dark grey; very fine grain sa	damp; hard; non-plastic; few ind	100			2				
40 -			100		MW-15d: 40 (1400)	4.6 0.9				
						1				

epi	PAR	IRONMEN TNERSIN	TAL C	BC	RING I	D: MW-20		
	DDRESS			CLIE	ENT:		CASING MATERIA	L AND SIZE:
820 So	outh Ada	ms St. Seattle, W	A	Wa	shington	Industries	Temp: 3/4" PV	С
	NG CONTRA			-	JECT #:		SCREEN SIZE:	
Holoc	ene Drilli	ng Inc.		640	01.1		0.010"- Slot	
DRILLI	NG EQUIPM	IENT:		DAT	E:		SCREEN INTERVA	NL:
AMS [OPT LAR			Jul	y 25, 201	4	9'-19'	
DRILLI	NG METHO	D:		GRC	OUND SUR	FACE ELEV. FT AMSL:	FILTER PACK:	
Direct	-Push Te	chnology					10/20 Silica Sa	nd
			BOREHOLE SIZE:		AL DEPTH:	:	FILTER PACK INT	ERVAL:
M. Bu	sbee			20'			10'-20'	
Depth (feet)	USCS	USCS name; Co Plasticity; Dilateno	Scription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	WellCon	struction
0		POORLY-GRADED with trace silt; no odd	SAND; brown; dry; fine sand r; moist at 7'	90	1.3	MW-20:1		Flush Monument Concrete
4 -	SP			60	1	MW-20:5		3/4" PVC Casing
8 -	[] M 4[]	WELL-GRADED SAM	bist; some rock; no odor	_				Hydrated Bentonite Chips
- 12 -	••••••••••••••••••••••••••••••••••••••	fine-medium sand; no	o odor	90	3.4	MW-20:11.5		Prepack-10 20 Sand
-	°. \$%	wet at 14'		- 95	0.7			
16 -	мц	SILT WITH SAND; g sand; no odor	ray; wet; silt with some fine		0.9			3/4" PVC 0.010" Slo
20 -		End @	of Borehole	100	1.1			End Cap
-								
24 -								
- 28 -								
_								
32								
NOT	ES:							1 of 1

	IRONMENTAL TNERS INC	вс	RING I	D: MW-21i			
SITE ADDRESS		CLIE	ENT:		CASING MATERIAL AND SIZE:		
812 S. Adams	S. Adams St. Seattle, WA		shington	Industries	2-inch PVC Sch. 40		
DRILLING CONTR			JECT #:		SCREEN SIZE:		
Holt Services		640	01		0.010"-Slot		
DRILLING EQUIP	/ENT:	DAT	E:		SCREEN INTERVAL:		
Geoprobe 782	2DT	4/3	0/15		20'-25'		
DRILLING METHO	D:	GRC	OUND SUR	FACE ELEV. FT AMSL:	FILTER PACK:		
Direct-Push Te	echnology				10/20 Prepack Sand		
LOGGED BY:			AL DEPTH:	:	FILTER PACK INTERVAL:		
M. Busbee		25'			19'-25'		
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction		
0 2 - 4 -	Very limited recovery. Brick in cutting shoe.	5	0.1		Flush Monumer 2-inch PVC Casing		
6 - 8 - SP 10 -	POORLY-GRADED SAND; brown; wet; mostly fine sand with trace silt; no odor; limited recovery.	5	0.1	MW-211:10	Hydrated Bentonite		
12 - ML 14 - ML	SILT; gray; moist; elastic silt; no odor. POORLY-GRADED SAND WITH SILT; gray; wet; mostly fine sand with few silt trace shells and	100	0.1	WW-211.10			
16 - - 18 - 20 - SP-SM	trace fine gravel; no odor.	100	0.1		10/20 Sand		
-22 - 22 - - 24 -		90	0.1		2-inch 0.010"-Slot Screen		
26 - -	End of Borehole						
28 - _ 30 -							
32 -							
34 - 							
NOTES:							
					1 of 1		

SITE ADDRESS CLIENT: CASING MATERIAL AND SIZE: B25 S. Dakota St. Seattle, WA Washington Industries 2-inch PVC Sch. 40 DRILLING CONTRACTOR: PROJECT #: SCREEN SIZE: Holt Services 64001 0.010"-Slot DRILLING EQUIPMENT: DATE: SCREEN INTERVAL: Geoprobe 7822DT 4/30/15 3'-13' DRILLING METHOD: GROUND SURFACE ELEV. FT AMSL: FILTER PACK: Direct-Push Technology TOTAL DEPTH: FILTER PACK INTERVAL: LOGGED BY: Description USCS name; Color; Moisture; Density; PID USCS USCS name; Color; Moisture; Density; PID Sample Well Construction	Ð	ENVIRONMENTAL PARTNERS INC			BORING ID: MW-24s							
DRILLING CONTRACTOR: PROJECT #: 64001 SOREEN NEE: 0.010*-Slot Holt Services 64001 0.010*-Slot DIRILLING CONTRACTOR: DATE: 3:43° DORULING MENT: DATE: 3:43° DORULING MENT: DATE: 3:43° DIRICH, MENT: DATE: 3:43° DIRICH, MENT: DATE: 3:43° DIRICH, MENT: DATE: 3:43° DIRICH, MENTOD: GROUND SURFACE ELEV. FT AMSL: FLTE PACK: DIRICH, MENTOD: DESCRIPTION USCS name: Color Mature: Density: FLTE PACK INTERVAL: 200 DESCRIPTION USCS name: Color Mature: Density: FLTE PACK INTERVAL: 21 USCS name: Color Mature: Density: FLTE PACK INTERVAL: 26-12' 24 DESCRIPTION: USCS name: Color Mature: Density: 50 1.4 MW-245:5 31 SUT: TENT, IND: gray: wet; mosty fine sand win 50 1.4 MW-245:5 31 SUT: TENT, GROUP CARADED SAND: brown: wtt: mosty 0.3 1.3 MW-245:5 4 End of Borehole Ind				CLIE	INT:		CASING MATER	RIAL AND SIZE:				
Holt Services 64001 0.010*Slot DRILLING EQUIPMENT: DATE: SCREEN INTERVAL: SCREEN INTERVAL: Geoprote 782207 4/3015 ST 37 DRILLING METHOD: GROUND SURFACE ELEV. FT AMSL: FILTER PACK: INTERVAL: DOGGED BY: TOTAL DEPTH: FILTER PACK: INTERVAL: M. Busbee DOS SURFACE ELEV. FT AMSL: FILTER PACK: INTERVAL: Services DOS SURFACE SURFACE FILTER PACK: INTERVAL: 0 Gravel # Bricks FILTER PACK: INTERVAL: 2.5*13* 2 USCS USCS runn: Color, Moting: Density: FILTER PACK: INTERVAL: 0 Gravel # Bricks FILTER PACK: INTERVAL: 2.5*13* 2 USCS USCS runn: Color, Moting: Density: Electron, Other Stream 1.4 MV-245.0.5 4 POORLY GRADED SAND: brown; dry; mosily 50 1.4 MV-245.8 Filter Marcume 10 SILT: serv; mosil; silt: no odor. 50 1.3 MW-245.8 2.5 minh 11 Sint Sint Sint Color, Moting with mostly line sand with Soreen 3.3 MW-245.8 3.3 <t< th=""><th>825 S. C</th><th>Dakota \$</th><th>St. Seattle, WA</th><th>Wa</th><th>shington</th><th>Industries</th><th colspan="3">2-inch PVC Sch. 40</th></t<>	825 S. C	Dakota \$	St. Seattle, WA	Wa	shington	Industries	2-inch PVC Sch. 40					
ORILLING EQUIPMENT: DATE: SCREEN INTERVAL: Geoprobe 7822DT 430/15 3-13' Diffect-Push Technology GROUND SURFACE ELEV. FT ANSL: HUTER PACK: DIGGED W: TOTAL DEPTH: PLTER PACK. Buskee Boring 15', Weil 13' 2.5-13' INCOME SURFACE ELEV. FT ANSL: PLTER PACK. HUTER PACK. INCOME SURFACE ELEV. FT ANSL: PLTER PACK. HUTER PACK. INCOME SURFACE ELEV. FT ANSL: PLTER PACK. HUTER PACK. INCOME Description Formation for description. Full for Anonymetric for description. INCOME USCS USCS Description Full for Anonymetric for description. INCOME SILT; tem, moist, silt; no odor. 50 1.4 MW-245.5 MW-245.5 INCOMENTS SULF SAND; brown; dry; mostly 80 1.3 MW-245.6 Screen INCOMENTS SULF SAND; brown; dry; mostly 100 0.3 0.3 1020 Sand INCOMENTS SULF SAND; brown; dry; mostly 100 0.3 0.3 1020 Sand INCOMENTS SULF SAND; brown; dry; mostly 100 0.3 0.3 1020 Sand INCOMENTS SULF SAND; brown; dry; mostly 100 0.3 0.3 1020 Sand INCOMENTS SAND; brown; dry; mostly 100				_	-		SCREEN SIZE:					
Geoprobe 7822DT 4/30/15 3'-13' DRILLING METHOD: GROUND SUFFACE ELEV. FT AMSL: FLITER PACK: D1020 Prepack Sand LOGGED by: TOTAL DEPTH: PILTER PACK: NTERVAL: 8 USCS USCS runs: Colum Molecular, Description Piltic Flow Structure 0 Gravel + Bicks Filter Pack INTERVAL: 2.5'-13' 2 Gravel + Bicks Filter Pack INTERVAL: 2.5'-13' 2 Gravel + Bicks Filter Pack INTERVAL: 2.5'-13' 3 MW-245.0.5 Well Construction Plank Monume 4 Gravel + Bicks 1.4 MW-245.0.5 Filter Monume 4 FOORLY-GRADED SAND; brown; dry; mosily 50 1.3 MW-245.8 10'020 Sand 10 JILSMJJL SILT; dray, most; silt; no odor. 100 0.3 1.3 MW-245.8 4'04 4 End of Borehole 10'00 0.3 1.4 10'00'0'Sit< Sit	Holt Se	rvices		640	01		0.010"-Slot					
DRILLING METHOD: GROUND SURFACE ELEV. FT AMSL: PLITER PACK: Direct-Push Technology IOZOP prack Sand LOGGED BY: TOTAL DEPTH: M. Busbee Boring 15, Well 13' 2 Description 3 MW-245:05 4 First model, brown, wet, mostly 9 SLT: tar; most; silt; no odor. 10 SLT: SAND; gray; wet; mostly fine sand with procest; of addit no odor. 11 MW-245:8 12 Infer sand; no odor. 14 End of Borehole 16 End of Borehole 18 End of Borehole 18 Infer sand; no odor. 18 Infer sand; no odor. 19 Infer sand; no odor. 100 Infer sand; no odor. 101 Infer sand; no odor. 102 Infer sand; no odor. 104 Infer sand; no odor.	DRILLING	G EQUIPM	IENT:	DAT	E:		SCREEN INTER	VAL:				
Direct-Push Technology 10/20 Prepack Sand LOGGED BY: TOTAL DEPTH: PILTE PACK INTERVAL: 2 USCS Description Plasticity Diateory: EPI description Other Plasticity Diateory: EPI description Other 9 3 USCS USCS Description Plasticity Diateory: EPI description Other 9 4 Flust Mountee Sample Well Construction 2 Interview Plasticity Diateory: EPI description Other 50 1.4 MW-245.0.5 4 PDORLY-GRADED SAND, brown; dry; mostly 3 MW-245.5 Interview Plasticity Diateory: EPI description Other 6 SP PORLY-GRADED SAND, brown; dry; mostly 3 MW-245.8 Interview Plasticity Diateory: EPI description Other 10 DISMUL SLTY SAND; gray; wet; mostly fine sand with Ins sand; no odor. 0.3 Interview Plasticity Diateory: EPI description Other 12 SP SP wet Hind Stand, no odor. 0.3 Interview Plasticity Diateory: EPI description Other 14 End of Borehole Interview Plasticity Diateory: EPI description Other 0.3 14 End of Borehole Interview Plasticity Plasticity Diateory: EPI description Other 16 End of Borehole Interview Plasticity Plasticity Diateory: EPI description Other 2 Interview Plasticity Diateory: EPI description Other Interview Pl	Geopro	be 7822	2DT	4/30	0/15		3'-13'					
LOGGED BY: TOTAL DEPTH: PLTER PACK INTERVAL: 2.5-13* Description USCS mane; Color Moisture: Density, Platticity: Diatance; EPI description. Other PDD (ppm) Sample Well Construction 0 Gravel + Bricks 1.4 MW-245:0.5 MW-245:0.5 Plath Monume Hydrated Bentonite 2 SILT; tar; moist; silt; no ador. 50 1.4 MW-245:0.5 MW-245:0.5 4 SULT; tar; moist; silt; no ador. 50 3 MW-245:8 Plath Monume Hydrated Bentonite 6 SP SULT; tar; moist; silt; no ador. 50 3 MW-245:8 Plath Monume Hydrated Bentonite 10 LISMLIL SLLTY SAND; gray; wet; mostly fine sand with Some silt; no ador. 60 1.3 MW-245:8 Plath Monume Hydrated Bentonite 10 SULT; Gray; mostly fine sand with Some silt; no ador. 60 1.3 MW-245:8 Plath Monume Hydrated Bentonite 11 SULT; Gray; mostly fine sand with Some silt; no ador. 60 1.3 MW-245:8 Plath Monume Hydrated Bentonite 12 End of Borehole 0.3 0.3 0.3 0.3 0.3 13 End of Borehole 1.4 1.4 1.4 1.4 1.4 14 End of Borehole 1.4 1.4 1.4 1.4 1.4	DRILLING	G METHO	D:	GRC	OUND SUR	FACE ELEV. FT AMSL:	FILTER PACK:					
M. Busbee Boring 15', Well 13' 2.5'-13' Image: Second Sec	Direct-F	Push Te	chnology				10/20 Prepac	ck Sand				
Wet Bit Discription Bit Discripion Bit Discription Bit Discript								NTERVAL:				
0 Gravel + Bricks 1.4 MW-24S:0.5 Fluidh Monume 2 SILT; tan; moist; silt; no odor. 50 3 MW-24S:0.5 Fluidh Monume 4 POORLY-GRADED SAND; brown; dry; mostly 3 MW-24S:0.5 MW-24S:0.5 10/20 Sand 6 SP Silt, T; tan; moist; silt; no odor. 3 MW-24S:0.5 10/20 Sand 6 SP Silt, T; Gray; mostly fine sand with 0.3 MW-24S:0.5 2-inch 10 LISMCLE Silt, T; Gray; mostly fine sand with 0.3 MW-24S:0.5 2-inch 12 Silt, T; Gray; mostly fine sand with 0.3 0.3 0.3 2-inch 14 End of Borehole 0.3 0.3 0.3 10/20 Sand 18 End of Borehole 100 0.4 100 100 0.4 22 10 10 10 10 10 10 10 24 End of Borehole 10 10 10 10 10 10 32 10 10 10 10 10 10 10 10 <t< td=""><td></td><td>bee</td><td></td><td>Bor</td><td>ring 15', \</td><td>Well 13'</td><td>2.5'-13'</td><td></td></t<>		bee		Bor	ring 15', \	Well 13'	2.5'-13'					
0 Gravel + Bricks 1.4 MW-24S:0.5 Fluidh Monume 2 SILT; tan; moist; silt; no odor. 50 3 MW-24S:0.5 Fluidh Monume 4 POORLY-GRADED SAND; brown; dry; mostly 3 MW-24S:0.5 MW-24S:0.5 10/20 Sand 6 SP Silt, T; tan; moist; silt; no odor. 3 MW-24S:0.5 10/20 Sand 6 SP Silt, T; Gray; mostly fine sand with 0.3 MW-24S:0.5 2-inch 10 LISMCLE Silt, T; Gray; mostly fine sand with 0.3 MW-24S:0.5 2-inch 12 Silt, T; Gray; mostly fine sand with 0.3 0.3 0.3 2-inch 14 End of Borehole 0.3 0.3 0.3 10/20 Sand 18 End of Borehole 100 0.4 100 100 0.4 22 10 10 10 10 10 10 10 24 End of Borehole 10 10 10 10 10 10 32 10 10 10 10 10 10 10 10 <t< td=""><td>Depth (feet</td><td>USCS</td><td>USCS name: Color: Moisture: Density:</td><td>Interval & % Recover</td><td>PID (ppm)</td><td>Sample</td><td>Well Co</td><td>onstruction</td></t<>	Depth (feet	USCS	USCS name: Color: Moisture: Density:	Interval & % Recover	PID (ppm)	Sample	Well Co	onstruction				
2 SiLT; tan; moist; sil; no odor. 50 3 MW-245.5 2-inch PVC Casing 6 SP 80 1.3 MW-245.8 10/20 Sand 10 D15M/L1 mooder. 80 1.3 MW-245.8 2-inch 0.010°-Slot Sand: brown; wet; mostly fine sand with 0.010°-Slot Sand: brown; wet; mostly fine sand with 0.010°-Slot Sareen 2-inch 0.010°-Slot Sareen 2-inch 0.010°-Slot Sareen 12 SILT; gray; mostly fine sand with Sall; brown; wet; mostly fine sand with Sall; figay; mostly file sand with 0.010°-Slot Sareen 0.3 0.3 0.3 14 End of Borehole 0.3 0.3 0.3 0.3 0.3 18 End of Borehole 0.3 0.3 0.3 0.3 0.3 0.3 22 10 10.0 0.3 0.3 0.3 0.3 0.3 18 10 10.0 0.3 0.3 0.3 0.3 0.3 0.3 24 10 10.0 0.3 0.3 0.3 0.3 0.3 0.3 36 10.1 10.1 10.1 10.1 10.1 10.1 10.1 37 10.1 <t< td=""><td>0</td><td></td><td>Gravel + Bricks</td><td></td><td></td><td>MW-24S:0.5</td><td></td><td>Flush Monumer</td></t<>	0		Gravel + Bricks			MW-24S:0.5		Flush Monumer				
Image: SP POORLY-GRADED SAND; brown; dy; mostly 3 MW-245:5 10/20 Sand Image: SP Wet 80 1.3 MW-245:8 2-inch Image: SP SP Some site, no odor. 90 1.3 MW-245:8 2-inch Image: SP SP Some site, no odor. 100 0.3 0.3 1.3 MW-245:8 2-inch Image: SP POORLY-GRADED SAND; brown; wet; mostly fine sand with 0 0.3 0.3 1.3 MW-245:8 2-inch Image: SP POORLY-GRADED SAND; brown; wet; mostly fine sond with 0.3 0.3 0.3 1.3 Hydrated Bentonite Image: SP POORLY-GRADED SAND; brown; wet; mostly fine sond with 0.3 0.3 0.3 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4	-	мц	SILT; tan; moist; silt; no odor.	50				Bentonite 2 2-inch PVC				
6 SP 8 Wet 10 JJSMJ JS 11 SILTY SAND; gray; wet; mostly fine sand with some sit; no odor. 12 Silt (no odor. 13 MW-24S:8 14 Multiple 15 Silt (no odor. 16 End of Borehole 18 End of Borehole 18 Silt (no odor. 19 Silt (no odor. 10 Silt (no odor. 11 Silt (no odor. 12 Silt (no odor. 13 Silt (no odor. 14 Silt (no odor. 15 End of Borehole 16 Silt (no odor. 18 Silt (no odor. 19 Silt (no odor. 20 Silt (no odor. 21 Silt (no odor. 22 Silt (no odor. 23 Silt (no odor. 24 <t< td=""><td>4</td><td></td><td>POORLY-GRADED SAND; brown; dry; mostly</td><td></td><td>0</td><td>NW4 040 5</td><td></td><td>10/20 Sand</td></t<>	4		POORLY-GRADED SAND; brown; dry; mostly		0	NW4 040 5		10/20 Sand				
8			ine sand, no odor.		3	MVV-245:5						
8 30 1.3 MW-24S.8 10 JSM 30 SiLT SAND; gray; wet; mostly fine sand with some silt no ador. 9 SP POORLY-GRADED SAND; brown; wet; mostly 11 Ine sand; no ador. 10 JSLT; gray; moist; silt; no ador. 11 Ine sand; no ador. 11 Ine sand; no ador. 11 Ine sand; no ador. 12 Ine sand; no ador. 14 Ine sand; no ador. 16 End of Borehole 18 Ine sand; no ador. 20 Ine sand; no ador. 21 Ine sand; no ador. 22 Ine sand; no ador. 23 Ine sand; no ador. 24 Ine sand; no ador. 25 Ine sand; no ador. 26 Ine sand; no ador. 27 Ine sand; no ador. 28 Ine sand; no ador. 30 Ine sand; no ador. 32 Ine sand; no ador. 34 Ine sand; no ador. 36 Ine sand; no ador.	•].:	SP										
Wet 2-inch 10 2:500 Sp. Processity mostly fine sand with some sity no odor. 12 St.T; gray; moist; silt; no odor. 14 Image: some sith no odor. 14 Image: some sith no odor. 16 End of Borehole 18 Image: some sith no odor. 22 Image: some sith no odor. 24 Image: some sith no odor. 25 End of Borehole 18 Image: some sith no odor. 24 Image: some sith no odor. 25 Image: some sith no odor. 26 Image: some sith no odor. 27 Image: some sith no odor. 28 Image: some sith no odor. 30 Image: some sith no odor. 32 Image: some sith no odor. 34 Image: some sith no odor. 36 Image: some sith no odor.	<u> </u>			80	13	M\\\/_24\$\8						
10 DISMONAL SILTY SAND: gray; weit; mostly fine sand with sorreen 0.310°-Slot 12 Sp: POORLY-GRADED SAND; brown; weit; mostly 0.3 14 Instantion codor. 100 0.3 16 End of Borehole 100 18 Instantion codor. 100 22 Instantion codor. 100 18 Instantion codor. 100 22 Instantion codor. 100 24 Instantion codor. 100 25 Instantion codor. 100 26 Instantion codor. 100 30 Instantion codor. 100 32 Instantion codor. 100 34 Instantion codor. 100 34 Instantion codor. 100 36 Instantion codor. 100			Wet		1.5	10107-2-50.0						
12 Interstand; no odor. 100 0.3 14 End of Borehole Hydrated Bentonte 16 End of Borehole Image: State of the state	10		some silt; no odor.					0.010"-Slot				
14 End of Borehole 16 End of Borehole 20	12 -	İTİTİ	fine sand; no odor.	_	0.3							
End of Borehole Image: Constraint of Borehole 18 - 20 - 21 - 22 - 24 - 26 - 30 - 32 - 34 - 36 -	- 14 -	мц	Sic i, gray, moist, siit, no odor.	100				Hydrated Bentonite				
16 18 18 20 20 22 22 24 24 26 30 28 30 21 32 21 34 23	-		End of Borehole	_								
20	16 - -											
22 24 26 30 32 34 36	18 - -											
24 26 28 30 32 34 36	20 -											
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	22 -											
28 - 30 - 32 - 34 - 36 -	24 -											
30 - 32 - 34 - 36 - 36 - 36 - 36 - 36 - 36 - 36	26 -											
32 - 34 - 36	28 -											
34 - 36	30 -											
36	32 -											
	34 -											
	36											
		:S·					·					
								1 of 1				

	IRONMENTAL TNERS INC	BO	RING ID): MW-24i			
SITE ADDRESS		CLIE	NT:		CASING I	MATERIAL AND SIZE:	
825 S. Dakota	St. Seattle, WA	Was	shington l	Industries	2-inch I	PVC Sch. 40	
DRILLING CONTR			JECT #:		SCREEN SIZE:		
Holt Services		640	01		0.010"-	Slot	
DRILLING EQUIPM	1ENT:	DAT	E:		SCREEN	INTERVAL:	
Geoprobe 782	2DT	4/30)/15		20'-25'		
DRILLING METHO	D:	GRC	UND SURF	ACE ELEV. FT AMSL:	FILTER P	ACK:	
Direct-Push Te	chnology					repack Sand	
LOGGED BY:			AL DEPTH:			ACK INTERVAL:	
M. Busbee		25' >			19'-25'		
Depth (feet) Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	w N	/ell Construction	
0	Gravel + Bricks				8	Flush Monumen	
2 	SILT; tan; moist; silt; no odor. POORLY-GRADED SAND; brown; dry; fine sand;	60				2-inch PVC	
	no odor.					Casing	
6 - SP						Hydrated	
8 -		90	0.9			Bentonite	
10 SM	SILTY SAND; gray; wet; mostly fine sand with some silt; no odor.						
hittit	POORLY-GRADED SAND; brown; wet; fine sand; no odor.						
12 - - 14 - ML	SILT; gray; moist; silt; no odor.	100					
16 - - 18 - 20 - SP-S M	POORLY-GRADED SAND WITH SILT; gray; wet; mostly fine sand with few silt and trace shells; no odor.	100	0.1			10/20 Sand	
22 - - 24 -		100				2-inch 0.010"-Slot Screen	
			0.1				
26 -	End of Borehole						
28 -							
30 -							
32 -							
34 -							
36							
NOTES:							

PARTNERS INC					BORING ID: MW-24ir				
SITE ADDRESS 825 South Dakota Street, Seattle, WA					CLIENT: Washington Industries			CASING MATERIAL AND SIZE: 2" PVC	
Casca	ade Drill	ing							
DRILLING EQUIPMENT: Spider Sonic Truck					DATE: 11/24/15			SCREEN INTERVAL: 16'-36'	
Sonic	;								
LOGGED BY: BOREHOLE SIZE:					TOTAL DEPTI	H:	FILTER PACK INTERVAL:		
	n Miles L	G.	2" PVC		45 fbg			14'-37'	
Depth (feet)	NSCS	USCS name; 0	escription Color; Moisture; Density; ncy; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction	
0		TOPSOIL/BACK	FILL						
- 5	ML	stiff; low plast.; f	ED SAND; dark brown; moist;	100 ;			0.2	Cement	
5 -	SP	dense; fine grair Increasing sand							
-		SILT; brown; very moist; stiff; non-plastic; some white clam shells less than 2" wide; no		100			0.2	Bentonite Chip	
10 -	<u>м</u> ∟	odor		100				Blank 2" PVC	
15 -	SM	clam shells; very POORLY-GRAD	DED SAND; dark brown; wet;				0.2		
-			n; few white shell fragments thes wide; very fine grain; few	100			0.2		
20 -	SP			100				Sand	
25 -	0 0	-) SAND WITH GRAVEL; dark o coarse gravel dense				0.1		
-	SW			100			0.2		
30 -	O SP		DED SAND; dark grey; moist; n; no odor; trace silt	100			_	.010 slot 2" PVC	
35 -		Increasing silt					0.2		
-		-	y; moist; hard; low plast.; few and	100			0.2		
40 -		Decreasing silt					0.2		
-				100			0.2	Bentontite Chips	
45 -	_	En	d of Borehole						
50									
NOT	ES:			1	<u>. </u>			1 of 1	

Y PAR	IRONMENTAL TNERS INC	BC		D: MW-25s	
SITE ADDRESS		CLIE	ENT:		CASING MATERIAL AND SIZE:
825 S. Dakota	St. Seattle, WA	Wa	shington	Industries	2-inch PVC Sch. 40
DRILLING CONTRA		PRC	JECT #:		SCREEN SIZE:
Holt Services		640	01		0.010"-Slot
DRILLING EQUIPM	IENT:	DAT	E:		SCREEN INTERVAL:
Geoprobe 7822	2DT	5/2	6/15		10'-20'
DRILLING METHO	D:	GRC	OUND SURI	FACE ELEV. FT AMSL:	FILTER PACK:
Direct-Push Te	chnology				10/20 Prepack Sand
LOGGED BY:			AL DEPTH:	:	FILTER PACK INTERVAL:
M. Busbee		20'			9'-20'
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction
0 2 - 4 -	Concrete POORLY-GRADED SAND; brown; dry; mostly fine sand with minor bricks and few wood pieces; no odor.	50	0		Flush Monum Hydrated Bentonite
6 - 8 - 5 SP 10 -		60	0		2-inch PVC Casing 10/20 Sanc
12 - 14 -		100	0	MW-25S:13	2-inch 0.010"-Slot Screen
16 - 18 - - SP-SM 20 -	Wet at 15' POORLY-GRADED SAND WITH SILT; gray; wet; mostly fine sand with few silt; no odor.	100	0		
20	End of Borehole				
22 -					
24 -					
26 - - 28 -					
30 -					
32 -					
34 -					
36 NOTES:		1		l	

Y V	PAR	TNERS INC		RING I	201			
SITE AD			CLIE	ENT:		CASING	MATERIA	AND SIZE:
325 S.	Dakota \$	St. Seattle, WA	Wa	shington	Industries	2-inch	PVC Scl	n. 40
ORILLIN	G CONTR/	ACTOR:	PRC	JECT #:		SCREE	N SIZE:	
Holt Se	ervices		640	01		0.010"	-Slot	
DRILLIN	G EQUIPM	IENT:	DAT	E:		SCREE	N INTERVA	L:
Geopro	obe 7822	2DT	5/2	7/15		29'-34	ı	
ORILLIN	G METHO	D:	GRC	OUND SURF	ACE ELEV. FT AMSL:	FILTER	PACK:	
		chnology					Prepack	
				AL DEPTH:			PACK INTE	RVAL:
M. Bus	bee		35' >			28'-34		
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well Cons	struction
0 2 - 4 -		POORLY-GRADED SAND; light brown; dry; mostly fine sand with trace gravel and few silt; no odor.	80	0.1				Flush Monumen 2-inch PVC
6		Increased moisture	85	0.1				Casing
10 - 12 - 14 -	SP	Wet	100	0.1				Hydrated Bentonite
16 - 18 - 20 -			100	0.1				
22 - 22 - 24 -		SILT; gray; moist; silt; no odor.	100	0.1				
26 - - 28 -	ML		100	0				
30	SP	POORLY-GRADED SAND; dark brown; wet; mostly fine sand with few silt; no odor. SILT; gray; moist; silt; no odor.	100	0				10/20 Sand 2-inch 0.010"-Slot Screen
34 -	ML					7////	1/////	Hydrated
36		End of Borehole						Bentonite

	IRONMENTAL TNERS INC	BC	RING I	D: MW-26s	
SITE ADDRESS		CLIE	ENT:		CASING MATERIAL AND SIZE:
325 S. Dakota	St. Seattle, WA	Wa	shington	Industries	2-inch PVC Sch. 40
DRILLING CONTR		PRC	JECT #:		SCREEN SIZE:
Holt Services		640	01		0.010"-Slot
DRILLING EQUIPN	IENT:	DAT	E:		SCREEN INTERVAL:
Geoprobe 782	2DT	5/27	7/15		10'-20'
DRILLING METHO	D:	GRC	OUND SURI	ACE ELEV. FT AMSL:	FILTER PACK:
Direct-Push Te	echnology				10/20 Prepack Sand
LOGGED BY:			AL DEPTH:		FILTER PACK INTERVAL:
M. Busbee		20'			9'-20'
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction
0 2 - 4 -	POORLY-GRADED SAND; light brown; dry; mostly fine sand with trace gravel and few silt; no odor. Color change to dark brown	80			Flush Monumer Hydrated Bentonite
6		85			2-inch PVC Casing
10 - SP 12 -	Increased moisture				10/20 Sand
14	Wet	100			2-inch 0.010"-Slot Screen
16 - 18 -		100			
20	End of Borehole				
22 -					
24 -					
26 -					
28 - - 30 -					
32 -					
34 - 					
NOTES:	1				1 of 1

Description USCS Description USCS DORLY-GRADED SAND; dark brown; dry; lose; mostly fine sand; no odor.	Wa PRC 640 DAT 5/2 GRC TOT 20' Vleconeux 8 Reconeux 60	DJECT #: 1001 TE: 8/15 DUND SURF/ TAL DEPTH:	Industries	CASING MATERIAL AND SIZE: 2-inch PVC Sch. 40 SCREEN SIZE: 0.010"-Slot SCREEN INTERVAL: 10'-20' FILTER PACK: 10/20 Prepack Sand FILTER PACK INTERVAL: 9'-20' Well Construction
Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services Initial Services	PRC 640 DAT 5/23 GRC TOT 20' % Seconcial %	DJECT #: 101 TE: 8/15 DUND SURF/ TAL DEPTH: PID (ppm)	ACE ELEV. FT AMSL:	SCREEN SIZE: 0.010"-Slot SCREEN INTERVAL: 10'-20' FILTER PACK: 10/20 Prepack Sand FILTER PACK INTERVAL: 9'-20' Well Construction
Adit Services DRILLING EQUIPMENT: Geoprobe 7822DT DRILLING METHOD: Direct-Push Technology OGGED BY: M. Busbee Image: SP Description USCS USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other 0 SP POORLY-GRADED SAND; brown; dry; mostly fine sand with few silt and few gravel; no odor. 2 POORLY-GRADED SAND; dark brown; dry; loose; mostly fine sand; no odor. 4 Image: SP POORLY-GRADED SAND; dark brown; dry;	640 DAT 5/20 GRC TOT 20' % Keconeil	001 FE: 8/15 DUND SURF, AL DEPTH: PID (ppm)		0.010"-Slot SCREEN INTERVAL: 10'-20' FILTER PACK: 10/20 Prepack Sand FILTER PACK INTERVAL: 9'-20' Well Construction
DRILLING EQUIPMENT: Geoprobe 7822DT DRILLING METHOD: Direct-Push Technology OGGED BY: M. Busbee Image: SP Q Description USCS Description; Other POORLY-GRADED SAND; brown; dry; mostly fine sand with few silt and few gravel; no odor. Q POORLY-GRADED SAND; dark brown; dry; loose; mostly fine sand; no odor.	DAT 5/2: GRC TOT 20' % Kecovery % Becovery 60	E: 8/15 DUND SURF, AL DEPTH: PID (ppm)		SCREEN INTERVAL: 10'-20' FILTER PACK: 10/20 Prepack Sand FILTER PACK INTERVAL: 9'-20' Well Construction
Billing METHOD: Direct-Push Technology OGGED BY: M. Busbee 1 USCS 0 USCS 0 SP 0 SP 2 POORLY-GRADED SAND; brown; dry; mostly fine sand with few silt and few gravel; no odor. 2 POORLY-GRADED SAND; dark brown; dry; loose; mostly fine sand; no odor.	5/2 GRC TOT 20' % Recovery 60	8/15 DUND SURF, TAL DEPTH: PID (ppm)		10'-20' FILTER PACK: 10/20 Prepack Sand FILTER PACK INTERVAL: 9'-20' Well Construction
ORILLING METHOD: Direct-Push Technology OGGED BY: M. Busbee (a) (b) (a) (b) (c)	GRC TOT Utterval & % Recovery 60	AL DEPTH: PID (ppm)		FILTER PACK: 10/20 Prepack Sand FILTER PACK INTERVAL: 9'-20' Well Construction
Direct-Push Technology OGGED BY: A. Busbee Image: Specific colspan="2">Description USCS USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other Image: Operative colspan="2">OPORLY-GRADED SAND; brown; dry; mostly fine sand with few silt and few gravel; no odor. Image: Operative colspan="2">OPORLY-GRADED SAND; brown; dry; loose; mostly fine sand; no odor. Image: Operative colspan="2">OPORLY-GRADED SAND; dark brown; dry; loose; mostly fine sand; no odor.	09 Recovery & LOT	PID (ppm)		10/20 Prepack Sand FILTER PACK INTERVAL: 9'-20' Well Construction
OGGED BY: Description Image: SP: USCS 0 SP: 2 POORLY-GRADED SAND; brown; dry; mostly fine sand with few silt and few gravel; no odor. 4 POORLY-GRADED SAND; dark brown; dry; loose; mostly fine sand; no odor. 8 SP:	0 % Recovery	PID (ppm)	Sample	FILTER PACK INTERVAL: 9'-20' Well Construction
M. Busbee 10 USCS 0 USCS 0 SP 2 POORLY-GRADED SAND; brown; dry; mostly fine sand with few silt and few gravel; no odor. 4 POORLY-GRADED SAND; dark brown; dry; loose; mostly fine sand; no odor. 8 SP	0 % Recovery	PID (ppm)	Sample	9'-20' Well Construction
Image: Spectro system Description 0 Spectro system USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other 0 Spectro system POORLY-GRADED SAND; brown; dry; mostly fine sand with few silt and few gravel; no odor. 2 POORLY-GRADED SAND; dark brown; dry; loose; mostly fine sand; no odor. 4 POORLY-GRADED SAND; dark brown; dry; loose; mostly fine sand; no odor.	9 Interval & %		Sample	Well Construction
0 POORLY-GRADED SAND; brown; dry; mostly fine sand with few silt and few gravel; no odor. 2 POORLY-GRADED SAND; dark brown; dry; loose; mostly fine sand; no odor. 4 POORLY-GRADED SAND; dark brown; dry; loose; mostly fine sand; no odor. 6 Sector 8 Sector	60		Sample	
 SP. fine sand with few silt and few gravel; no odor. POORLY-GRADED SAND; dark brown; dry; loose; mostly fine sand; no odor. 8 	60			Flush Monume
4		0.1		
8				Hydrated Bentonite
	90			2-inch PVC Casing
		0.1	MW-27S:10	
- SP 12 -				
14 - Wet	90	0.1		10/20 Sand
16	100	0		2-inch 0.010"-Slot Screen
20 End of Derehole				
End of Borehole				
24 -				
26 -				
28 -				
30 -				
32 -				
34 -				
36				
NOTES:				

STE ADDRESS CLIENT: CASING MATERIAL AND SIZI 825 S. Dakota St. Seattle, WA Washington Industries 2-inch PVC Sch. 40 DRILLING CONTRACTOR: PROJECT #: SCREEN SIZE: Holt Services 64001 0.010"-Slot DRILLING EQUIPMENT: DATE: SCREEN INTERVAL: Geoprobe 7822DT 6/3/15 5'-15' DIRILLING METHOD: GROUND SURFACE ELEV. FT AMSL: FILTER PACK: DIRCET-Push Technology TOTAL DEPTH: FILTER PACK INTERVAL: LOGGED BY: B. Miles P.G. TOTAL DEPTH: FILTER PACK INTERVAL: B. Miles P.G. 10/20 Prepack Sand 10/20 Prepack Sand O USCS Description Plasticity: Dilatency: EPI description; Other If if if if if if if if if if if if if if		IRONMENTAL TNERS INC	BO	RING I	D: MW-28s		
B25 S. Dakota St. Seattle, WA Washington Industries 2-inch PVC Sch. 40 DRILLING CONTRACTOR: PROUECT #: SCREEN SIZE: Holt Services 0.010**Slot 0.010**Slot DRILLING EQUIPMENT: DATE: SCREEN NIZE: Geoprobe 7822DT 6/3/15 ST4 Direct-Push Technology GROUND SURFACE ELEV. FT AMSL: FILTER PACK: Direct-Push Technology TOTAL DEPTH: FILTER PACK INTERVAL: 0 VSCS Description Stample visc Stame; Color, Masture; Density; Plastic; Distery; Differed protocol Stample Well Construction 0 Appartit surface PID Sample Well Construction 0 Appartit surface Proder, Craft ADED SAND; dark brown; damp; mostly fine sand; no odor. Not surface 10 End of Borehole 0.1 0.1 0.1 11 End of Borehole 0.1 0.1 0.1 12 2-inch sitt layer 0.1 0.1 0.1 13 End of Borehole 0.1 0.1 0.1 14 End of Borehole 0.1 0.1 0.1 15 End of Borehole 0.1 0.1 0.1 14 End of Borehole 0.1 0.1 0.1			CLIE	ENT:		CASING MATERI	AL AND SIZE:
Holt Services 64001 0.010"-Slot DRILLING ERUIPMENT: DATE: SCREININTERVAL: Geoprobe 7822DT 6/3/15 5'-15' Direct-Push Technology GROUND SURFACE ELEV. FT AMSL: FILTER PACK: Direct-Push Technology TOTAL DEPTH: FILTER PACK INTERVAL: 10/60ED BY: TOTAL DEPTH: FILTER PACK INTERVAL: 8. Miles P.G. Description FILTER PACK INTERVAL: 9. USCS DEscription PSC 9. USCS DEscription PSC 9. USCS DEscription PSC 9. USCS DEscription PSC 9. USCS DEscription oddr. PSC 9. OPCORT: PARADED SAND; dark brown; damp; PDORT: 9. OPCORT: PARADED SAND; dark brown; damp; 0.1 10 Candot 0.1 0.1 12 2-inch sitt layer 0.1 0.1 14 Medium sand 0.1 0.1 16 End of Borehole 0.1 0.1 18 End of Borehole 0.1 0.1 19/20 End of Borehole 0.1 0.1 10 End of Borehole 0.1 0.1 18 10 10 10 <t< th=""><th>325 S. Dakota</th><th>St. Seattle, WA</th><th>Wa</th><th>shington</th><th>Industries</th><th>2-inch PVC S</th><th>ch. 40</th></t<>	325 S. Dakota	St. Seattle, WA	Wa	shington	Industries	2-inch PVC S	ch. 40
ORILLING EQUIPMENT: DATE: SCREEN INTERVAL: Geoprobe 7822DT 6/3/15 5-15' DRILLING METHOD: GROUND SURFACE ELEV. FT AMSL: FILTER PACK: Direct-Public Technology TOTAL DEPTH: FILTER PACK INTERVAL: B. Miles P.G. 15' 4-15' Increased moisture Description; Other Image: Stress of the secription; Other Image: Stress of the secription; Other 0 Applat surface PooRLY-GRADED SAND; dark brown; damp; mostly time sand; no odor. Image: Stress of the secription; Other Image: Stress of the secription; Other 10 Applat surface PooRLY-GRADED SAND; dark brown; damp; mostly time sand; no odor. Image: Stress of the secription; Other Image: Stress of the secription; Other 11 Increased moisture Increased moisture Image: Stress of the secription; Other Image: Stress of the secription; Other Image: Stress of the secription; Other 12 Increased moisture Increased moisture Image: Stress of the secription; Other Image: Stress of the secription; Other Image: Stress of the secription; Other 12 Increased moisture Increased moisture Image: Stress of the secret of the secret of the secret of the secret of the secret of the secret of the secret of the secret of the secret of the secret of the secret of the secret of the secret of the secret of the secret of the secret of the secret of the secret of the secret of the secret of			PRO	JECT #:		SCREEN SIZE:	
Geoprobe 7822DT 6/3/15 5'-15' DRILLING METHOD: Direct-Push Technology GROUND SURFACE ELEV. FT AMSL: FULTER PACK INTERVAL: 10/20 Prepack Sand FULTER PACK INTERVAL: 10/20 Prepack Sand B. Miles P.G. TOTAL DEPTH: USCS mane: Color, Molecular Description; Other TOTAL DEPTH: 15' FULTER PACK INTERVAL: 4'-15' B. Miles P.G. Description USCS mane: Color, Molecular Description; Other Total DEPTH: 15' FULSE Note: 4'-15' 0 USCS Intervention USCS mane: Color, Molecular Description; Other Total DEPTH: 15' FULSE Note: 4'-15' 0 USCS Intervention USCS mane: Color, Molecular Description; Other Total DEPTH: 15' FULSE Note: 4'-15' 0 USCS Intervention USCS mane: Color, Molecular Description; Other Total DEPTH: 15' FULSE Note: 4'-15' 10 USCS Intervention Molecular Description; Other Sample Well Construction 10 Increased moisture 0.1 0.1 0.1 11 End of Borehole 0.1 0.1 0.1 12 2-inch silt layer 0.1 0.1 0.1 13 End of Borehole 0.1 0.1 0.1 14 End of Borehole 0.1 0.1 0.1 15 End of Borehole 0.1 0.1 0.1 14 End of Borehole 0.1	Holt Services		640	01		0.010"-Slot	
DRILLING METHOD: GROUND SURFACE ELEV. FT AMSL: FILTER PACK: Direct-Push Technology TOTAL DEPTH: FILTER PACK Sand DGGED BY: TOTAL DEPTH: 15' B. Miles P.G. USCS Description USCS USCS interce Color, Moisture: Density: PID Plasticity: Differor, FT description, Objective: Density: USCS interce Color, Moisture: Density: Plasticity: Differor, FT description, Objective: Differor, Moisture: Density: Vell Construction 0	DRILLING EQUIPM	/ENT:	DAT	E:		SCREEN INTERV	AL:
Direct-Push Technology 10/20 Prepack Sand LOGGED BY: TOTAL DEPTH: FILTER PACK INTERVAL: 8. Miles P.G. 15' 4'-15' 9 gr gr gr gr gr gr gr gr gr gr gr gr gr	Geoprobe 7822	2DT	6/3/	/15		5'-15'	
LOGGED BY: TOTAL DEPTH: FILTER PACK INTERVAL: B. Miles P.G. Description 15" USCS Description USCS ame; Color, Moisture; Density; Plasticity, Dilatency, EPI description; Other 10" 2 POORLYCRADED SAND; dark brown; damp; mostly line sand; no odor. 0.1 4 2 4 2 6 Increased moisture 10 2 112 2 2 2 10 0.1 112 2 2 0.1 114 Medium sand 10 0.1 116 End of Borehole 12 2 24 2 24 2 25 2 24 2 25 2 26 2 27 2 28 2			GRC	OUND SURI	FACE ELEV. FT AMSL:		
B. Miles P.G. 15' 4'-15' 0 USCS Description Plasticity Diatercy: EPI PID (ppm) Sample Well Construction 2 - - - - - - 4 - - - - - - 6 - - - - - - 10 - - - - - - 11 - - - - - - 12 - - - - - - 12 - - - - - - 14 - - - - - - 16 - - - - - - 2		chnology					
Image: Speed of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector				AL DEPTH:			TERVAL:
0 Asphalt surface 2 POORLY-GRADED SAND; dark brown; damp; 6 Increased moisture 8 SP Vet 0.1 10 2-inch silt layer 2 0.1 16 End of Borehole 18 0.1 20 0.1 21 2-inch silt layer 0.1 0.1 16 End of Borehole 18 0.1 20 2-inch silt layer 20 0.1 24 2-inch silt layer 25 2-inch silt layer 26 24 28 24 26 28		Description					
PORLY-GRADED SAND; dark brown; damp; mostly fine sand; no odo. 4 6 10 10 2-inch sit layer 10 2-inch si	Depth (fé Depth	USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval 8 % Recov		Sample	Well Co	nstruction
2 mostly fine sand; no odor. 4 Hydrati Benton 6 Increased moisture 0 0.1 10 2-inch silt layer 10 0.1 14 Medium sand 16 End of Borehole 18 0.1 22 2 24 0.1	0	Asphalt surface	_				Flush Monumer
6 Increased moisture 0 Wet 10 2-inch silt layer 12 2-inch silt layer 14 Medium sand 16 End of Borehole 18 0.1 20 0.1 22 1000000000000000000000000000000000000	-	mostly fine sand; no odor.					Hydrated Bentonite 2-inch PVC
0 0.1 0.1 10/20 S 12 2-inch silt layer 0.1 0.1 2-inch silt layer 14 Medium sand 0.1 0.1 2-inch silt layer 16 End of Borehole 0.1 0.1 10/20 S 20 0.1 0.1 0.1 0.1 0.1 22 24 0.1 0.1 0.1 0.1 0.1 24 0.1 0.1 0.1 0.1 0.1 0.1 0.1 28 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 <t< td=""><td></td><td>Increased moisture</td><td></td><td></td><td></td><td></td><td>Casing</td></t<>		Increased moisture					Casing
12 2-inch silt layer 0.1 14 Medium sand 0.1 16 End of Borehole 0.1 18	8 - SP	Wet					
14 Medium sand 0.1 16 End of Borehole 0.1 20 0.1 0.1 22 0.1 0.1 24 0.1 0.1 26 0.1 0.1	-						10/20 Sand
14 Medium sand 16 End of Borehole 18				0.1			2-inch 0.010"-Slot Screen
16	14 -	. Medium sand		0.1			
	16 -	End of Borehole		0.1			_
22 - 24 - 26 - 28 -	18 -						
	20 -						
	22 -						
	24 -						
	26 -						
30	28 -						
	_						
	_						
	_						
NOTES:							1 of 1

	IRONMENTAL TNERSINC	BC		D: MW-29s		
SITE ADDRESS		CLIE	ENT:		CASING MATERIA	L AND SIZE:
825 S. Dakota	St. Seattle, WA	Wa	shington	Industries	2-inch PVC Sc	h. 40
DRILLING CONTR	ACTOR:	_	JECT #:		SCREEN SIZE:	
Holt Services		640	01		0.010"-Slot	
DRILLING EQUIPM	IENT:	DAT	E:		SCREEN INTERVA	NL:
Geoprobe 782	2DT	6/8/	15		5'-15'	
DRILLING METHO	D:	GRC	OUND SURF	ACE ELEV. FT AMSL:	FILTER PACK:	
Direct-Push Te	echnology				10/20 Prepack	Sand
LOGGED BY:			AL DEPTH:		FILTER PACK INT	ERVAL:
M. Busbee		32'			4'-15'	
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Con	struction
0	Concrete POORLY-GRADED SAND; brown; dry; mostly	_				Flush Monumen
2 -	fine sand; no odor.	60				
			0.3			Hydrated
4 -						Bentonite
SP						2-inch PVC
6 -		100				Casing
-	Wet					
8 -			1.7	MW-29S:8		
-						
10 -	SILTY SAND; gray; wet; mostly fine sand with some silt; no odor.	100				10/20 Sand
			0.2			
12 -						2-inch
-						0.010"-Slot Screen
14 –		100				
AC SM						
16 - 5 1V			0.6			
18 –		0	0.6			
20 -						
22	POORLY-GRADED GRAVEL; gray; wet; gravel	100	0			
GP	with few silt; no odor.					Hydrated
24 M L	SILT; gray; dry; silt; no odor. POORLY-GRADED SAND WITH SILT; gray;	+				Bentonite
-0.44404	moist; mostly fine sand with minor silt.					
26 – SP SM		10	0			
-NUHHUNH						
28	POORLY-GRADED SAND; gray; moist; mostly					
	fine sand with few silt; no odor.					
30 - SP		60	0			
32	End of Borehole					
34 -						
34						
36						
NOTES:						
						1 of 1

	IRONMEN TNERSIN	TAL C	BC	RING I	D: SBW-1		
SITE ADDRESS			CLIE	ENT:		CASING MATERIAL	AND SIZE:
325 S Dakota S	St. Seattle, WA		Wa	shington	Industries	2" PVC	
ORILLING CONTR			PRC	JECT #:		SCREEN SIZE:	
Cascade Drilli	ng		640	01		0.010-inch Slot	
DRILLING EQUIP	IENT:		DAT			SCREEN INTERVAL	:
/ac Masters			3/9/			7-12 feet bgs	
ORILLING METHO			GRC	OUND SURF	FACE ELEV. FT AMSL		
	me Excavation		TOT			2/12 sand	
.OGGED BY: Bryan Miles P.	G.	BOREHOLE SIZE: 2"	14'	AL DEPTH:		FILTER PACK INTER 5-12 fbg	RVAL:
Depth (feet) CSCS	Des	s cription lor; Moisture; Density; y; EPI description; Other	Interval & . % Recovery	PID (ppm)	Sample	Well Const	ruction
0	Cement		7 %				
		SAND; very dark gray; moist;					Cement
2	few silt Some Bricks						Bentonite
6 - SP 8 - 10 -							Screen
12 -	Few Bricks Wet	f Borehole	-				Backfill
16 -							
18 -							
20							
NOTES:							
							1 of 1

SITE ADDRESS 825 S Dakota S DRILLING CONTRA Cascade Drillin DRILLING EQUIPMI Vac Masters DRILLING METHOE Air Knife Vacur LOGGED BY: Bryan Miles P.C	ACTOR: Ing ENT: D: me Excavation G. Des	BOREHOLE SIZE: 2" Cription or; Moisture; Density; r; EPI description; Other	PRO 640 DAT 3/10 GRC	shington JECT #: 01 E: 0/15	FACE ELEV. FT AMSL:	CASING MATERIAL / 2" PVC SCREEN SIZE: 0.010-inch Slot SCREEN INTERVAL: 6-11 feet bgs FILTER PACK: 2/12 sand FILTER PACK INTER 4-11 fbg	
DRILLING CONTRA Cascade Drillin DRILLING EQUIPM Vac Masters DRILLING METHOD Air Knife Vacur LOGGED BY: Bryan Miles P.C (19) 10 10 10 10 10 10 10 10 10 10	ACTOR: IS ENT: D: me Excavation G. USCS name; Col Plasticity; Dilatency POORLY-GRADED S	2" cription or; Moisture; Density; ;; EPI description; Other	PRO 640 DAT 3/10 GRC TOT	JECT #: 01 E: 0/15 0/15 AL DEPTH:	FACE ELEV. FT AMSL:	SCREEN SIZE: 0.010-inch Slot SCREEN INTERVAL: 6-11 feet bgs FILTER PACK: 2/12 sand FILTER PACK INTER	
Cascade Drillin DRILLING EQUIPM Vac Masters DRILLING METHOE Air Knife Vacur LOGGED BY: Bryan Miles P.C	PS ENT: D: me Excavation G. USCS name; Col Plasticity; Dilatency POORLY-GRADED S	2" cription or; Moisture; Density; ;; EPI description; Other	640 DAT 3/10 GRC TOT	01 E: D/15 DUND SURI		0.010-inch Slot SCREEN INTERVAL: 6-11 feet bgs FILTER PACK: 2/12 sand FILTER PACK INTER	
DRILLING EQUIPM Vac Masters DRILLING METHOD Air Knife Vacur LOGGED BY: Bryan Miles P.C	ENT: D: me Excavation G. USCS name; Col Plasticity; Dilatency POORLY-GRADED S	2" cription or; Moisture; Density; ;; EPI description; Other	DAT 3/10 GRC TOT	E: D /15 DUND SURI AL DEPTH:		SCREEN INTERVAL: 6-11 feet bgs FILTER PACK: 2/12 sand FILTER PACK INTER	
Vac Masters DRILLING METHOD Air Knife Vacur LOGGED BY: Bryan Miles P.C (1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1	D: me Excavation G. USCS name; Col Plasticity; Dilatency POORLY-GRADED S	2" cription or; Moisture; Density; ;; EPI description; Other	3/10 GRC TOT	D /15 DUND SURI		6-11 feet bgs FILTER PACK: 2/12 sand FILTER PACK INTER	
DRILLING METHOD Air Knife Vacur LOGGED BY: Bryan Miles P.C (199) tto 0 0 2 2	me Excavation G. USCS name; Col Plasticity; Dilatency POORLY-GRADED S	2" cription or; Moisture; Density; ;; EPI description; Other	GRC TOT. 11'	OUND SURI		FILTER PACK: 2/12 sand FILTER PACK INTER	VAL:
Air Knife Vacur LOGGED BY: Bryan Miles P.C (19) Hd O O 2 - - - - - - - - - - - - - - - - -	me Excavation G. USCS name; Col Plasticity; Dilatency POORLY-GRADED S	2" cription or; Moisture; Density; ;; EPI description; Other	тот. 11'	AL DEPTH:		2/12 sand FILTER PACK INTER	VAL:
LOGGED BY: Bryan Miles P.C (ja) uscs 0 2 -	3. Des USCS name; Col Plasticity; Dilatency POORLY-GRADED S	2" cription or; Moisture; Density; ;; EPI description; Other	11'		-	FILTER PACK INTER	VAL:
Bryan Miles P.C (integration of the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second	Des USCS name; Col Plasticity; Dilatency POORLY-GRADED S	2" cription or; Moisture; Density; ;; EPI description; Other	11'				VAL:
USCS 0 2 -	Des USCS name; Col Plasticity; Dilatency POORLY-GRADED S	cription or; Moisture; Density; ; EPI description; Other		PID			
0 2		AND: very dark grav: moist:	- 0 .	(ppm)	Sample	Well Const	ruction
4 - SC 6 - ML 10 - ML 12 - 14 - 16 - 18 - 18 - 18 - 10 - 10 - 10 - 10 - 10		rk gray; wet; poorly graded					Cement Bentonite Screen

SITE ADDRESS 22 S Dakota St. Seattle, WA 22 S Dakota St. Seattle, WA 23 S Dakota St. Seattle, WA 24 S Dakota St. Seattle, WA 25 S Dakota St. Seattle, WA 25 S Dakota St. Seattle, WA 26 S Dakota St. Seattle, WA 27 PVC 28 SCREEN SIZE: 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform Slot 0.010 inform 0.010 inform Slot 0.010 inform 0.010 inform 0.010 inform 0.010 inform 0.010 inform 0.010 inform 0.010 inform 0.010 inform 0.010 inform 0.010 inform 0.010 inform 0.010 inform 0.010 i		IRONMEN TNERSIN	TAL C	BC	ORING I	D: SBW-3		
DRILLING CONTRACTOR: PROJECT #: SCREEN NETRYAL: Cascade Drilling DATE: SCREEN NETRYAL: Ac Masters 3/10/15 7.5 - 12.5 feet bgs SRILLING CONTRACTOR: BOREHOLE SIZE: 3/10/15 Ar Knife Vacume Excavation GROUND SURFACE ELEV. FT AMSL: FILTER PACK its NITERVAL: OGGED BY: BOREHOLE SIZE: TOTAL DEPTH: FILTER PACK its NITERVAL: Ar Mile S.P.G. 2* 12.5* 4-12.5 fbg Ogged BY: Description USCS nume: Color, Mosterir: Density: Pipping Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Provide Signific Pr	SITE ADDRESS			CLIE	ENT:		CASING MATERIAL	AND SIZE:
Cascade Drilling 64001 0.01/ench Slot SRILLING EQUIPMENT: DATE: SCREEN INTERVAL: ad Masters 3/10/15 T.5 - 12.5 foet bgs SRILLING METHOD: BOREHOLE SIZE: CROUND SURFACE ELEV. FT AMSL: PILTER PACK MITERVAL: Air Knife Vacume Excavation BOREHOLE SIZE: TOTAL DEPTH: FILTER PACK MITERVAL: Air Knife Vacume, Color Multicure Density: Description BOREHOLE SIZE: TOTAL DEPTH: FILTER PACK MITERVAL: 3rgan Miles P.G. 2" 12.5' 4-12.5 fbg Vell Construction Bore Hole Sinter: Density: Description BOREHOLE SIZE: PID (ppm) Sample Well Construction USCS muce: Color Multice: Density: Pacteria PID (ppm) Sample Well Construction 2 - - - - - - - 4 - - - - - - - 10 - - - - - - - 12 - - - - <th>825 S Dakota</th> <th>St. Seattle, WA</th> <th></th> <th>Wa</th> <th>shington</th> <th>Industries</th> <th>2" PVC</th> <th></th>	825 S Dakota	St. Seattle, WA		Wa	shington	Industries	2" PVC	
SRILLING EQUIPMENT: DATE: SCREEN INTERVAL: fac Masters 3/10/15 T.5.125 feet bgs RILLING ERHOD: ROUND SURFACE ELEV.FT AMSL: FLITER PACK. Nir Knife Vacume Excavation BOREHOLE SIZE: TOTAL DEPTH: FLITER PACK. Agran Miles P.G. 2" TOTAL DEPTH: FLITER PACK. USCS Description 12.5" 4-12.5 fbg Very Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity: Distance, EPI description, Other Pastidity, E				PRC	DJECT #:		SCREEN SIZE:	
Vac Masters 3/10/15 7.5 - 12.5 feet bgs DRILLING METHOD: Image: Control of the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the second to mail the se	Cascade Drilli	ing		640	001		0.010-inch Slot	
SRILLING METHOD. GROUND SURFACE ELEV. FT AMSL: PILTER PACK. ZAIr Knife Vacume Excavation BOREHOLE SIZE: TOTAL DEPTH: Styram Miles P.G. 2" 12.5" USCS Description Vertice Pack Intervalu: Value Description Sample Value Vertice Pack Intervalu: Vertice Pack Intervalue Value Vertice Pack Intervalue	DRILLING EQUIP	MENT:		DAT	E:		SCREEN INTERVAL	:
Air Knife Vacume Excavation 2/12 and OGGED BY: BOREHOLE SIZE: TOTAL DEPTH: FLITER PACK INTERVAL: Total Depth: PILD Excliption FLITER PACK INTERVAL: FLITER PACK INTERVAL: Image: Signar Miles P.G. 2''' 12.5'' H12.5 fbg Image: Signar Miles P.G. Description Image: Signar Miles P.G. Vell Construction Image: Signar Miles P.G. Description Image: Signar Miles P.G. Vell Construction Image: Signar Miles P.G. Description (Milsture; Density); Plastity, Distency: Pilotescription; Other Pressite Image: Signar Miles P.G. Vell Construction Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G. Image: Signar Miles P.G.	Vac Masters			3/1	0/15		7.5 - 12.5 feet b	gs
LOGED BY: BOREHOLE SIZE: TOTAL DEPTH: FLITER PACK INTERVAL: Stran Miles P.G. 2'' 12.5'' 412.5 ftg USCS Description Platelyt, Dialency, EPI description, Other 12.5'' PID (ppm) Sample Well Construction 0 POORLY-GRADED SAND; very dark gray, most; POORLY-GRADED SAND; very dark gray, most; Image: Construction Image: Construction 2 POORLY-GRADED SAND; very dark gray, most; Image: Construction Image: Construction 4 POORLY-GRADED SAND; very dark gray, most; Image: Construction Image: Construction 10 Image: Construction Image: Construction Image: Construction 12 Image: Construction Image: Construction Image: Construction 14 Image: Construction Image: Construction Image: Construction 14 Image: Construction Image: Construction Image: Construction 18 Image: Construction Image: Construction Image: Construction	DRILLING METHO	DD:		GRO	OUND SURI	FACE ELEV. FT AMSL	: FILTER PACK:	
Anyan Miles P.G. 2" 12.5" 4-12.5 fbg Image: Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second	Air Knife Vacu	ume Excavation					2/12 sand	
Sec USCS USCS arme: Color Mosture: Density: Plasticity: EPI desorption: Other PID (ppm) Sample Well Construction 0 POORLYGRADED SAND: very dark gray; most: POORLYGRADED SAND: very dark gray; most: Image: Color Mosture: Density: Plasticity: P	LOGGED BY:					:		RVAL:
0 POORLY-GRADED SAND; very dark gray; moist; 2 4 6 SP 8 10 12 Wet End of Borehole		.G.	2"	12.	5'		4-12.5 fbg	
0 POORLY-GRADED SAND; very dark gray; moist; 2 4 6 SP 8 10 12 Wet End of Borehole	Depth (feet)	Des USCS name; Co Plasticity; Dilatenc	scription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Cons	truction
20	2	few silt						Cement Bentonite Screen
	20							
NOTES:		1			I	1	I	
	NUTES.							1 of 1

	IRONMEN TNERSIN	TAL C	во		D: SBW-4		
SITE ADDRESS			CLIE	NT:		CASING MATERIAL	AND SIZE:
825 S Dakota	St. Seattle, WA		Wa	shington	Industries	2" PVC	
DRILLING CONT				JECT #:		SCREEN SIZE:	
Cascade Drill	-		640			0.010-inch Slot	
DRILLING EQUIP	MENT:		DAT			SCREEN INTERVAL:	
Vac Masters			-	0/15		4.4 - 9.4 fbg	
			GRC	OUND SURI	FACE ELEV. FT AMSL:	FILTER PACK:	
AIF KNITE VACI	ume Excavation	BOREHOLE SIZE:	тот	AL DEPTH:		2/12 sand FILTER PACK INTER	
Bryan Miles P	.G.	2''	9.4			3.5 - 9.4 fbg	VAL.
Depth (feet)	Des	cription or; Moisture; Density; /; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Const	ruction
0 2 - 4 - SP 6 - 8 - 10 - 12 - 14 - 16 - 18 -	few silt	AND; very dark gray; moist; f Borehole					Cement Bentonite Screen
20 NOTES:							
							1 of 1

	IRONMEN TNERSINO	TAL C	BC	ORING	D: B-1		
SITE ADDRESS			CLI	ENT:	· · · · · · · · · · · · · · · · · · ·	CASING	G MATERIAL AND SIZE:
825 South Dak	ota St. Seattle, WA	·	Wa	shingtor	n Industries	Temp	: 3/4" PVC
DRILLING CONTRA				DJECT #:			N SIZE:
Holocene Drilli			640				'- Slot
DRILLING EQUIPM	IENT:		DAT				N INTERVAL:
Jackhammer				8/14		6'-11'	
DRILLING METHO			GRO	DUND SUR	FACE ELEV. FT AMSL:	FILTER	
Direct-Push Te	cnnology	BOREHOLE SIZE:	TOT	AL DEPTH		Native	PACK INTERVAL:
M. Busbee		BOREHOLE SIZE.	11'			n/a	
SDSN (feet)	USCS name: Cold	cription or; Moisture; Density; ; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well Construction
0 1 - SW .	WELL-GRADED SANI sand with few fine grav	D; brown; wet; fine-coarse el; no odor	50	0.4	B-1:0.5'		
2	SILTY SAND; brown; r fine-coarse sand with s	noist; well graded come silt; no odor	100	2.6	B-1:3'		Temporary Well 3/4" PVC
5	Hole wet from a roof le	ak. No further soil sampling					
7 - 8 -							
9 -					D 4.DOW		0.010" Slo
10 - 11 -	End of	Borehole			B-1:RGW		
12 - 13 -							
14 - 15 -							
16 -							
17 - _ 18 -							
19 - 20 ⁻							
NOTES:							1 of 1

der.

ep	PAR	IRONMEN TNERSIN	C	BC	RING	ID: B-2		
	DDRESS		······	CLIE	ENT:			IATERIAL AND SIZE:
825 S	outh Dak	ota St. Seattle, WA	· · · ·	Wa	shingtor	n Industries	Temp: 3	
	ING CONTR			1	JECT #:		SCREEN S	
	ene Drilli			640			0.010"- \$	
	NG EQUIPN			DAT			SCREEN I	NTERVAL:
	DPT LAR				7/14		6'-11'	
	NG METHO			GRC	OUND SUR	FACE ELEV. FT AMSL:	FILTER PA	ACK:
	t-Push Te ED BY:	chnology	BOREHOLE SIZE:	TOT	AL DEPTH	l.	Native	CK INTERVAL:
M. Bu			BOREHOLE SIZE.	12'			n/a	
Depth (feet)	USCS	USCS name: Col	cription or; Moisture; Density; r; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	W	ell Construction
<u> </u>		Sub-Base Gravel		5%				1
· -		SILT; brown; moist; si	t; no odor	-	33.8	B-2:0.5'		
2 2 3 4	ML	POORLY-GRADED S sand with trace silt; we	AND; dark brown; dry; fine at at 7'; no odor	50	5.8	B-2:3'		Temporar Well 3/4'' PVC
5 - 6 - 7 - 8 -	SP			100	2.2	B-2:6'		
9 -	ML	SILT; gray ; we t		- 100		B-2:RGW		0.010" Sk
13 - 13 - 14 -		End of	Borehole					
15 - 16 - 17 -								
18 - 19 - 20								
NOT	E9:							1 of 1

	IRONMEN TNERSIN	TAL C	BC	RING I	D: B-3			
SITE ADDRESS			CLIE	ENT:		CASING MA	TERIAL AND SIZE:	
	ota St. Seattle, W	٩.	Wa	shington	Industries	Temp: 3/4	" PVC	
RILLING CONTR				JECT #:		SCREEN SIZ	ĽΕ:	
lolocene Drill	ing Inc.		640	01		0.010"- Slot		
RILLING EQUIP	MENT:		DAT	E:		SCREEN INTERVAL:		
MS DPT LAR			3/18	3/14		8'-12'		
RILLING METHO	D:		GRC	UND SUR	FACE ELEV. FT AMSL:	FILTER PAC	K:	
Direct-Push Te	echnology					Native		
OGGED BY:		BOREHOLE SIZE:	TOTAL DEPTH:				K INTERVAL:	
I. Busbee			<u>12'</u>		<u></u>	n/a		
Depth (feet)	USCS name: Co	scription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction		
0 1 - - ML	SILT; brown; wet; silt	with fine gravel		7.5	B-3:0.5'			
2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Brick; red; dry		60				Temporary Well 3/4" PVC	
4	4 POORLY-GRADED SAND; brown; moist; fine sand; no odor			4.2	B-3:3.5'		FVG	
6 -			100	4.5	B-3:6.5'			
8 -							0.010" Slo	
	SILT; gray; wet; silt; n	o odor	— 100					
11 - ML	End o	f Borehole			B-3:RGW			
13 - - 14 -								
15 - - 16 -								
17 -								
18 - 19 -								
20 NOTES:							1 of 1	

	VIRONME RTNERSI	N T A L N C	BC	DRING I	D: B-4			
SITE ADDRESS	·····		CLIE	ENT:		CASING MATE	ERIAL AND SIZE:	
825 South D	akota St. Seattle,	WA	Wa	shingtor	Industries	Temp: 3/4"	PVC	
DRILLING CON			PRC	DJECT #:		SCREEN SIZE:		
Holocene Dr	illing Inc.		640	01		0.010"- Slot		
DRILLING EQU	PMENT:		DAT	E:		SCREEN INTERVAL:		
AMS DPT LA	R		3/1	7/14		8'-12'		
DRILLING MET	HOD:		GRO	OUND SUR	FACE ELEV. FT AMSL:	FILTER PACK		
Direct-Push	Technology					Native		
LOGGED BY:		BOREHOLE SIZE:		AL DEPTH	:	FILTER PACK	INTERVAL:	
M. Busbee			12'			n/a		
Depth (feet)	USCS name:	Description Color; Moisture; Density; ency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Well	Construction	
0	trace silt; no odor;	GRAVEL; gray; dry; gravel with contains brick fragments	<u>ר</u> ו	5.8	B-4:0.5'			
	O SILT; brown; mois	it; silt; no	90				Temporary	
3	POORLY-GRADE	D SAND; brown; moist; fine t at 7'		4.9	B-4:3'		Well 3/4" PVC	
4 - · · · · · · · · · · · · · · · · · ·								
6 - SP			100	1.5	B-4:6'			
7 -								
8	SILT; gray; wet; si	It no odor	_				0.010" Slo	
10 -			100					
	En	d of Borehole			B-4:RGW			
13 - - 14 -								
15 -								
16 -								
17 -								
18 - _ 19 -								
20								
NOTES:							1 of 1	

epi	E N V P A R	IRONMEN TNERSIN	TAL C	BC	RING I	D: B-5			
	DDRESS	ota St. Seattle, WA		CLIE		Industries	CASING MAT	ERIAL AND SIZE: ' PVC	
	NG CONTRA ene Drilli			PRC 640)JECT#:		SCREEN SIZE: 0.010"- Slot		
				DAT	E:		SCREEN INT	ERVAL:	
AMS [DPT LAR			3/17/14			8'-12'		
RILLI	NG METHO	D:		GRC	OUND SURI	FACE ELEV. FT AMSL:	FILTER PACK	ζ.	
		chnology					Native		
.ogge M. Bu s			BOREHOLE SIZE:	101	AL DEPTH:	:	FILTER PACK	INTERVAL:	
Depth (feet)	USCS	Des USCS name; Col Plasticity; Dilatency	Cription or; Moisture; Density; r; EPI description; Other	Interval & %	PID (ppm)	Sample		Construction	
0 0 1			VEL; gray; dry; gravel with	2 %	4.1	B-5:0.5'			
2 - 2 - 3 -		SILT; brown; moist; si		- 70	6.1	B-5:3'		Temporar Well 3/4"	
4 -		POORLY-GRADED SAND; brown; moist; fine sand; no odor; wet at 7'				2 0.0		PVC	
5 -									
6 - - 7 -	SO			100	1.7	B-5:6'			
8 -							V	0.010" Slo	
- 10 - - 11 -	MIL	SILT; gray; wet; silt; no	o odor	100					
12		End of	Borehole			B-5:RGW			
13 - - 14 -									
15 -									
16 - _ 17 -									
18 -									
- 19 - 20 -									
NOTI	ES:						I	1 of 1	

P	PAR	IRONMEN TNERSIN	TAL C	вс	DRING	D: B-6			
SITE A	DDRESS		······································	CLI	ENT:		CASING	ATERIAL AND SIZE:	
		ota St. Seattle, W/	4	Wa	shingtor	n Industries	Temp: 3	3/4" PVC	
DRILL	ING CONTR	ACTOR:			DJECT #:		SCREEN SIZE:		
Holo	cene Drilli	ng Inc.		640	001				
	ING EQUIPM	IENT:		DAT			SCREEN	INTERVAL:	
	DPT LAR				8/14				
	ING METHO			GR	OUND SUR	FACE ELEV. FT AMSL:	FILTER P	ACK:	
		chnology		TOI	AL DEPTH			ACK INTERVAL:	
	ED BY: I sbee		BOREHOLE SIZE:	2'	ALDEFIN		n/a	RON INTERVAL.	
			<u> </u>						
Depth (feet)	USCS	Des USCS name; Co Plasticity; Dilatenc	scription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	W	ell Construction	
0		Sub-Base Gravel						Temporary	
1 -		SILT; gray; dry; silt wi	th some fine gravel; no odor	50	1.1	B-6:1'		Well 3/4" PVC	
2 -		Refusal							
3 -		End o	f Borehole	-					
4 -	-								
5 -									
6 -	-								
7 -									
8 -									
9 -									
10 -									
11 - - 12 -									
13 -									
- 14 -									
- 15 -									
- 16 -									
- 17 -									
- 18 -									
- 19 -									
20									
NOT	ES:								
1								1 of 1	

	IRONMEN TNERSIN	TAL C	BC	ORING I	D: B-7			
SITE ADDRESS				ENT:				IAL AND SIZE:
825 South Dak	ota St. Seattle, WA				n Industries		o: 3/4" P	VC
DRILLING CONTRA				DJECT #:		SCREEN SIZE:		
Holocene Drilli		·······	640			0.010"- Slot		
DRILLING EQUIPM	IENT:		DAT				EN INTER	VAL:
AMS DPT LAR		··· ··	_	7/14		7'-12'		
DRILLING METHO	D:		GRC	OUND SUR	FACE ELEV. FT AMSL:		R PACK:	
Direct-Push Te	chnology					Nativ		
LOGGED BY:		BOREHOLE SIZE:		AL DEPTH	:		R PACK IN	TERVAL:
M. Busbee			12'			n/a		
Depth (feet)	Des USCS name; Col Plasticity; Dilatency	cription or; Moisture; Density; ; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well Co	onstruction
0	Sub-Base Gravel				D 7:0 5			
	SILT; dark brown; dry;	silt	1	27.8	B-7:0.5'			
¹ ML								
2			70					
	sand with trace silt; no	AND; dark brown; dry; fine odor: moist at 7'						Temporary
3 -				34.3	B-7:3'			Well 3/4"
-								PVC
4 -								
SP								
5								
				4.0	D. 7.0			
6			100	4.6	B-7:6'			
7								
1							¥	
8 -	SILT; gray; wet; soft; s	ilt; no odor						
								0.010" Slot
9 -							_	
10 -			100					
11 -								
					B-7:RGW			
12	End of	Borehole			D-7.KGVV			
13 -								
14 -								
-								
15 -								
-								
16 -								
47								
17 -								
18 -								
19 -								
_								
20		·····						
NOTES:								
								1 of 1

epi	E N V P A R	IRONMEN TNERS IN	C	BC	DRING I	D: B-8			
SITE AL	DRESS			CLIE	ENT:		CASING	MATERIAL AND SIZE:	
825 So	outh Dak	ota St. Seattle, W	Α	Wa	shingtor	Industries	Temp:	3/4" PVC	
DRILLIN	IG CONTR	ACTOR:		PRC	DJECT #:		SCREEN SIZE:		
Holoc	ene Drilli	ng Inc.		640	01		0.010"- Slot		
	NG EQUIPN	IENT:		DAT	E:			I INTERVAL:	
AMS [OPT LAR			3/17	7/14	<u></u>	7'-12'	· · · · · · · · · · · · · · · · · · ·	
	NG METHO			GRC	OUND SUR	FACE ELEV. FT AMSL:	FILTER F	PACK:	
		chnology		_			Native		
LOGGE			BOREHOLE SIZE:	12'	AL DEPTH	•		PACK INTERVAL:	
M. Bus	spee			12			n/a		
Depth (feet)	USCS	USCS name; Co	scription olor; Moisture; Density; cy; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	v	Vell Construction	
0		Sub-Base Gravel				D 9.0 5'			
1		SILT; dark brown; dr	y; silt		12.6	B-8:0.5'			
']	M4								
2 -	<u>, , , , , , , , , , , , , , , , , , , </u>	POORLY-GRADED	SAND; dark brown; dry; fine	60					
+		sand with trace silt; r	no odor; moist at 7'					Temporary	
3 -					3.1	B-8:3'		Well 3/4" PVC	
4 -								FVG	
4].									
5 -	SP								
6 -				100	0.5	B-8:6'			
[:									
7 -			· · · · · · · · · · · · · · · · · · ·			- - -			
8 -		SILT; gray; wet; soft;	silt; no odor		0.3				
Ŭ _								0.010" Slot	
9 -									
-	ML								
10 -				100				7	
11 -									
'' _								=	
12		End	of Borehole		0.2	B-8:RGW			
-									
13 -									
14 -									
14									
15 -									
-									
16 -									
47									
17 -									
18 -									
-									
19 -									
20									
NOTE	ES:			4					
								1 of 1	

				RING	D: B-9			
ITE ADDRESS		,	CLIE Wa		Industries		MATERIAL AND SIZE: 3/4" PVC	
RILLING CONTRA	ACTOR:			JECT #:		SCREEN SIZE: 0.010"- Slot		
olocene Drilli			640					
RILLING EQUIPM	ENT:		DAT			6'-11'	INTERVAL:	
MS DPT LAR			3/17/14 GROUND SURFACE ELEV. FT AMSL:			FILTER F	PACK.	
RILLING METHOD			GROUND SURFACE ELEV. FT AMISL.			Native		
OGGED BY:	cimology	BOREHOLE SIZE:	тот	AL DEPTH			PACK INTERVAL:	
I. Busbee			11'			n/a		
Depth (feet)	Des USCS name; Col Plasticity; Dilatency	cription or; Moisture; Density; r; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Well Construction		
0	Sub-Base Gravel			0.5	B-9:0.5'			
1 - ML	SILT; dark brown; dry;	silt		0.0	D-9.0.5			
2	POORLY-GRADED S	AND; dark brown; dry; fine	20					
3	sand with trace silt; no	odor; moist at 7'		6	B-9:3'		Temporar Well 3/4" PVC	
4								
SP								
5-								
			20	1.2	B-9:6'			
6			20	1.2	D-0.0			
7 -								
	SILT; gray; wet; soft; s	silt; no odor	-					
8							0.010" Slo	
- 10 - ML			30					
12	End of	fBorehole			B-9:RGW			
13 -								
14								
15 -								
16 -								
17 -								
- 18 -								
20								
NOTES:								

	IRONMEN TNERSIN	TAL C	BC	RING	D: B-10			
SITE ADDRESS			CLI	ENT:	<u> </u>	CASING M	ATERIAL AND SIZE:	
825 South Dak	ota St. Seattle, W	4	Wa	shingtor	n Industries	Temp: 3/	4" PVC	
DRILLING CONTR.				DJECT #:		SCREEN SIZE:		
Holocene Drilli	ng Inc.		640	01		0.010"- Slot		
DRILLING EQUIPM	IENT:		DAT	E:		SCREEN IN	ITERVAL:	
AMS DPT LAR			3/1	7/14		7'-12'		
DRILLING METHO	D:		GRO	OUND SUR	FACE ELEV. FT AMSL:	FILTER PA	CK:	
Direct-Push Te	chnology					Native		
LOGGED BY:		BOREHOLE SIZE:	TOTAL DEPTH:				CK INTERVAL:	
M. Busbee	·		12'			n/a		
Depth (feet)	USCS name: Co	scription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	ell Construction	
0	Sub-Base Gravel							
1 SW	WELL-GRADED SAN	ID; light gray; dry;	7	8.1	B-10:0.5'			
	fine-coarse sand; no POORLY-GRADED S	SAND; dark brown; dry; fine	-					
2 -	sand; no odor; wet at	7'	40					
-							Temporary	
3 -				11.1	B-10:3'		Well 3/4"	
							PVC	
4 - - SP								
5 - 5 -								
6			100	2.3	B-10:6'			
7 -								
8	SILT; gray; wet; silt; n	o odor					0.010" Slot	
9-							0.010 300	
10 - ML			100					
-								
11 -								
12				0	B-10:RGW			
	End o	f Borehole		U	D-IU.KGW			
13 -								
4								
14 -								
-								
15 -								
16 -								
17 -								
-								
18 -								
19 -								
20								
NOTES:								
							1 of 1	

PAR'	IRONMEN TNERSIN	c	BC	RING I	D: B-11			
SITE ADDRESS			CLIE	ENT:		CASING M	ATERIAL AND SIZE:	
	ota St. Seattle, WA	A Contraction of the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second seco	Wa	shington	Industries	Temp: 3/	4" PVC	
DRILLING CONTRA				JECT #:		SCREEN SIZE:		
Holocene Drilli			640	01		0.010"- Slot		
DRILLING EQUIPM	ENT:		DAT	E:		SCREEN IN	NTERVAL:	
AMS DPT LAR			3/17	7/14		5'-10'		
DRILLING METHOD	D:		GRC	UND SURF	ACE ELEV. FT AMSL:	FILTER PA	CK:	
Direct-Push Te	chnology					Native		
LOGGED BY:		BOREHOLE SIZE:		AL DEPTH:			CK INTERVAL:	
M. Busbee			12'			n/a		
Depth (feet)	USCS name: Col	cription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	ell Construction	
0	Sub-Base Gravel	-		28.3	B-11:0.5'			
1	SILT; dark brown; dry	; silt		20.3	D-11.0.5			
'_ M 4								
2		AND; dark brown; dry; fine	60					
-	sand with trace silt; no	odor; moist at 7'					Temporary	
3 -				2.2	B-11:3'		Well 3/4" PVC	
							1.60	
4								
5 -								
6 -			100	1.4	B-11:6'			
7								
8	8'-12' No Recovery; W	/et					0.010" Slo	
9 -							0.010 010	
10 -			0					
-								
11 -								
10					B-11:RGW			
12 -	End o	f Borehole			D-TI.NOW			
13								
-								
14 -								
-								
15 -								
16 -								
17 -								
_								
18 -								
19 -								
20								
NOTEO								
NOTES:								

	N V A R	IRONMEN FNERSIN	TAL C	BC	DRING I	D: B-12				
SITE ADDRE	ESS			CLIE	ENT:		CASI	NG MATI	ERIAL AND SIZE:	
		ta St. Seattle, WA	A	Wa	shingtor	Industries	Tem	p: 3/4"	PVC	
DRILLING C				PRC	DJECT #:		SCREEN SIZE:			
Holocene	Drillir	ng Inc.		640)01		0.010"- Slot			
DRILLING E	QUIPM	ENT:		DAT	Ē:		SCRE	EN INTE	ERVAL:	
AMS DPT	LAR				9/14		7'-12			
DRILLING M	IETHOD):		GRO	DUND SUR	FACE ELEV. FT AMSL:	FILTE	R PACK	-	
Direct-Pu	sh Teo	chnology					Native			
LOGGED BY			BOREHOLE SIZE:		AL DEPTH	:		R PACK	INTERVAL:	
M. Busbee	e			12'			n/a			
Cepth (feet)	scs	USCS name: Co	c ription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well	Construction	
0		Sub-Base Gravel				P 12:0 5				
1	SP (cemented fine sand (AND; dark brown; dry; clay like); no odor AND; brown; dry; fine sand;	90	3.5	B-12:0.5'			Temporary	
3					1.7	B-12:3'			Weil 3/4" PVC	
5 - S 6 - 7 -	P			100	4.7	B-12:6'				
8 9 10		SILT; gray; wet; soft s	ilt; no odor	100					0.010'' Slo	
12 13 _		End o	f Borehole			B-12:RGW				
14 - 15 -										
16 - 17 -										
18 -										
19 - 20 -		<u> </u>								
NOTES:									1 of 1	

	IRONMEN TNERSIN	TAL C	вс	RING I	D: B-13			
SITE ADDRESS			CLI	ENT:		CASING MA	ATERIAL AND SIZE:	
825 South Dak	ota St. Seattle, W/	4	Wa	shingtor	n Industries	Temp: 3/	4" PVC	
DRILLING CONTR				DJECT #:		SCREEN SIZE:		
Holocene Drill			640	001		0.010"- Slot		
DRILLING EQUIPM	MENT:		DAT	E:		SCREEN IN	TERVAL:	
AMS DPT LAR			3/1	8/14		5'-10'		
DRILLING METHO	D:		GRO	OUND SUR	FACE ELEV. FT AMSL:	FILTER PAG	CK:	
Direct-Push Te	chnology					Native		
LOGGED BY:		BOREHOLE SIZE:		AL DEPTH	:		CK INTERVAL:	
M. Busbee			12'			n/a		
Depth (feet)	USCS name: Co	scription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	Il Construction	
0	Sub-Base Gravel			10.1	B-13:0.5'			
1	SILT; dark brown; mo odor	ist; silt with few fine sand; no	2	10.1	D-13.0.3			
	POORLY-GRADED S	AND; dark brown; moist;	-					
2 -	fine sand; no odor; we	et at /'	60					
							Temporary	
3 -				4.9	B-13:3'		Well 3/4" PVC	
							PVC	
4 SP								
5								
6			100	8.1	B-13:6'			
7 -								
	SILT; gray; wet; some	debris; very soft 9.5'-10.5'						
8 -							0.010" Slot	
9 -							0.010 0.00	
Ŭ _ <u> </u>								
10 - ML			100					
-								
11 -								
				0	B-13:RGW			
12	End o	f Borehole		0	D-13.KGW			
13 -								
-								
14 -								
-								
15 -								
16								
16 -								
17 -				:				
18 –								
-								
19 -								
20								
NOTES:								
							1 of 1	
			-					

P A R	IRONMEN TNERSIN	TAL C	BC	RING I	D: B-14			
SITE ADDRESS	<u></u>		CLIE	ENT:		CASING MAT	ERIAL AND SIZE:	
825 South Dak	ota St. Seattle, WA	A	Wa	shingtor	n Industries	Temp: 3/4	" PVC	
DRILLING CONTR	ACTOR:		PRC	JECT #:		SCREEN SIZE:		
Holocene Drill	ing Inc.		640	01		0.010"- Slot		
DRILLING EQUIPM	MENT:		DAT	E:		SCREEN INT	ERVAL:	
AMS DPT LAR			3/18	8/14		5'-10'		
DRILLING METHO	D:		GRC	OUND SUR	FACE ELEV. FT AMSL:	FILTER PACH	K :	
Direct-Push Te	echnology					Native		
LOGGED BY:		BOREHOLE SIZE:		AL DEPTH	•	FILTER PACH	(INTERVAL:	
M. Busbee	I	<u> </u>	10' ろ			n/a		
Depth (feet)	USCS name: Col	cription or; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Well	Construction	
0	with some silt; no odo	et; soft; fine-coarse sand r; fill	100	1.4 2.2	B-14:6' (not collected) B-14:8'		Temporary Well 3/4" PVC	
8 - 9 - 10 - 11 -	0'-8'; dark brown	ne sand in the bottom of f Borehole	0		B-14:RGW		0.010" Slo	
12 - 13 - 14 -								
15 - - 16 - -								
17 - - 18 - - 19 -								
20 NOTES:							1 of 1	

SITE A	DDRESS	<u></u>		CLI	ENT:		CASING MAT	ERIAL AND SIZE	
		ota St. Seattle, W	Α	Wa	shingtor	n Industries	Temp: 3/4'	' PVC	
	NG CONTR				OJECT #:		SCREEN SIZ		
Holoc	ene Drilli	ng Inc.		64001		0.010"- Slo			
	NG EQUIPN			DA			SCREEN INT	ERVAL:	
	DPT LAR				8/14		7'-12'		
	NG METHO			GR	OUND SUR	FACE ELEV. FT AMSL:	FILTER PACK	K :	
LOGGE		chnology	BOREHOLE SIZE:	TO.	TAL DEPTH		FILTER PACK		
M. Bu			BOREHULE SIZE.	12			n/a		
Depth (feet)	USCS	Des USCS name; Co Plasticity; Dilatenc	scription olor; Moisture; Density; :y; EPI description; Other	Interval & % Recoverv	PID (ppm)	Sample	Well	Construction	
0 1 2 3 - 4 5 - 6 - 7 - 10 - 11 - 12 - 13 - 14 - 15 - 10 - 11 - 12 - 13 - 14 - 15 - - 10 - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - 12 - - - 12 - - - - - - - -	SP.	sand; no odor; wet af		90		B-15:5' B-15:RGW		Tempo Well 3 PV0 0.010"	
20 NOT	EQ.								

	NVIRONMEN RTNERS IN	N T A L I C	BC	DRING I	D: B-16			
SITE ADDRES			CLIE	ENT:		CASING MA	TERIAL AND SIZE:	
825 South I	Dakota St. Seattle, W	/A	Wa	shington	Industries	Temp: 3/4	4" PVC	
DRILLING CO				JECT #:		SCREEN SIZE:		
	Filling Inc.		640	01		0.010"- S	lot	
DRILLING EQ	UIPMENT:		DAT	E:		SCREEN IN	TERVAL:	
AMS DPT L	AR		3/1	8/14		5'-10'		
DRILLING ME	THOD:		GRC	OUND SUR	FACE ELEV. FT AMSL:	FILTER PAC	CK:	
Direct-Push	n Technology					Native		
LOGGED BY:		BOREHOLE SIZE:		AL DEPTH	•		CK INTERVAL:	
M. Busbee			10'		I	n/a		
Depth (feet)	S USCS name: C	scription olor; Moisture; Density; icy; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	Il Construction	
0	Sub-Base Gravel							
MI			1	5.5	B-16:0.5'			
	POORLY-GRADED	SAND; brown; dry; fine sand;	7					
2			15					
							Temporary	
3 -				1.5	B-16:3'		Well 3/4" PVC	
4 -								
5 - SP			100	1.1	B-16:5.5'			
6 -								
7 -								
			100					
8			100				0.010" Slo	
9	SILT: grav: wet: trac	e shell fragments; no odor	-					
10		of Borehole						
- 11 -	End							
- 12 -					B-16:RGW			
- 13 -								
- 14 -								
15 -								
16 -								
17 -								
18 -								
19 -								
20								
NOTES:								
							1 of 1	

	IRONMEN TNERSIN	C	BC	DRING I	D: B-17			
SITE ADDRESS			CLI	ENT:	<u> </u>	CASING MA	ATERIAL AND SIZE:	
825 South Dak	ota St. Seattle, W	A	Wa	shington	Industries	Temp: 3/	4" PVC	
DRILLING CONTR	ACTOR:			DJECT #:		SCREEN SIZE:		
Holocene Drilli	ing Inc.		640	001		0.010"- S	lot	
DRILLING EQUIPM	IENT:		DAT	E:		SCREEN IN	ITERVAL:	
AMS DPT LAR			3/2	0/14		5'-10'		
DRILLING METHO			GRO	OUND SUR	FACE ELEV. FT AMSL:	FILTER PAG	CK:	
Direct-Push Te	chnology					Native		
LOGGED BY:		BOREHOLE SIZE:		AL DEPTH	•		CK INTERVAL:	
E. Caddey			12'			n/a		
Depth (feet) CSCS	USCS name; Co Plasticity; Dilatenc	cription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	ell Construction	
01 -	0-2" Concrete Sub-Base Gravel and Silt and bricks; interbo brown and red; dry; n	edded organic silt and bricks;	-	2.2	B-17:0.5'			
2 -	2.0 and 100, dry, fi		10				Temporary	
3 -				1.3	B-17:1.3'		Well 3/4" PVC	
4 - 5		AND; brown; moist; medium						
6	sand; no odor; wet at	7'	90	1.8	B-17:6'			
8 - SP 9			80		B-17:RGW		0.010" Slo	
11 - ML	SILT; gray; wet; soft; s	silt; no odor						
12 13 _	End o	f Borehole						
14 -								
15 -								
16 - - 17 -								
- 18 -								
19 -								
20 NOTES:							1 of 1	

e pi	E N V P A R	I R O N M E N T N E R S I N	TAL C	BC	DRING I	D: B-18		
	DDRESS			CLI	ENT:		CASING MA	TERIAL AND SIZE:
		ota St. Seattle, W/	4	Wa	shingtor	Industries	Temp: 3/4	" PVC
	NG CONTR			PRC)JECT #:		SCREEN SIZ	
Holod	ene Drill	ing Inc.		640	01		0.010"- SI	ot
DRILLI	NG EQUIPN	IENT:		DAT	E:		SCREEN INT	ERVAL:
AMS	DPT LAR				9/14		5'-10'	
DRILLI	NG METHO	D:		GRO	OUND SUR	FACE ELEV. FT AMSL:	FILTER PAC	K:
		echnology					Native	
	ED BY:		BOREHOLE SIZE:		AL DEPTH	•		K INTERVAL:
E. Ca	ddey	1		12'			n/a	
Depth (feet)	USCS	USCS name: Co	s cription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Wel	Construction
0		0-2" Concrete						
1 -		Sub-Base Gravel and SILT; brown and red; and bricks; no odor	dry; interbedded organic silt					
2 -				5				-
3 -	ML				1.8	B-18:3'		Temporary Well 3/4" PVC
4 -								
5 -								
		POORLY-GRADED S sand; no odor; wet at	AND; brown; moist; fine 7'					
6 -				60		B-18:6'		
7 -								
-		7 7				D 40-DOM		
8 -						B-18:RGW		0.010" Slot
9 -								
- 10 -				60				
··· _		SILT; gray; wet; soft; s	silt: no odor					
11 -		SILT, gray, wet, SOIt, a						
12 -		Endo	f Borehole					
- 13 -		End 0						
-								
14 -								
15 -								
16 -								
17 -								
- 18 -								
-								
19 - 20 -								
NOT	ES:						<u> </u>	
								1 of 1

	IRONMEN TNERSIN	C	BC	RING II	D: B-19			
SITE ADDRESS	ota St. Seattle, W			ENT: shington	Industries		MATERIAL AND SIZE: 3/4" PVC	
ORILLING CONTR				JECT #:		SCREEN SIZE: 0.010"- Slot		
- Holocene Drill	ing Inc.		640	01				
ORILLING EQUIP	MENT:		DAT	E:		SCREEM	NINTERVAL:	
MS DPT LAR			3/1	9/14		7'-12'		
ORILLING METHO	D:		GRC	OUND SURF	ACE ELEV. FT AMSL:	FILTER	PACK:	
Direct-Push To	echnology					Native		
OGGED BY:		BOREHOLE SIZE:		AL DEPTH:			PACK INTERVAL:	
/I. Busbee			12'			n/a		
Depth (feet)	USCS name: Co	scription blor; Moisture; Density; cy; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well Construction	
0	0-2" Concrete Sub-Base Gravel and Silt and bricks; brown organic silt and brick	and red; dry; interbedded		19	B-19:0.5'			
2 - - 3 -			60	10.1	B-19:3'		Temporar Well 3/4"	
4							PVC	
6 7 7	POORLY-GRADED sand; no odor; wet al	SAND; brown; moist; fine 7'	70	8.6	B-19:6'			
8	SILT; gray; wet; soft;	silt; no odor	80	4	B-19:RGW		0.010" Slo	
12	End o	of Borehole		-				
14 -								
15 - 16 -								
17 -								
18 -								
19 - 20 -								
NOTES:								

ed :		IRONMEN TNERSIN	C	BC	RING I	D: B-20				
SITE ADDR	RESS			CLI	ENT:	·····	CASING	MATERIAL AND SIZE:		
825 Sout	h Dako	ota St. Seattle, W	Α	Wa	shington	Industries	Temp:	3/4" PVC		
DRILLING (CONTRA	CTOR:)JECT #:		SCREEN SIZE:			
Holocene	e Drilli	ng Inc.		640	001		0.010"-	0.010"- Slot		
DRILLING E		ENT:		DAT			SCREEN	I INTERVAL:		
AMS DP1	LAR			3/1	9/14		7'-12'			
DRILLING N	METHOD	D:		GRO	OUND SUR	FACE ELEV. FT AMSL:	FILTER	PACK:		
		chnology		_			Native			
LOGGED B			BOREHOLE SIZE:		AL DEPTH			PACK INTERVAL:		
M. Busbe	e T			12'			n/a			
Depth (feet)	scs	USCS name; Co	scription Nor; Moisture; Density; ;y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	v	Vell Construction		
0		Sub-Base Gravel			9.8	B-20:0.5'				
	ML	SILT; brown; dry; org			5.0	D-20.0.J				
4.		POORLY-GRADED no odor; 6'-6.2' bricks	SAND; brown; dry; fine sand; s; moist beneath bricks; wet							
2 -		at 8'	· · · ·	40						
								Temporar		
3 - 1.					5.2	B-20:3'		Well 3/4" PVC		
								FVC		
4 - 1. 1.										
5 -										
6				70	3.1	B-20:6'				
	SP									
7 - [
8								-		
°]								0.010" Slo		
9 -										
-										
10 -				60						
11 -										
12						B-20:RGW				
-		End o	f Borehole							
13 -										
-										
14 -	ĺ									
15										
15 -										
16 -										
17 -										
-										
18 -										
10										
19 -										
20										
NOTES:										

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			CLIE	ENT:		CASING N	IATERIAL AND SIZE:		
	ota St. Seattle, W	Α	Wa	shington	Industries	Temp: 3	/4" PVC		
DRILLING CONTR				JECT #:		SCREEN SIZE:			
Holocene Drilli			640			0.010"- Slot			
DRILLING EQUIPM	IENT:		DAT				SCREEN INTERVAL:		
AMS DPT LAR				9/14		7'-12'			
DRILLING METHO			GRC	UND SURI	FACE ELEV. FT AMSL:	FILTER PA	ACK:		
Direct-Push Te	chnology					Native	ACK INTERVAL:		
LOGGED BY: M. Busbee		BOREHOLE SIZE:	101 12'	AL DEPTH:		n/a	GK INTERVAL.		
1			2				<u> </u>		
Depth (feet)	De USCS name; C Plasticity; Dilaten	scription olor; Moisture; Density; cy; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	w	ellConstruction		
0	Sub-Base Gravel			400	D 24.0 E				
1	Organic Silt			122	B-21:0.5'				
	POORLY-GRADED	SAND; wet at 7'							
2 -			60						
							Temporary		
3 -				7	B-21:3'		Well 3/4" PVC		
4				1			FVO		
*									
5 - SP									
6 -			90	11	B-21:6'				
7									
8 -									
-							0.010" Slot		
9	SILT	· · · · · · · · · · · · · · · · · · ·	-						
10 -			100						
11 -									
12	End	of Borehole			B-21:RGW	L	1		
13 -									
-									
14 -									
45									
15 -									
16 -									
_									
17 -									
- 18 -									
-									
19 -									
20									
NOTES:					· · · ·		0		
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epi	PAR	IRONMEN TNERS IN	C	BC	RING	ID: B-22			
SITE AI	DDRESS			CLIE	ENT:		CASING M	ATERIAL AND SIZE:	
825 Se	outh Dak	ota St. Seattle, W	Α	Wa	shingtor	n Industries	Temp: 3/4" PVC		
	NG CONTR	· · · · · · · · · · · · · · · · · · ·			JECT #:	····	SCREEN S	IZE:	
Holoc	ene Drilli	ing Inc.		640	01		0.010"- Slot SCREEN INTERVAL:		
DRILLIN		IENT:		DAT	E:				
AMS [OPT LAR			3/1	9/14		5'-10'		
DRILLIN	NG METHO	D:				FACE ELEV. FT AMSL:	FILTER PA	CK:	
		chnology					Native		
LOGGE			BOREHOLE SIZE:	тот	AL DEPTH	l:		CK INTERVAL:	
E. Cac	ldey			10'			n/a		
Depth (feet)	USCS	Des USCS name; Co Plasticity; Dilateno	s cription Nor; Moisture; Density; :y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	ell Construction	
0		Sub-Base Gravel		- 01					
-		Organic Silt		-	17.2	B-22:0.5'			
1+		POORLY-GRADED	SAND; wet at 7'						
				50					
2 -				50				T	
3 -					2.7	B-22:3'		Temporary Well 3/4"	
۲ <u> </u> .					£.1			PVC	
4 -									
-									
5 -	SP								
-									
6 -				20	13	B-22:6'			
7 -									
-f.									
8 -								0.0408.01-	
9 - 1 .				0				0.010" Slot	
9		SILT							
10 - - 11 - -	MIL.					B-22:RGW			
12 -		End o	f Borehole	-					
-			. 50101010						
13 -									
14									
14 -									
15 -									
16 -									
-									
17 -									
-									
18 -									
-									
19 -									
20									
NOTE	=0.					L.,	L		
NUT	_0.								
								1 of 1	

e pi	PAR	IRONME TNERSII	NC	BC	DRING I	D: B-23				
SITE AD	DDRESS			CLI	ENT:		CASING MA	TERIAL AND SIZE		
825 Sc	outh Dak	ota St. Seattle, N	NA	Wa	shington	Industries	Temp: 3/4	" PVC		
	NG CONTR/				DJECT #:			CREEN SIZE:		
	ene Drilli			64001			0.010"- SI			
		ENT:		DATE:			SCREEN IN	TERVAL:		
	OPT LAR			_	9/14		7'-12'			
	NG METHO	chnology		GRO	JUND SURI	FACE ELEV. FT AMSL:	FILTER PAC	K.		
LOGGE		chhology	BOREHOLE SIZE:	тот	AL DEPTH			K INTERVAL:		
M. Bus			BONEHOLE OILE.	12'			n/a			
Depth (feet)	USCS	USCS name:	escription Color; Moisture; Density; ncy; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Wel	Construction		
0		Sub-Base Gravel		<u> </u>						
1 - 2 -:		GRAVELLY SILT; fine gravel; no odo	orown; moist; mostly silt; some SAND; brown; dry; fine sand;	60	1151	B-23:0.5'				
3 - 3 - 4 -	SP				48.5	B-23:3'		Tempora Well 3/4 PVC		
5 - · 6 - · 7 - ·				100	36.7	B-23:6'				
8 9 - 10 - 11 - 12 - 13 - 14	MIL	SILT; gray; wet; silt	of Borehole	100	5.5	B-23:RGW		0.010" S		
- 15 - - 16 - - 17 -										
- 18 - - 19 -										
20 NOTE	ES:									
								1 of 1		

CD :	NVIRONME ARTNERSI	NTAL	BC	ORING	ID: B-24			
SITE ADDRES			CLII	ENT:		CASING MA	ATERIAL AND SIZE:	
825 South	Dakota St. Seattle,	WA	Wa	shingto	n Industries	Temp: 3/	4" PVC	
DRILLING CO	NTRACTOR:			DJECT #:		SCREEN SIZE:		
Holocene [Drilling Inc.		640	001		0.010"- S	lot	
DRILLING EQ	UIPMENT:		DAT	E:		SCREEN IN	ITERVAL:	
AMS DPT L	AR		3/1	9/14		7'-12'		
DRILLING ME	THOD:		GRC	OUND SUR	FACE ELEV. FT AMSL:	FILTER PAG	CK:	
Direct-Pus	h Technology	· · · · · · · · · · · · · · · · · · ·				Native		
LOGGED BY:		BOREHOLE SIZE:		AL DEPTH	1:		CK INTERVAL:	
M. Busbee			12'		1	n/a		
Depth (feet)	CS USCS name:	escription Color; Moisture; Density; ency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	Il Construction	
0	Sub-Base Gravel				D 24-0 5			
1	SANDY SILT			15.6	B-24:0.5'			
2		D SAND; wet at 7'	90					
-	. FOORLI-GRADE	D SAND, wet at 7					Temporary	
3 -				39.9	B-24:3'		Well 3/4"	
							PVC	
4 –								
5 SP								
6 -			100	16.9	B-24:6'			
-								
7 -								
	SILT; gray; wet; si	t; no odor						
8 -							0.010" Slot	
9-							0.010 300	
10 – ML			100					
11 -								
12					B-24:RGW			
-	End	d of Borehole			D-24.1\GVV			
13 -								
_								
14 -								
15								
15 -								
16 -								
-								
17 -								
-								
18 -								
19 -								
_								
20							· · · · · · · · · · · · · · · · · · ·	
NOTES:							1 of 1	

e pi	PAR	IRONME TNERSI	NC	BC	DRING	ID: B-25				
825 S		ota St. Seattle	WA	Wa		n Industries	Temp:	MATERIAL AND SIZE:		
	ING CONTRA C ene Drilli			PRC 640	DJECT#:)01		SCREEI 0.010"			
	ING EQUIPM			DAT			SCREEN INTERVAL:			
	DPT LAR			3/19/14				6'-11'		
	ING METHO	D;				FACE ELEV. FT AMSL:				
Direc	t-Push Te	chnology					Native			
	ED BY:		BOREHOLE SIZE:		AL DEPTH	l:		PACK INTERVAL:		
M. Bu	ISDEE			11'			n/a			
Depth (feet)	USCS	USCS name Plasticity; Dila	Description ; Color; Moisture; Density; tency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well Construction		
0	-	Sub-Base Grave			158	B-25:0.5'				
1 -		Organic Silt POORLY-GRAD	ED SAND; wet at 7'	_						
-		- CONCI-GINAD	שלו מני איני מני י							
2 -				60				_		
3 -					12	B-25:3'		Temporar Well 3/4' PVC		
4										
5 -	.SP			100	5.5	B-25:6'				
6 - - 7 -				100	5.5	D-23.0				
, 8 -										
9 -		SILT						0.010" Sk		
10 -	MIL.			100						
11 - - 12 -						B-25:RGW				
13 -		En	d of Borehole							
14 -										
15 -										
16 -										
17 -										
18 -										
19 - 20 -										
NOT	ES:							1 of 1		

SITE ADRESS CLENT: CASING MATERIAL AND SI: BRILLING CONTRACTOR: PROJECT # SCREEN SIZE Holocano Drilling Inc. DATE: SCREEN SIZE DRILLING CONTRACTOR: DATE: SCREEN NITERVAL: AMS DPT LAR J2014 S-10° DRILLING CONTRACTOR: BOREHOLE SIZE: TOTAL DEPTH: MS DPT LAR SCREEN NITERVAL: Native IDERLING ELEV.FT AMSL FLER PROK: Native DIRLING FCUMENT: DOREHOLE SIZE: TOTAL DEPTH: DIRLING FCUMENT: DOREHOLE SIZE: TOTAL DEPTH: USCS DESCRIPTION Sample Well Construction PLOR ON SURFACE LEV.FT AMSL Native DISCS DESCRIPTION Sample VUSCS DESCRIPTION Sample VISCS DESCRIPTION Sample VISD Same Sample Sa	epp		TNERSIN			DRING I				
DRILING CONTRACTOR: PROJECT #: SCREEN SUE: Outfort : SCREEN SUE: SCREEN SUE SUE: SCREEN SUE SUE SUE SUE SUE SUE SUE SUE SUE SUE										
Holocene Drilling Lnc. 54001 0.010"- Slot DRILLING EQUIPMENT: DATE: SCREENINTERVAL: AMS DPT LAR DATE: SCREENINTERVAL: Direct-Push Technology BOREHOLE SIZE: TOTAL DEPTH: FILTER PACK: Direct-Push Technology BOREHOLE SIZE: TOTAL DEPTH: FILTER PACK: E. Caddey Description TOTAL DEPTH: In/a 0 USCS Description TOTAL DEPTH: In/a 0 Description Stables Gravel and Sand; alternating vellow Mailwore Well Construction 0 Description Sand; alternating vellow 2 Sand with some sits one broks attop of unit Sand B-26:0.5' Sand Sand 3 Sand Sand B-26:0.5' Sand Sand Sand Sand Sand 3 Sand Sand <th></th> <th></th> <th></th> <th>VA</th> <th></th> <th></th> <th>Industries</th> <th colspan="3" rowspan="2">SCREEN SIZE:</th>				VA			Industries	SCREEN SIZE:		
DRILLING EQUIPMENT: DATE SCREEN INTERVAL: AMS DPT LAR J2014 5-100 DRILLING METHOD: BOREHOLE SIZE: GRUND SURFACE ELEV. FT AMSL: FLITER PACK: Native Native FLITER PACK: Native LOGGED BY: BOREHOLE SIZE: TOTAL DEPTH: FLITER PACK INTERVAL: 0 USCS Description grups 1 USCS Description Other Size: TOTAL DEPTH: FLITER PACK INTERVAL: 0 USCS of Concrete Sub-Base Gravel and Sand; attenating yellow grups PID 2 Sub-Base Gravel and Sand; attenating yellow 1190 B-26:0.5' Well Construction 1 Sub-Base Gravel and Sand; attenating yellow 1190 B-26:0.5' Well Construction 3 Sub-Base Gravel and Sand; attenating yellow 1190 B-26:0.5' Well Construction 1 Sub-Base Gravel and Sand; attenating yellow sol description other grups 1190 B-26:0.5' 3 Sub-Base Gravel and Sand; attenating yellow sol description sol description sol description 1 Sub-Base Gravel and Sand; attenating yellow sol description sol description sol description 1 Sub-Base Gravel and Sand; attenating yellow sol description										
AMS DPT LAR 3/20/14 5'-10' DRILLING METHOD: GROUND SURFACE ELEV. FT AMS: FILTER PACK: Direct-Push Technology BOREHOLE SIZE: TOTAL DEPTH: LOGGED BY: BOREHOLE SIZE: TOTAL DEPTH: 12' nfa 000										
DRULLING METHOD: GROUND SURFACE ELEV. FT AMSL: FILTER PACK: Native Direct-Push Technology BOREHOLE SIZE: TOTAL DEPTH: RLTER PACK INTERVAL: E. Caddey Description Image: Color, Molarue, Density, Bill Image: Color, Molarue, Density, Bill PID Image: Color, Molarue, Color, Molarue, Density, Bill with some Sit, Some bricks at top of unit Image: Color, Molarue, Median, Mernating vellow Image: Color, Molarue, Sit, Some bricks at top of unit Image: Color, Molarue, Median, Mernating vellow Image: Color, Molarue, Median, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Merce, Mer			IEN I:						ERVAL:	
Direct-Push Technology Native LOGGED BY: BOREHOLE SIZE: TOTAL DEPTH: PILTER PACK INTERVAL: 0 Description 12 n/a 0 Defence: Canded Description 12 0 Defence: Canded Sample Well Constructor 1 Defence: Canded 190 B-26:0.5' 1 Sub-Base Gravel and Sand; alternating vellow 41.4 B-26:0.5' 3 POORL-CADED SAND: gray; damp; medum 80 41.4 B-26:0.5' 4 Sample Sample Well Constructor 9 Sample Sample Well Constructor 1 POORL-CADED SAND: gray; damp; medum 80 190 B-26:0.5' 3 Sample Sample Sample Well Constructor 1 PooRL-CADED SAND: gray; damp; medum 80 80 B-26:0.5' 3 Sample Sample Sample Sample 11 Sample Sample Sample Sample 12 End of Borehole 90 8.8 B-26:0' Sample 13 Sample Sample Sample Sample Sample 14 Sample Sample Sample Sample <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>V.</td></t<>									V.	
LOGGED BY: E. Caddoy BOREHOLE SIZE: III TOTAL DEPTH: 12' PILTER PACK INTERVAL: n/a 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5					GR	JUND SURI	FACE ELEV. FT AMSL:		K:	
E. Caddey 12' n/a			cimology	BOREHOLE SIZE	тот					
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				BONEHOLE OILE.	12'		·			
0	eet)		De	ecription	serv Verv					
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L (te	uscs	USCS name: C	olor: Moisture: Density:		PID	Sample	Well	Construction	
0 -0.4*Concrete Sub-Base Gravel and Sand; alternating yellow and green banding Sand with some sit; some binks at top of unit sand with some sit; some binks at top of unit 1190 B-26:0.5* 3	Dep		Plasticity; Dilater	cy; EPI description; Other	% R	(ppm)				
1 and green banding POORLYSANDE DAND: gray; damp; medium and with some silt, some bricks at top of unit 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 7 8 9 9 10 11 12 End of Borehole 13 14 15 16 17 18 19 20				ad Canada alferrantia	_		D 26-0 FI			
2 POORLY-GRADED SAND; gray; damp; medium 3 and with some silt; some bricks at top of unit 3 414 5 SP 6 90 8 90 8 80 9 8.8 9 8.8 9 8.8 9 8.8 9 8.8 9 8.8 9 8.8 9 8.8 9 8.8 9 8.8 9 8.8 9 8.8 9 8.8 9 8.8 9 8.8 9 9 11 11 12 End of Borehole 13 14 14 14 15 14 16 14 17 14 18 14 19 14 19 14 10 14 14 14	1		and green banding			1190	B-20:0.5			
2 3 41.4 B-26:3' Temp 4 5 5P 90 8.8 B-26:6' 7 8 90 8.8 B-26:RGW 0.010' 9 5 50 90 8.8 B-26:RGW 0.010' 9 5 5 5 5 6 0.010' 11 5 5 5 5 0.010' 11 5 5 5 5 0.010' 11 5 5 5 5 5 0.010' 11 5 5 5 5 5 0.010' 11 5 5 5 5 5 0.010' 11 5 5 5 5 5 0.010' 12 End of Borehole 1 1 1 1 1 1 13 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			POORLY-GRADED	SAND; gray; damp; medium some bricks at top of unit						
3 41.4 B-26.3' Weil 5 SP 90 8.8 B-26.6' 7 8 90 8.8 B-26.6' 9 SILTY SAND; gray; wet; mostly silt with some sand 90 8.8 B-26:RGW 0.010' 10 Silt TY SAND; gray; wet; mostly silt with some sand 90 8.8 B-26:RGW 0.010' 11 End of Borehole 90 90 90 90 90 90 11 End of Borehole 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90	2 -		Sand with Some Sit,	some blicks at top of unit	80					
3 41.4 B-26.3' Weil 5 SP 90 8.8 B-26.6' 6 90 8.8 B-26.6' 0.010' 9 SILTY SAND; gray; wei; mostly silt with some sand 90 8.8 B-26:RGW 0.010' 10 SM Subscription 90 8.8 B-26:RGW 0.010' 11 Subscription 90 8.8 B-26:RGW 0.010' 11 End of Borehole 90 8.8 B-26:RGW 0.010' 12 End of Borehole 90 90 90 90 90 90 13 Image: Subscription of Borehole Image: Subscrine Image: Sub	-1.								Tempo	
4 5 SP 6 90 8.8 B-26:6' 7 8 90 8.8 B-26:RGW 9 90 8.8 B-26:RGW 0.010' 10 - SILTY SAND; gray; wet; mostly silt with some sand 90 90 B-26:RGW 0.010' 11 - End of Borehole 0 0.010' 0.010' 12 End of Borehole 0 0.010' 0.010' 13 14 0 0.010' 0.010' 14 0 0.010' 0.010' 0.010' 14 0 0.010' 0.010' 0.010' 14 0 0.010' 0.010' 0.010' 14 0 0.010' 0.010' 0.010' 14 0 0.010' 0.010' 0.010' 15 0 0.010' 0.010' 0.010' 14 0 0.010' 0.010' 0.010' 15 0.010' 0.010' 0.010' 0.010' 16 0.010' 0.010'	3 - ::					41,4	B-26:3'		Well	
5 SP 90 8.8 B-26:6' 9 SILTY SAND; gray; wet; mostly silt with some sand 90 B-26:RGW 0.010' 10 Silt TY SAND; gray; wet; mostly silt with some sand 90 B-26:RGW 0.010' 11 End of Borehole 90 B-26:RGW 0.010' 12 End of Borehole 90 0.010' 13 Image: sand 90 Image: sand 90 14 Image: sand 90 Image: sand 90 Image: sand 0.010' 14 Image: sand Image: s									PV	
6 90 8.8 B-26:6' 7 8 90 8.8 B-26:RGW 9 90 90 90 8.8 B-26:RGW 10 11 15 16 16 16 16 11 15 16 16 16 16 16 16 18 19 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10	4 -									
6 90 8.8 B-26:6' 7 8 90 8.8 B-26:RGW 9 90 8.8 B-26:RGW 0.010' 10 11 11 11 11 11 12 End of Borehole 11 11 11 11 11 12 End of Borehole 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11	5	¢р								
7 8 9 B-26:RGW 0.010" 9 90 90 90 90 90 11 11 11 11 11 12 End of Borehole 11 11 13 14 15 16 16 17 18 19 19 20 10 10		. J F								
7 8 9 B-26:RGW 0.010" 9 SILTY SAND; gray; wet; mostly silt with some sand 90 90 0.010" 10 SM 90 90 90 11 End of Borehole 90 90 0.010" 13 End of Borehole 90 90 90 14 15 10 10 10 18 10 10 10 10 19 20 10 10 10	6 -				90	8.8	B-26:6'			
8										
90 10 11 12 End of Borehole 13 14 15 16 17 18 19 20 0.010 ⁴ 90 90 90 90 90 90 90 90 90 90	7 -									
9 SILTY SAND; gray; wet; mostly silt with some sand 90 10 SILTY SAND; gray; wet; mostly silt with some sand 90 11 End of Borehole 91 13 End of Borehole 10 14 15 14 15 16 17 18 19 10 10 20 10 10 10										
9 SILTY SAND; gray; wet; mostly silt with some sand 90 10 - Sind 90 11 - - - 12 End of Borehole - - 13 - - - 14 - - - 15 - - - 16 - - - 17 - - - 18 - - - 19 - - - 20 - - -	8 -[.:						B-26:RGW		0.0408	
10 - SLL T SAND, gray, wet, mostly sit with some sand 90 11 - - 12 End of Borehole 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 -	9		011 777 0 1115	4 14 14 14					0.010	
10 - 90 90 11 - End of Borehole 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 -				wet; mostly silt with some						
12 End of Borehole 13 End of Borehole 14 End of Borehole 15 Image: Comparison of the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second seco	10 -				90					
12 End of Borehole 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 -		SM :								
13 14 14 15 16 17 18 19 20 1	11 –									
13 14 14 15 16 17 18 19 20	12			· · · · · · · · · · · · · · · · · · ·						
14 15 16 17 18 19 20	14		End	of Borehole						
14 15 16 17 18 19 20	13 -									
15 16 17 18 19 20	-									
16	14 -									
16 17 18 19 20	15 -									
17 - 18 - 19 - 20 -	_									
	10 -									
	17 -									
19 - 20 -	_									
20	_									
	_									
NOTES:										
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	N V A R ⁻	IRONMEN TNERSIN	TAL C	BC	ORING	ID: B-27				
SITE ADDRE	SS		· · · · · · · · · · · · · · · · · · ·	CLI	ENT:		CASING M	ATERIAL AND SIZE:		
825 South	Dako	ota St. Seattle, W/	4	Wa	shingto	n Industries	Temp: 3/	4" PVC		
DRILLING CC	ONTRA	ACTOR:	· · · · · · · · · · · · · · · · · · ·		DJECT #:		SCREEN SIZE:			
Holocene I	Drillir	ng Inc.		640	001		0.010"- S	lot		
DRILLING EC	QUIPMI	ENT:		DAT	ΓE:		SCREEN INTERVAL: 5'-10'			
AMS DPT I	LAR			3/2	0/14		FILTER PACK:			
DRILLING ME	ETHOD	D:		GRO	OUND SUF	RFACE ELEV. FT AMSL:				
Direct-Pus	h Teo	chnology					Native			
LOGGED BY:			BOREHOLE SIZE:		TAL DEPTH	ł:		CK INTERVAL:		
E. Caddey				12'	1	1	n/a	<u></u>		
Depth (feet)	cs	USCS name: Col	c ription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	ell Construction		
0_	-	0-4" Concrete Sub-grade Gravel and	d Sand	-	5000+	B-27:0.5'				
1		POORLY-GRADED S	AND; gray; damp; medium							
2 -		sand with some silt; so	ome bricks at top of unit	50						
								Temporary		
3 -					30.3	B-27:3'		Well 3/4"		
								PVC		
4 -										
5 - S F	P									
6 -				80	17.5	B-27:6'				
						0 21.0				
7										
-										
8										
								0.010" Slo		
9		SILTY SAND; gray; we sand	et; mostly silt with some	7						
10 -		ound		95		B-27:RGW				
SN										
11 -										
-										
12		End of	Borehole	1						
13 -										
14 -										
-										
15 -										
-										
16 -										
17 -										
18 -										
_										
19 -										
20										
NOTES:							L			
								1 of 1		
							_	1011		

	VIRONMEN RTNERSIN	TAL C	BC	ORING	ID: B-28						
SITE ADDRESS			CLI	ENT:		CASING M	ATERIAL AND SIZE:				
825 South Da	kota St. Seattle, W/	4	Wa	shingto	n Industries						
DRILLING CONT				DJECT #:		SCREEN S					
Holocene Dri			640			0.010"- S					
			DAT								
AMS DPT LAI				0/14							
DRILLING METH Direct-Push T			GRU	JUND SUP	RFACE ELEV. FT AMSL:						
LOGGED BY:	eciliology	BOREHOLE SIZE:	тот	ALDEPTH	4:	Native FILTER PACK INTERVAL:					
E. Caddey			12'			n/a					
Depth (feet)	USCS name: Co	o cription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	ell Construction				
0	Sub-grade gravel and	sand		21.9	B-28:0.5'						
1 2	POORLY-GRADED S coarse sand with grav	AND WITH GRAVEL; gray; el	5	21.5	6-20.0.0		Temporary Well 3/4" PVC				
4 - 5 - SP	· · · · · · · · · · · · · · · · · · ·						FVG				
6	· · · · · · · · · · · · · · · · · · ·		10	23.7	B-28:6'						
9	with some sand	et; low plasticity; mostly silt			B-28:RGW		0.010" Slo				
12	End of	Borehole									
13 -											
-											
14 -											
15 -											
_											
16 -											
17											
17 -											
18 -											
-											
19 -											
20											
NOTES:							1 of 1				
							1011				

	VIRONMEN RTNERS IN	C	BC	RING	D: B-29			
SITE ADDRESS			CLIE	ENT:		CASING MA	TERIAL AND SIZE:	
825 South Da	kota St. Seattle, W	Ά	Wa	shingtor	n Industries	Temp: 3/4	4" PVC	
DRILLING CONT	RACTOR:		PRC	PROJECT #:		SCREEN SIZE:		
Holocene Dri	lling Inc.		640	01		0.010"- Slot		
			DAT	E:		SCREEN IN	TERVAL:	
AMS DPT LA	R		3/20/14 5'-10'					
DRILLING METH			GRC	OUND SUR	FACE ELEV. FT AMSL:	FILTER PAC	CK:	
Direct-Push 1	echnology					Native		
LOGGED BY:		BOREHOLE SIZE:		AL DEPTH	:		CK INTERVAL:	
E. Caddey			<mark>12'</mark>			n/a		
Depth (feet)	USCS name: Co	scription blor; Moisture; Density; cy; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	ll Construction	
0	0-4" Concrete				D 00:0 51			
1 +	Sub-grade Gravel ar			43.3	B-29:0.5'			
	POORLY-GRADED sand with some silt:	SAND; gray; damp; medium some bricks at top of unit						
2 -			90					
-	•.						Temporary	
3 -				20.2	B-29:3'		Well 3/4" PVC	
4 -							FVG	
	•							
5 - SP	:							
6 -			90	4.9	B-29:6'			
_								
7								
8	•.							
	•						0.010" Slo	
9	SILTY SAND: grav: w	vet; mostly silt with some	-	1	B-29:RGW			
	sand	inour on mursonic						
10 –			95					
11 -								
12 -		(D						
_	End c	of Borehole						
13 -								
-								
14 -								
15 -								
-								
16 -								
-								
17 -								
18 -								
-								
19 -								
20								
						1		
NOTES:								
							1 of 1	

e pi	PAR	IRONMEN TNERSIN	C	BC	DRING I	D: B-30				
	DDRESS			CLIE	ENT:		CASING MAT	ERIAL AND SIZE:		
825 S	South Dak	ota St. Seattle, W	Ά	Wa	shington	Industries	Temp: 3/4	" PVC		
	ING CONTR				DJECT #:		SCREEN SIZ			
	CENE Drilli		<u> </u>	640			0.010"- Sic			
	DPT LAR			DATE: 3/20/14			SCREEN INTERVAL: 5'-10'			
	ING METHO					FACE ELEV. FT AMSL:		FILTER PACK:		
		chnology					Native			
LOGGI	ED BY:		BOREHOLE SIZE:		AL DEPTH:		FILTER PACK INTERVAL:			
E. Ca	ddey	-	·	12'			n/a			
Depth (feet)	USCS	USCS name: C	scription olor; Moisture; Density; cy; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Well	Construction		
0	0-4" Concrete Sub-grade Gravel and Sand		nd Sand		4.8	B-30:0.5'				
1 -			SAND; gray; damp; medium	-		2 00.010				
_		sand with some silt;	some bricks at top of unit							
2 -				50				Temporary		
3 -					30	B-30:3'		Well 3/4"		
_								PVC		
4 -										
5 -	SP									
-										
6 -				95	9.6	B-30:6'				
7 -										
8 -				$\left - \right $						
_								0.010" Slo		
9 -		SILTY SAND; gray; v sand	vet; mostly silt with some							
10 -				90		B-30:RGW				
_	SM.									
11 -										
12 -		T a d a	of Porcholo							
-			of Borehole							
13 -										
14 -										
-										
15 -										
16 -										
47										
17 -										
18 -										
-										
19 -										
20		-				- · ·				
NOT	ES:									
								1 of 1		

25 South Dakota St. Seattle, WA Washington Industries Temp: 3/4" PVC RILLING GONTRACTOR: locicene Drilling Inc. PROJECT #: SCREEN NIZE: SOCREEN NIZE: SOCREEN NITERVAL: 320014 SOCREEN NIZE: SOCREEN NITERVAL: 320014 SOCREEN NITERVAL: SOCREEN NITERVAL: 320014 SOCREEN NITERVAL: SOCREEN NITERVAL: 320014 SOCREEN NITERVAL: SOCREEN NITERVAL: 320014 SOCREEN NITERVAL: Native SocreEN NITERVAL: Native Socr		IRONMEN TNERS IN	TAL C	BC	DRING I	D: B-31					
BILLING CONTRACTOR PROJECT #: 64001 SCREEN XIZE: D.010* SIGE ILLING CONTRACTOR DATE: SCREEN XIZE: D.010* SIGE MSD PT LAR J20/14 5'-10* MILLING METHOD: GROUND SURFACE ELEV.FT AMSL: FILTER PACK: Mative Treact-Push Technology BOREHOLE SIZE: TOTAL DEPTH: Caddey TOTAL DEPTH: Native Social Direct-Push Technology BOREHOLE SIZE: TOTAL DEPTH: 0 Description Plastory, Diatency, EPI description Plastory, Diatency, EPI description Baskory, Diatency, EPI description, EPI description Baskory, Baskory, Berlewich, Bricks and gravel: 11.1 B-31:0.5' 1 - Sill T WITH SAND; gray damp; medium dense; medium plastory, mostly sill with minor sand damp; mostly medium sand with few sill 95 4.1 B-31:3' 7 - - - - - 7 - - - - - 8 - - - - - 10 - - - - - 11 - - - - - 11 - - - - - 11 - - - - - 12 - - - -	SITE ADDRESS			CLIE	ENT:		CASING M	IATERIAL AND SIZE:			
Odocene Drilling Inc. 64001 D.010": Slot RILLING COURMENT: J20/14 SCREENINTERVAL: MB DPT LAR 3/20/14 SCREENINTERVAL: RILLING RETHOD: GROUND SURFACE ELEV. FT AMSL: Native Caddey Description FILTER PACK INTERVAL: Caddey Description FILTER PACK INTERVAL: Caddey Description FILTER PACK INTERVAL: 0 USCS Description FILTER PACK INTERVAL: 1 Description FILTER PACK INTERVAL: Native 2 USCS Description FILTER PACK INTERVAL: 1 Description FILTER PACK INTERVAL: Native 2 USCS Description FILTER PACK INTERVAL: 3 B-31:05' Well Construction FILTER PACK INTERVAL: 4 SPE SPE FILTER PACK INTERVAL: 4 SPE SPE SPE SPE 6 SPE SPE SPE SPE 6 SPE SPE SPE SPE 6 SPE SILTY SAND: gray. wet, medium dense, medium dense, medium dense, medium dense, medium dense, medium dense, medium dense, medium dense, medium dense, medium dense, medium dense, medium dense, medium dense, medium dense, medium dense, medium dense, medium dense, medium den			٩			n Industries	Temp: 3/	/4" PVC			
NILLING EQUIPMENT: DATE: SCREEN INTERVAL: MSD PT LAR 370/14 5-10' MSD PT LAR 370/14 5-10' INLLING METHOD: GROUND SURFACE ELEV.FT AMSL: HITER PACK. Image: State of the stating of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state											
MS DPT LAR 3/2014 5'-10' RILLING METHOD: GROUND SUFFACE ELEV. FT ANS:: FILTER PACK. Text-Push Technology BOREHOLE SIZE: TOTAL DEPTH: na Caddey Description effective PILTER PACK. USCS USCS Description effective USCS USCS Description effective USCS USCS Description effective USCS Description effective ftppp Gravel surface, 22 debits, bioks and gravel; and bioxids, mostly sit with minor sand effective ftppp 3 SILT WTH SAND; gray damp; medium dense, medium dense, medium dense, medium sand with few silt effective s 6 POORLV-GRADED SAND; gray and brown; damp, medium dense, medium dense, some sand; contains some shell rayments effective effective 7 SF SF B-31:8' effective 0.010'' Sto 11 B-31:6' effective effective effective effective 12 SILT Y SAND; gray, wet, medium dense, medium sand; contains some send; contains some shell rayments effective effective effective 13 SILT Y SAND; gray, wet, medium dense, medium some send; contains some send; contains some send; contains some shell rayments effective effective <											
RILLING METHOD: Irect-Push Technology OCGED BY Caddey BOREHOLE SIZE: TOTAL DEPTH: 12 1 1 1 1 1 1 1 1 1 1 1 1 1							5'-10'				
Native Native DOGED DY: Caddey Colspan="2">OTAL DEPTH: 12" Colspan="2">OTAL DEPTH: 12" OTAL DEPTH: 12" OSEE DESCIPTION USCS DEPTH: 11" DESCIPTION 11" Sample Well Construction Sample Well Construction Sample Well Construction Sample Sample Well Construction Sample PIDE Sample POORLY-GRADED SAND, gray and brown; damp, mostly medium sand with few silt Sample B-31:RGW B-31:RGW B-31:RGW <						FACE ELEV. FT AMSL:		CK:			
DCGED BY: BOREHOLE SIZE: TOTAL DEPTH: FILTER PACK INTERVAL: 0 USCS medicing Color, Meditine, Density, Plasticity, Diatency, EPI description, Other some black staining medicing Description (ppm) sample Well Construction 0 Gravel surface, C2 debrs, bricks and gravel; some black staining 11.1 B-31:0.5' Well Construction 1 SILT WITH SAND; gray; damp; medium dense; medium plasticity; mostly silt with minor sand damp; mostly medium sand with few silt 11.1 B-31:0.5' Image: Calor Mediting Silt With Silt Well Silt Well Silt Well Silt Well Silt Silt With minor sand damp; mostly medium sand with few silt 95 4.1 B-31:6' 1 Silt With Silt Silt With minor sand; contains some shell fragments some shell fragments 95 4.1 B-31:RGW 0.010'' Slo 1 Silt With minor sand; contains 96 B-31:RGW Image: Calor Mediting Silt Well Silt With minor sand; contains 96											
Operation Description Massier Pipe Sample Well Construction 0 Gravel surface, 0-2 debris, bricks and gravel; some black staining 11.1 B-31:0.5' Image: Construction 3 Gravel surface, 0-2 debris, bricks and gravel; some black staining 11.1 B-31:0.5' Image: Construction 3 SILT WITH SAND, gray, damp; medium dense; medium plasticity; mostly silt with minor sand 60 3 B-31:3' Temporan; Well 3/4' 4 POORLY-GRADED SAND; gray, damp; medium dense; medium plasticity; mostly silt with minor sand 95 4.1 B-31:6' Image: Construction 6 SP Silt TWTH SAND; gray, weit; medium dense; medium plasticity; mostly silt with minor sand; contains some shell fragments 95 4.1 B-31:RGW 0.010'' Slo 11 Silt TW SAND; gray, weit; medium dense; medium plasticity; mostly silt with minor sand; contains 95 B-31:RGW Image: Contains 0.010'' Slo 12 Silt TW SAND; gray, weit; medium dense; medium plasticity; mostly silt with minor sand; contains 95 B-31:RGW Image: Contains Image: Contains 13 Image: Contains 14 Image: Contains Image: Contains Image: Contains Im	OGGED BY:		BOREHOLE SIZE:		AL DEPTH			CK INTERVAL:			
Cravel surface; 0-2 debris, bricks and gravel; some black staining 11.1 B-31:0.5' 1 SILT WITH SAND; gray; damp; medium dense; medium plasticity; mostly silt with minor sand 60 3 B-31:3' 4 POORLY-GRADED SAND; gray and brown; damp; mestly medium sand with few silt 95 4.1 B-31:6' 6 95 4.1 B-31:6' 0.010'' Sio 9 95 8-31:RGW 0.010'' Sio 11 Subtry SAND; gray; wet; medium dense; medium plasticity; mostly silt with minor sand; contains pome shell fragments 95 B-31:RGW				12'			n/a				
Cravel surface; 0-2 debris, bricks and gravel; some black staining 11.1 B-31:0.5' 1 SILT WITH SAND; gray; damp; medium dense; medium plasticity; mostly silt with minor sand 60 3 B-31:3' 4 POORLY-GRADED SAND; gray and brown; damp; mestly medium sand with few silt 95 4.1 B-31:6' 6 95 4.1 B-31:6' 0.010'' Sio 9 95 8-31:RGW 0.010'' Sio 11 Subtry SAND; gray; wet; medium dense; medium plasticity; mostly silt with minor sand; contains pome shell fragments 95 B-31:RGW	Depth (feet)	USCS name: Co	lor: Moisture: Density:	Interval & % Recover	PID (ppm)	Sample	We	ell Construction			
3 ML B-31:3' Temporary Well 3/4" 4 POORLY-GRADED SAND; gray and brown; damp; mostly medium sand with few silt 95 4.1 B-31:6' 5 9 95 4.1 B-31:6' 0.010" Slo 9 9 9 9 0.010" Slo 10 95 4.1 B-31:RGW 0.010" Slo 11 SILTY SAND; gray, welt, medium dense; medium plasticity; mostly silt with minor sand; contains some shell fragments 95 B-31:RGW	0		ebris, bricks and gravel;			B-31:0.5'					
5 Gamp, mostly medium sand with few sit 6 95 7 SP 8 95 9 SILTY SAND; gray wet, medium dense, medium plasticity, mostly sit with minor sand; contains some shell fragments 10 SILTY SAND; gray; wet, medium dense, medium plasticity, mostly sit with minor sand; contains 11 SILTY SAND; gray; wet, medium dense, medium plasticity, mostly sit with minor sand; contains 12 End of Borehole 13 End of Borehole 14 Interview 15 Interview 16 Interview 17 Interview 18 Interview 19 Interview	-	SILT WITH SAND; gr medium plasticity; mo	ay; damp; medium dense; stly silt with minor sand	60	3	B-31:3'					
9 - Start SAND: gray; wet; medium dense; medium plasticity; mostly silt with minor sand; contains some shell fragments End of Borehole 13 - End of Borehole 14 - 15 - 16 - 17 - 18 - 19 - 10 - 10 - 10 - 10 - 10 - 10 - 10	5 - 6 - 7 - SP	POORLY-GRADED S damp; mostly medium	AND; gray and brown; a sand with few silt	95	4.1	B-31:6'					
	10 - 11 - 11 - SM	plasticity; mostly silt w some shell fragments	ith minor sand; contains	95		B-31:RGW	0.010				
	_										
	16 - - 17 -										
	- 18 -										
	19 -										
	NOTES:				<u> </u>		<u> </u>				

	IRONMEN TNERSIN	TAL C	BC	RING I	D: B-32A			
SITE ADDRESS			CLIE	ENT:		CASING MA	TERIAL AND SIZE:	
825 South Dak	ota St. Seattle, W	4	Wa	shington	Industries	Temp: 3/4" PVC		
DRILLING CONTR								
Holocene Drill			640	01		0.010"- Slot SCREEN INTERVAL: 5'-10'		
DRILLING EQUIPM	MENT:		DAT	E:				
AMS DPT LAR			3/2	0/14				
DRILLING METHO	D:		GRC	OUND SUR	FACE ELEV. FT AMSL:	FILTER PAC	K:	
Direct-Push Te	echnology					Native		
LOGGED BY:		BOREHOLE SIZE:	1	AL DEPTH	:	FILTER PAC	K INTERVAL:	
E. Caddey	1		12'		n/a			
Depth (feet)	Des USCS name; Co Plasticity; Dilatenc	scription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Wel	I Construction	
0 0 0 0 0 1 0 0 0 0 2 - SW-SM	WELL-GRADED SAM medium sand with mi	ID WITH SILT; gray; wet; nor silt		2.9	B-32A:0.5'			
	POORLY-GRADED S damp; medium sand	SAND; brown and gray; with trace silt		2.3	B-32A:3'		Temporary Well 3/4" PVC	
6 - SP 7 -				1.8	B-32A:6'			
8 9 10 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	WELL-GRADED SAN medium sand with mi shells	ID WITH SILT; gray; wet; nor silt, contains broken			B-32A:RGW		0.010" Slo	
12 <u>-</u> 13 -								
14 -								
15 -								
16 - - 17 -								
18 -								
19 -								
20 NOTES:						<u> </u>	1 of 1	

e DI	PAR	IRONMENTAL TNERS INC	BC	RING I	D: B-32			
SITE A	DDRESS		CLIE	ENT:		CASING MAT	ERIAL AND SIZE:	
320 S	outh Ada	ms	Wa	shingtor	n Industries	Temp: 3/4	" PVC	
ORILLI	NG CONTR	ACTOR:		DJECT #:		SCREEN SIZ		
loloc	ene Drilli	ng Inc.	640	01.1		0.010"- Slot SCREEN INTERVAL:		
RILLI	NG EQUIPN	ENT:	DAT	E:				
MS	DPT LAR		Jul	y 24, 201	4	12'-15' and	1 16'-18'	
RILLI	NG METHO	D:	GRO	OUND SUR	FACE ELEV. FT AMSL:	FILTER PAC	< :	
Direc	t-Push Te	chnology				Native		
	ED BY:	BOREHOLE SI		AL DEPTH	:	FILTER PAC	KINTERVAL:	
<u>. Ad</u>	dis		18'			n/a		
Depth (feet)	USCS	Description USCS name; Color; Moisture; Der Plasticity; Dilatency; EPI description	nsity; ; Other ; Other	PID (ppm)	Sample	Well	Construction	
0		Concrete		0.1	B-32:0.5'			
1 - - 2 -		POORLY-GRADED SAND; brown; dar fine sand with trace gravel	np; mostly	0.1	B-32.0.3			
-			15					
3 -	SP			0.6	B-32:3'			
-	JF							
4 -				0.3				
- 5 -								
5_							2	
6 - - 7 -	SP SM	POORLY-GRADED SAND WITH SILT brown; moist; mostly fine sand with few organics	; dark v silt, few	0.6	B-32:6'		Temporar Wells 3/4 PVC	
8 -	SP	POORLY-GRADED SAND; brown; dar	mp; mostly	1				
9 -	SPISM	fine sand with trace gravel POORLY-GRADED SAND WITH SILT brown; moist; mostly fine sand with few organics	v silt, few	0.1	B-32:9'			
10 - -		POORLY-GRADED SAND, dark brown mostly fine to medium sand	n; damp; 95	0				
11 -				0.1				
- 12 -				0.1 0.5	B-32:12'			
· -					0.12			
13 -								
-	SP		80	0.6				
14 -								
- 15 -				0.2	B-32:15'		0.010" Slo 12'-15' and	
- 10				0.2	D-32.10		12-15 and 16'-18'	
16 -								
-			100					
17 -								
-								
18 -		End of Borehole		1	B-32:18'			
- 19 -								
_								
20								
NO	FES: B-32	2:W-S screened 12'-15'; B-32: W	-D screened 1	6'-18'				
							1 of 1	

edi	PAR	IRONMEN TNERSIN	TAL C	во	RING II	D: B-33		
SITE A	DDRESS			CLIE	INT:		CASING	MATERIAL AND SIZE:
		ms St. Seattle, W	A			Industries		3/4" PVC
	NG CONTRA			-	JECT #:		SCREEN	
Holoc	ene Drilli	Drilling Inc. 64001.1				0.010"- Slot		
	NG EQUIPM			DAT	E:		SCREEN	INTERVAL:
AMS I	OPT LAR				4	12'-15'		
DRILLII	NG METHO	D:				ACE ELEV. FT AMSL:	FILTER P	ACK:
Direct	-Push Te	chnology					Native	
LOGGE			BOREHOLE SIZE:	тот	AL DEPTH:		FILTER P	ACK INTERVAL:
K. Ad	dis			15'			n/a	
Depth (feet)	USCS	Des USCS name; Co Plasticity; Dilatenc	scription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	w N	/ell Construction
0		Concrete			0.1	B-33:0.5'		
1 -		POORLY-GRADED S fine sand with trace g	SAND; brown; damp; mostly ravel			D-33.0.3		
2 - - 3 -				90	0.1			
4 -	SP				0.5			
5 -					0.1	B-33:5'		Temporary
6 - - 7 -				70	0.2			Well 3/4" PVC
/ 8		POORLY-GRADED	SAND WITH SILT; dark		0.1			
- 9 -	SP SM	brown; moist; mostly	fine to medium sand with silt SAND; dark brown; moist;					
10 - - 11 -		mostly fine to mediun seam; 14.7': 1" silt se	n sand; 12': 2" silty sand	100	1.1			
12 - - 13 -	SP				1.6	B-33:12'		
14 -					0.5			0.010"- Slot
15 -		End c	of Borehole		0.3	B-33W-S:		
16 - - 17 -								
- 18								
19 -								
20 NOT	ES:							1 of 1

edi	PAR	IRONMENTAL TNERS INC	BC	RING I	D: B-34			
SITE AI	DDRESS		CLIE	ENT:		CASING MA	TERIAL AND SIZE:	
820 S	outh Ada	ms St. Seattle, WA	Wa	shington	Industries	Temp: 3/4	PVC	
DRILLI	NG CONTR/	ACTOR:	PRC	JECT #:		SCREEN SIZE: 0.010"- Slot		
Holoc	ene Drilli	ng Inc.	640	01.1				
DRILLI	NG EQUIPM	ENT:	DAT	E:		SCREEN IN	TERVAL:	
AMS [OPT LAR		Jul	y 24, 201	4	13'-15' an	d 16'-18'	
DRILLI	NG METHO	D:	GRO	OUND SURI	FACE ELEV. FT AMSL:	FILTER PAC	K:	
Direct	-Push Te	chnology				Native		
LOGGE		BOREHOLE SIZE:		AL DEPTH	:		K INTERVAL:	
K. Ad	ais		19'			n/a		
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Wel	l Construction	
0	SP	POORLY-GRADED SAND; strong brown; damp; mostly fine to medium sand with few gravel POORLY-GRADED SAND; dark brown; damp; mostly fine to medium sand with few gravel		0.8	B-34:0.5' B-34:5'		2	
6 7 8 9 10 11	эг SP	POORLY-GRADED SAND; dark brown; damp; mostly fine to medium sand, becomes wet at 13'		2.2 0.5 0.6			Temporary Wells 3/4" PVC	
12 -				0.4	B-34:12'			
13 - - 14 -		SILT WITH SAND; dark gray; wet; mostly silt wit		2.4	B-34:13'			
15 -				0.3			0.010" Slot	
16 - - 17 -	мц			0.1	B-34:16'		13-15' and 16-18'	
- 18 - -				0.1	B-34:18'			
19 - 20	SM	SILTY SAND; dark gray; wet; mostly fine to medium sand with some silt and minor shells End of Borehole at 19'		0				
NOT	ES: B-34	I: W-S screened 13'-15', B-34: W-D scre	ened 1	16'-18'			1 of 1	

	VIRONMEI RTNERS IN	N T A L I C	BO	RING I	D: B-35			
SITE ADDRES	3		CLIE	ENT:		CASING	MATERIAL AND SIZE:	
820 South A	dams St. Seattle, V	VA	Wa	shington	Industries	Temp	: 3/4" PVC	
DRILLING COM				JECT #:		SCREE		
Holocene D	rilling Inc.		640	01.1		0.010"- Slot		
DRILLING EQU	IPMENT:		DATE: SCREEN INTERVAL: July 24, 2014 12'-15'				N INTERVAL:	
AMS DPT L	AR		July	y 24, 201	4	12'-15	•	
DRILLING MET	HOD:		GRC	OUND SURI	FACE ELEV. FT AMSL:	FILTER	PACK:	
Direct-Push	Technology					Native)	
LOGGED BY:		BOREHOLE SIZE:		AL DEPTH:			PACK INTERVAL:	
K. Addis			15'			n/a		
Depth (feet)	De S USCS name; C Plasticity; Dilater	escription Color; Moisture; Density; hcy; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well Construction	
0	Concrete			0.1	B-34:0.5'			
1 - 2 - 3 -	POORLY-GRADED mostly fine to mediu	SAND; dark brown; damp; ım sand	60		2 0 1.0.0			
4 - SP 5		SAND; brown; moist; mostly	70	0.7	B-35:5'		Temporary Well 3/4" PVC	
8 - 9 - 10 - 11 - 12 -	fine to medium sand		80	1.2	B-35:12'			
13 - 14 - 15 - -	medium sand with r	brown; wet; mostly fine to ninor silt of Borehole	70				0.010"- Slo	
16 - - 17 -								
18 - 19 - 20 -								
NOTES:							1 of 1	

PD	E N V P A R	IRONMEN TNERSIN	TAL C	BC	RING I	D: B-36				
SITE ADI				CLIE	INT:		CASIN	G MATI	ERIAL AND SIZE:	
820 So	uth Ada	ms St. Seattle, W	Α	Wa	shinaton	Industries	Temp	: 3/4"	PVC	
	G CONTRA							SCREEN SIZE:		
Holoce	ne Drilli	ng Inc.		64001.1			64001.1 0.010"- Slot			t
DRILLIN	G EQUIPM	ENT:		DAT	E:		SCREE	N INTE	ERVAL:	
AMS D	PT LAR			Jul	y 24, 201	4	15'-17	15'-17'		
DRILLIN	G METHO	D:		GROUND SURFACE ELEV. FT AMSL:			FILTER PACK:			
Direct-	Push Te	chnology					Native	e		
LOGGED			BOREHOLE SIZE:		AL DEPTH:			PACK	INTERVAL:	
K. Add	is			18'			n/a			
Depth (feet)	USCS	Des USCS name; Co Plasticity; Dilateno	Scription blor; Moisture; Density; ;y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well	Construction	
0		Concrete								
1 5	GP	GRAVEL FILL; dry; r	o odor							
		Concrete		1						
2 -		POORLY-GRADED	SAND; brown; damp; mostly	40	2.2	B-36:0.5'				
-{.:		fine to medium sand	o, a 12, oronni, damp, moony							
3 –										
					0.7	D 20.5				
4 -[.:					0.7	B-36:5'				
5	SP									
· .	01									
6				80	0.6					
-1:										
7 - : .					0.8				Temporary Well 3/4"	
8	SM	SILTY SAND; dark b sand with minor silt	rown; moist; fine to medium		9.5				PVC	
9 –	1,1,1,1,1,1,1,1	POORLY-GRADED	SAND; dark brown; moist;	1						
10 -		mostly fine to mediur	n sand	80	1.4					
11 -				00	1.4					
12	SP				1.3	B-36:12'				
13 -					1.7	B-36:13'				
14 -				60	3.1					
15 -[.										
16 -	SM	SILTY SAND		$\left - \right $	0.4	B-36:16'				
17 -	MH.	ELASTIC SILT; dark	gray	100	0.2				0.010"- Slot	
	SP	POORLY-GRADED	SAND	1		D 00-40	I E			
18		End o	of Borehole		1	B-36:18'				
19 -										
20										
NOTE	ES:								1 of 1	

Ð	E N V P A R	IRONMEN TNERSIN	TAL C	BC	RING I	D: B-37						
SITE ADD				CLIE	INT:		CASING MA	ATERIAL AND SIZE:				
812 Sou	uth Ada	ms St. Seattle, W	Α			Industries	Temp: 3/	4" PVC				
	GCONTR/			_	JECT #:		SCREEN SI					
Holocer	ne Drilli	ng Inc.	64001.1				0.010"- Slot SCREEN INTERVAL: 10'-12'			0.010"- Slot		
DRILLING	EQUIPM	IENT:		DATE: July 24, 2014 GROUND SURFACE ELEV. FT AMSL:								
AMS DF	PT LAR						10'-12'					
ORILLING	METHO	D:					FILTER PACK:					
Direct-F	Push Te	chnology					Native					
OGGED			BOREHOLE SIZE:	TOTAL DEPTH:				CK INTERVAL:				
M. Busk	bee			12'		[n/a					
Depth (feet)	USCS	USCS name; Co Plasticity; Dilateno	Scription blor; Moisture; Density; ;y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	Il Construction				
0		Concrete Dust and G	Bravel									
1 -												
-												
2 -				100								
3 -												
۲_ ا												
4	: : : : : : : :	SII TY SAND brown	; dry; hard; mostly fine sand	+	0.6	B-37:4'						
		with some silt and tra	ace fine gravel					Temporar				
5 -	SM							Well 3/4" PVC				
6				100				PVC				
•		POORLY-GRADED sand; no odor; wet at	SAND; brown; moist; fine	100								
7 -	• • • • •											
-												
8 -												
9 - · · ·	SP				2	B-37:9'						
					2	8.10-0						
10 -				100		B-37:W	_					
-{:-												
11		SILT; gray; wet; silt;	no odor					0.010"- Slo				
1 2 [⊥]	ML											
12	1	End	of Borehole									
13 -												
-												
14 -												
15 –												
16 -												
-												
17 -												
40												
18 -												
19 -												
_												
20												
NOTE	S:											
								1 of 1				

Ð	PAR	IRONMENTAL TNERS INC	BO	RING I	D: B-38				
SITE A	TE ADDRESS I2 South Adams St. Seattle, WA			ENT:		CASING	MATERIAL AND SIZE:		
812 S	outh Ada	ms St. Seattle, WA	Wa	shington	Industries	Temp: 3/4" PVC			
DRILLI	NG CONTRA	ACTOR:	-	JECT #:			SCREEN SIZE:		
Holod	ene Drilli	ng Inc.	640	01.1		0.010"-	Slot		
DRILLI	ING EQUIPM	ENT:	DAT	E:		SCREEN	INTERVAL:		
AMS	DPT LAR		July	y 28, 201	4	10'-12' a	and 14'-16'		
DRILLI	NG METHO	D:	GRC	OUND SURF	FACE ELEV. FT AMSL:	FILTER P	ACK:		
Direc	t-Push Te	chnology				Native			
	ED BY:	BOREHOLE SIZE:		AL DEPTH:			ACK INTERVAL:		
<u>M. Bu</u>			<mark>16'</mark> >			n/a			
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	W	/ell Construction		
0	GP	GRAVEL FILL; dry; no odor							
- 1 -	ML	SILT; brown; dry; silt							
-	GP	GRAVEL FILL; dry; no odor SILT; dark brown; silty gravel							
2 -		SILT, UAIN DIOWIT, SILLY YIAVEI	60						
-				0.8	B-38:0.5'				
3 -	╎╎╎╎╎╎	GRAVELLY SILT; brown; moist; mostly silt with							
- 4 -		some gravel		0.7	B-38:4'				
-	NIL			0.7	D-30.4		2		
5 -							Temporary		
-							Wells 3/4" PVC		
6 -		POORLY-GRADED SAND; brown; moist; loose;	90				1.10		
-		fine sand							
7 -									
- 8									
-	SP								
9 -				1.8	B-38:9'				
-									
10 -			100						
-							_		
11 -		SILT; gray; wet; soft; mostly silt with trace shells and fine sand							
12 -		and the sand		1.2	B-38:W-S;		_		
					B-38:12'		0.010" Slot:		
13 -	$\left\ \left\ \right\ \right\ \left\ \right\ $						10'-12' and		
-	ML						14'-16'		
14 -			100	0.1	B-38:14'				
- 15									
-							-		
16 -		End of Borehole	+	0.1	B-38:16'; B-38:W-D				
-	-				D-30.VV-D				
17 -									
-]								
18 - -									
19 -									
_									
20									
NO	IES: B-38	3: W-S screened 10'-12'; B-38: W-D scree	ened 1	4'-16'					
							1 of 1		

PARTNERS INC				D: B-39	
SITE ADDRESS			ENT:		CASING MATERIAL AND SIZE:
12 South Adams St. Seattle, WA			-	Industries	
RILLING CONTRACTOR:			DJECT #:		SCREEN SIZE:
Holocene Drilli			001.1		
DRILLING EQUIPM	ENT:	DAT			SCREEN INTERVAL:
AMS DPT LAR			y 29, 201		
		GR	OUND SURI	FACE ELEV. FT AMSL:	FILTER PACK:
Direct-Push Te					
LOGGED BY: M. Busbee	BOREHOLE S	3.5	TAL DEPTH: •	:	FILTER PACK INTERVAL:
Depth (feet)	Description USCS name; Color; Moisture; De Plasticity; Dilatency; EPI description	n; Other	PID (ppm)	Sample	Well Construction
0 1 - 2 - 3 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 -	Sub-Base Gravel SILTY SAND; brown; dry; loose; most and some silt; no odor	ly fine sand 50	0.4	B-39:0.5'	No Well
19 - 20 NOTES:					1 of 1

PARTNERS INC			BC	RING I	D: B-40			
SITE ADDRESS	ADDRESS			ENT:		CASING M	IATERIAL AND SIZE:	
ITE ADDRESS 12 South Adams St. Seattle, WA RILLING CONTRACTOR:				shington	Industries	Temp: 3/4" PVC SCREEN SIZE: 0.010"- Slot		
DRILLING CONTR/	LLING CONTRACTOR: Iocene Drilling Inc.							
Holocene Drilli								
DRILLING EQUIPM	ILLING EQUIPMENT:					SCREEN I	NTERVAL:	
MS DPT LAR				y 29, 201	4	10'-12'		
DRILLING METHO	D:		GRC	OUND SURI	FACE ELEV. FT AMSL:	FILTER PA	ACK:	
Direct-Push Te	chnology					Native		
Direct-Push Technology OGGED BY: BOREHOLE SIZE:				AL DEPTH:	:		ACK INTERVAL:	
M. Busbee			12'			n/a		
Depth (feet)	USCS name; Cole Plasticity; Dilatency	cription or; Moisture; Density; ; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	w	ellConstruction	
0 1	some silt; no odor	oose; mostly fine sand with gray; loose; fine gravel	60	0	B-40:0.5' B-40:4'			
5 - ML 6	odor	silt with trace fine sand; no AND; brown; dry; loose; fine 10'	- 90				Temporary Well 3/4" PVC	
9			100	0.5	B-40:9' B-40:W			
11 - ML 12 - ML 13	SILT; gray; wet; soft; s End of	illt; no odor f Borehole					0.010" Slo	
16 – 17 –								
18 - 19 - 20								
NOTES:						1	1 of 1	

PARTNERS INC			BC	RING I	D: B-41		
SITE ADDRESS			CLIENT: Washington Industries				ATERIAL AND SIZE:
812 South Ada	2 South Adams St. Seattle, WA				Industries	Temp: 3/	4" PVC
			PROJECT #: SCREEN SIZE:				
Holocene Drilli	ene Drilling Inc.					0.010"- S	Slot
DRILLING EQUIPN	LLING EQUIPMENT:			E:		SCREEN IN	NTERVAL:
MS DPT LAR			Jul	y 29, 201	4	10'-12'	
RILLING METHOD:				-	FACE ELEV. FT AMSL:	FILTER PA	CK:
Direct-Push Te	chnology					Native	
LOGGED BY:		BOREHOLE SIZE:		AL DEPTH:		FILTER PA	CK INTERVAL:
M. Busbee			12'			n/a	
Depth (feet)	Deso USCS name; Colo Plasticity; Dilatency	cription or; Moisture; Density; ; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	ell Construction
$\begin{array}{c} 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\ 0 \\ - \\$	SILTY GRAVEL; gray gravel with some silt a	and brown; dry; mostly nd trace fine sand; no odor	50	0.9	B-41:0.5'		
4	SILT; gray; moist; soft POORLY-GRADED S 10'	; silt; no odor AND; moist; no odor; wet at	- 50	0.1	B-41:5'		Temporary Well 3/4" PVC
8 - SP 9	SILT; wet; soft; mostly	silt with few clay; no odors	100	0.3	B-41:9' B-41:W		0.010" Slc
12	End of	fBorehole					
16 - - 17 - - 18 - - 19 -							
20 NOTES:							1 of 1

PARTNERS INC			BORING ID: B-42						
SITE ADDRESS	ADDRESS			NT:		CASING MA	TERIAL AND SIZE:		
12 South Adams St. Seattle, WA			Wa	shington	Industries	Temp: 3/4	4" PVC		
DRILLING CONTR/	RILLING CONTRACTOR:			JECT #:		SCREEN SIZE:			
olocene Drilling Inc.			640	01.1		0.010"- S	lot		
RILLING EQUIPMENT:			DAT	E:		SCREEN IN	TERVAL:		
AMS DPT LAR	-			y 28, 201	4	10'-12'			
RILLING METHOD:			GRC	UND SUR	FACE ELEV. FT AMSL:	FILTER PAG	CK:		
irect-Push Technology						Native			
OGGED BY: BOREHOLE SIZE:				AL DEPTH	:		CK INTERVAL:		
M. Busbee			12'			n/a			
Depth (feet)	Des USCS name; Co Plasticity; Dilatenc	scription blor; Moisture; Density; ;y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	Il Construction		
0	Sub-Base Gravel								
1 – SW oʻ	gravel; no odor	ND; brown; dry; few fine							
2 -	GRAVEL FILL; dry; r	io odor	50	0.1	B-42:0.5'				
GP									
3 -									
	SILT; light brown; dry	r; no odor							
4 -							-		
5 - ML							Temporary Well 3/4"		
J_							PVC		
6		SAND; brown; moist; fine	100	2.6	B-42:4'				
-	sand; no odor; wet at	t 10'							
7 -									
-									
8 -									
- SP 9 -				1	B-42:9'				
J				I	D-42.9				
10 -			100		B-42:W	-			
-									
11 + + + + + + + + + + + + + + + + + +	SILT; gray; wet; silt; i	no odor	-				0.010" Slo		
ML									
12	End o	of Borehole							
13 -									
14 -									
-									
15 -									
16 -									
17 -									
-									
18 -									
19 -									
20									
NOTES:									

PARTNERS INC			BC	RING I	D: B-43			
SITE ADDRESS			CLIENT: CASING MATER					
812 South Ada	ims St. Seattle, W	٩	Wa	shington	Industries	Temp: 3/4" PVC		
DRILLING CONTR								
Holocene Drill	ing Inc.		640	01.1		0.010"	- Slot	
DRILLING EQUIPM	RILLING EQUIPMENT:					SCREEM	NINTERVAL:	
AMS DPT LAR			Jul	y 25, 201	4	13'-15'		
DRILLING METHO	D:		GRC	OUND SUR	FACE ELEV. FT AMSL:	FILTER	PACK:	
Direct-Push Te	echnology					Native		
LOGGED BY:		BOREHOLE SIZE:		AL DEPTH	:		PACK INTERVAL:	
M. Busbee			15'		I	n/a		
Depth (feet)	Des USCS name; Co Plasticity; Dilatenc	scription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well Construction	
0 1 2 - 3 - 4 - SP 5 - 6 - 7 - 8 - ML	sand; no odor	SAND; brown; dry; loose; fine own; moist; fine-medium o odor	50	1.1	B-43:1' B-43:6'		Temporary Well 3/4" PVC	
9 - ML 10 - SP 12 - SP 13 - SP 13 - SP 14 - SP 15 - SP 16 - SP 17 - SP 18 - SP 19 - SP	. 13.5'	SAND; brown; moist; h few silt; no odor; wet at	90	0.9	B-43:11.5' B-43:W		0.010" Slot	
20 NOTES:							1 of 1	

PARTNERS INC			во	RING II	D: B-44				
SITE ADDRESS	DRESS CLIENT:					CASING	MATERIAL AND SIZE:		
812 South Ad	12 South Adams St. Seattle, WA				Industries	Temp: 3	Temp: 3/4" PVC		
				JECT #:			SCREEN SIZE:		
Holocene Dril	lolocene Drilling Inc.					0.010"-	Slot		
DRILLING EQUIP	RILLING EQUIPMENT:					SCREEN	INTERVAL:		
MS DPT LAR				y 25, 201	4	14'-16' a	and 17'-19'		
DRILLING METH	DD:		GRC	UND SURF	ACE ELEV. FT AMSL:	FILTER P	ACK:		
Direct-Push T	echnology					Native			
LOGGED BY:		BOREHOLE SIZE:		AL DEPTH:			ACK INTERVAL:		
M. Busbee			19'			n/a			
Depth (feet)	USCS name: Co	scription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	w	/ell Construction		
0 1 - 2 - SP 3 -	POORLY-GRADED mostly fine sand	SAND; brown; dry; loose;	50	2.6	B-44:1'				
4	No Recovery		0				2 Temporary Wells 3/4" PVC		
8 9 10 11 0 5 W		ID; dark brown; dry; loose; ce silt; no odor; wet at 13.5'	60	2.7	B-44:11.5'				
12 -					D 4440				
13 – 14 – O	:		100	0.9	B-44:13'	-	_		
15 - ML	SILT; gray; wet; mosi shells	ly silt trace fine sand and							
16	fine-medium sand wit		+	2	B-44:16'		0.010" Slot: 14'-16' and 17'-19'		
17 - 18 - SM	SILTY SAND; gray; v some silt; no odor	et; fine-coarse sand with	100		B-44:W-S B-44:18.5'				
19 - 20	End c	of Borehole			B-44:10.5				
	⊥ I4: W-S screened 1≀	4'-16'; B-44: W-D scree	ned 1	7'-19'	D-44.VV-D	1	1 of 1		

PARTNERS INC				во	RING I	D: B-45				
SITE AD				ATERIAL AND SIZE:						
812 So	outh Ada	ms St. Seattle, W	A	Wa	shington	Industries	Temp: 3	8/4" PVC		
	IG CONTRA			_	JECT #:		SCREEN			
Holoce	ene Drilli	ng Inc.		640	01.1	Slot				
DRILLIN	IG EQUIPM	IENT:		DAT	E:		SCREEN INTERVAL			
AMS D	PT LAR	•								
DRILLIN	IG METHOI	D:		GRC	OUND SURI	FACE ELEV. FT AMSL:	FILTER P	ACK:		
		chnology					Native			
LOGGEI			BOREHOLE SIZE:		AL DEPTH	:		ACK INTERVAL:		
M. Bus	sbee			<mark>16'</mark> >			n/a			
Depth (feet)	USCS	Des USCS name; Co Plasticity; Dilateno	Scription blor; Moisture; Density; ;y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	w	ell Construction		
0 1 2 3 4		POORLY-GRADED mostly fine sand; no	SAND; brown; dry; loose; odor	80	1.5	B-45:1'				
5 - 6 - 7 - 8 -	SP			100	1.7	B-45:6'		Temporary Well 3/4" PVC		
9 - 10 - 11 - 12 -				100	2	B-45:11.5'				
12 - 13 - 14 - 15 -	ML	SILT; dry; silt with cla	ay and some sand	— 100				0.010" Slot		
16 –		- End (of Borehole	_		B-45:W		Ⅎ		
, -										
17 -										
18 -										
19 -										
_										
20	FO .									
NOT	E9:									
								1 of 1		

7 SP 80 80 80 80 91 10 11 80 4.1 B-46:11.5' 91 91 13 14 0.8 B-46:13' 100 101'' Skit with some fine sand; no odor; moist at 17.5'' 0.1 B-46:W-S; B-46:16'' 100 0.1 B-46:18'; B-46:18'; B-46:W-D 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 </th <th colspan="3">PARTNERS INC</th> <th>во</th> <th>RING II</th> <th>D: B-46</th> <th></th> <th></th>	PARTNERS INC			во	RING II	D: B-46					
DRILLING CONTRACTOR: PROJECT #: SOPER NIZE: OUTO'' Slot Holocene Drilling Inc. DATE: G4001.1 0.010'' Slot MMS DPT LAR July 28, 2014 13'15' and 16'18' ITER PACK MMS DPT LAR BOREHOLE SIZE: GROUND SURFACE ELEV. FT AMSL: HITER PACK MMS DPT LAR BOREHOLE SIZE: TOTAL DEPTH: FILTER PACK MB ubsce 18' na' na' 0 Description Endemony EPI description, Other Status 0 Description Status Sample Well Construction 0 Description Status Sample Well Construction 0 Description Sample Well Construction Sample Well Construction 1 PODRU-VCRADED SMDUSTORM, dy loose; Sample Sample Well Construction 1 Sample Sample Sample Well Construction 1 Sample Sample Sample Sample Sample 1 Sample Sample Sample Sample </th <th>ITE AD</th> <th colspan="5">DDRESS CLIENT: CASING MA</th> <th>MATERIAL AND SIZE:</th>	ITE AD	DDRESS CLIENT: CASING MA					MATERIAL AND SIZE:				
Holocame Drilling Inc. 64001.1 0.010*-Siot DRILLING EQUIPMENT: July 28, 2014 13:15' and 16*-18' SPELLING METHOD: Image: Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Se	12 So	outh Ada	ms St. Seattle, WA	A Contraction of the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second seco	Wa	shington	Industries	Temp: 3	Temp: 3/4" PVC		
DRILLING EQUIPMENT: DATE: SCREEN INTERVAL: AMS DPT LAR July 28, 2014 13-15" and 16'-16" DITEC-Push Technology GROUND SURFACE ELEV.FT AMSL: 13-15" and 16'-16" DITEC-Push Technology BOREHOLE SIZE: TOTAL DEPTH: FILTE PACK INTERVAL: MB ubsee 18" na ma 0 USCS Description Pleatinty, Diaconse, ET description, Other 18" PID Sample Well Construction 0 1 PooRLIV-GRADED SAND; brown, dry; loose; 14 B-46:16' 2" 1 - - - - - - 1 - - - - - - 1 - - - - - - 1 - - - - - - 1 - - - - - - - 1 - - - - - - - - - -				_							
AMS DPT LAR July 28, 2014 13':15' and 16':18' DRILLING METHOD: IPICE Public Method: IPICE Public Method: IPICE Public Method: LOGGED BY: BOREHOLE SIZE: TOTAL DEPTH: IPICE Public Method: MB ubbee BOREHOLE SIZE: TOTAL DEPTH: IPICE Public Method: MB USCS USCS OPECATION BOREHOLE SIZE: TOTAL DEPTH: IPIC Public Method: MB USCS USCS OPECATION BOREHOLE SIZE: TOTAL DEPTH: IPIC Method: MB USCS USCS OPECATION BOREHOLE SIZE: TOTAL DEPTH: IPIC Method: MB USCS USCS OPECATION BOREHOLE SIZE: BOREHOLE SIZE: IPIC Method: IPIC Method: IPIC Method: MB USCS USCS OPECATION (Chrown dry: losse: mostly file sand; no odor BORE ALL SIZE: IPIC Method: IPIC Me	oloc	ene Drilli	ng Inc.		640	01.1		0.010"-	Slot		
DRILLING METHOD: Direct-Push Technology Direct-Push Technology M. Busbee 80REHOLE SIZE: 10 10 10 10 10 10 10 10 10 10					DAT	E:		SCREEN	INTERVAL:		
Direct-Push Technology BOREHOLE SIZE: TOTAL DEPTH: 18' PILTER PACK INTERVAL: n/a USCS USCS Description USCS and; Color, Masture: Density: Plasticy: Directory, EPI description, Other Plasticy: Directory, EPI description, Other mostly line sand; no odor					Jul	y 28, 201	4	13'-15' a	and 16'-18'		
LOGGED BY: BOREHOLE SIZE: TOTAL DEPTH: PLIER PACK INTERVAL: 0 USCS Description Plasticity: Dilations; EP description. Other Plasticity: Dilations; EP description. Other Postly fine sand: no odor 18' Na 1 - - - 18' Na 2 - - - - - 3 - - - - - - 4 - - - - - - - 3 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	RILLIN	NG METHO	D:		GRC	OUND SURF	FACE ELEV. FT AMSL:	FILTER P	ACK:		
M. Busbee 18' n/a 0 USCS Description Pusaticity: Dilation; EP identify in costs; Plasticity: Dilation; EP identify in costs; 1 PID Sample Well Construction 1 POORLY-GRADED SAND; travel; dry; loose; 1 80 1.4 B-46:1' Pid Pid <td< td=""><td></td><td></td><td>chnology</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>			chnology								
Open Security Discovery Description (Popen) Description (Popen) Sample Well Construction 0 PODELY-SRADED SAND, brown; dry; loose; mostly fine sand; no odor 80 1.4 B-46:1' 2 3 9 95 2.5 B-46:6' 2 Well Construction 1 9 0.1 B-46:11.5' 1 1 1 1 9 0.1 B-46:13' 1 1 1 1 9 0.1 B-46:18'; 1 1 1 1 9 0.1 B-46:18'; 1 1 1 1 1 100 0.1 B-46:18'; 1 1 1 1 1 1 1 1 1				BOREHOLE SIZE:		AL DEPTH:			ACK INTERVAL:		
0 POORLY-GRADED SAND; brown; dy; loose: mostly fine sand; no odor 80 1.4 B-46:1' 2 9 9 2.5 B-46:6' 2 7 SP: 9 2.5 B-46:6' 2 10 9 2.5 B-46:6' PVC 11 9 0.1 B-46:13' 0.1 B-46:13' 14 9 0.1 B-46:13' 0.1 B-46:16' 16 0.1 B-46:16' 16-18' 16-18' 17 0.1 B-46:18'; 16-18' 19 0.1 B-46:18'; B-46:18'; 19 0.1 B-46:18'; 16-18' 19 0.1 B-46:18'; 16-18'; 19 0.1 B-46:18'; 16-18'; 19 0.1 B-46:18'; 16-18'; 100 0.1 B-46:18'; 16-18'; 100 0.1 B-46:18'; 16-18'; 100 0.1 B-46:18'; 16-18'; 116 100 16-18'; 16-18'; 10 1		spee						n/a			
0 POORLY-GRADED SAND; brown; dy; loose: mostly fine sand; no odor 80 1.4 B-46:1' 2 9 9 2.5 B-46:6' 2 7 SP: 9 2.5 B-46:6' 2 10 9 2.5 B-46:6' PVC 11 9 0.1 B-46:13' 0.1 B-46:13' 14 9 0.1 B-46:13' 0.1 B-46:16' 16 0.1 B-46:16' 16-18' 16-18' 17 0.1 B-46:18'; 16-18' 19 0.1 B-46:18'; B-46:18'; 19 0.1 B-46:18'; 16-18' 19 0.1 B-46:18'; 16-18'; 19 0.1 B-46:18'; 16-18'; 19 0.1 B-46:18'; 16-18'; 100 0.1 B-46:18'; 16-18'; 100 0.1 B-46:18'; 16-18'; 100 0.1 B-46:18'; 16-18'; 116 100 16-18'; 16-18'; 10 1	Depth (feet	USCS	Des USCS name; Col Plasticity; Dilatency	cription or; Moisture; Density; r; EPI description; Other	Interval & % Recover		Sample	W	/ell Construction		
5 6 95 2.5 B-46:6' 2 7 5P 80 9 80 9 10 6 4.1 B-46:11.5' 9 13 4.1 B-46:13' 10 13'-15' ar 14 6 0.8 B-46:13' 10'-16' She 14 10 0.1 B-46:13' 10'-16' She 16 100 0.1 B-46:18'; 16'-18' 18 End of Borehole 0.1 B-46:18'; B-46:W-D 19 0.1 B-46:W-D 16'-18' NOTES: B-46: W-S screened 13'-15'; B-46: W-D screened 16'-18' 10'-18'	0122222222222222222222					1.4	B-46:1'				
10 80 4.1 B-46:11.5' 12 4.1 B-46:11.5' 13 0.8 B-46:13' 14 0.8 B-46:13' 15 0.1 B-46:W-S; 16 0.1 B-46:16' 17 0.1 B-46:18'; 18 End of Borehole 0.1 19 0.1 B-46:W-D 20 NOTES: B-46: W-S screened 13'-15'; B-46: W-D screened 16'-18'	6 - - 7 - -	SP			95	2.5	B-46:6'		Temporary Wells 3/4"		
13 0.8 B-46:13' 14 0.8 0.8 15 0.1 16 0.1 17 0.1 18 End of Borehole 19 0.1 20 0.1 NOTES: B-46: W-S screened 13'-15'; B-46: W-D screened 16'-18'	10 - - 11 - -				80	4.1	B-46:11.5'				
14 15 SILT WITH SAND; medium gray; wet; soft; mostly 80 0.010" Sld 15 16 13'-15' ar 0.1 B-46:W-S; 13'-15' ar 16 17 0.1 B-46:16' 16'-18' 17 100 0.1 B-46:18'; 16'-18' 18 End of Borehole 0.1 B-46:18'; 16'-18' 19 20 NOTES: B-46: W-S screened 13'-15'; B-46: W-D screened 16'-18' NOTES: B-46: W-S screened 13'-15'; B-46: W-D screened 16'-18'	12 -										
16 Image: Sile in With some fine sand; no odor; moist at 17.5' 0.1 B-46:W-S; B-46:16' 13'-15' ar 16'-18' 17 Image: Sile in With some fine sand; no odor; moist at 17.5' 0.1 B-46:16' 16'-18' 18 End of Borehole 0.1 B-46:18'; B-46:W-D Image: Sile in Control of Borehole Image: Sile in Control of Borehole </td <td>-</td> <td></td> <td></td> <td></td> <td>80</td> <td>0.8</td> <td>B-46:13'</td> <td>*</td> <td></td>	-				80	0.8	B-46:13'	*			
18 End of Borehole 0.1 B-46:18'; B-46:W-D 19 0.1 B-46:W-D 20 NOTES: B-46: W-S screened 13'-15'; B-46: W-D screened 16'-18'	-		SILT WITH SAND; mo silt with some fine sar	edium gray; wet; soft; most d; no odor; moist at 17.5'	ly	0.1			0.010" Slot: 13'-15' and 16'-18'		
18 End of Borehole 0.1 B-46:W-D 19	-				100		B-46:18':				
NOTES: B-46: W-S screened 13'-15'; B-46: W-D screened 16'-18'	19 -		End o	f Borehole		0.1			_		
1 of 1		ES: B-46	3: W-S screened 13	8'-15'; B-46: W-D scre	ened 1	6'-18'			1 of 1		

PARTNERS INC					RING I	D: B-47			
SITE AD				CLIE	INT:	MATERIAL AND SIZE:			
812 Sc	outh Ada	ms St. Seattle, W	4			Industries	Temp: 3/4" PVC		
	IG CONTR/			-	JECT #:		SCREEN SIZE:		
Holoce	ene Drilli	ng Inc.		640	01.1		0.010"-	Slot	
DRILLIN	IG EQUIPM	IENT:		DAT	E:		SCREEN	INTERVAL:	
AMS D	PT LAR			July	y 25, 201	4	13'-15'		
DRILLIN	IG METHO	D:				FACE ELEV. FT AMSL:	FILTER P	PACK:	
Direct	-Push Te	chnology					Native		
LOGGE			BOREHOLE SIZE:		AL DEPTH	:	FILTER P	ACK INTERVAL:	
M. Bus	sbee			15'			n/a		
Depth (feet)	USCS	Des USCS name; Co Plasticity; Dilatenc	cription lor; Moisture; Density; y; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	v	Vell Construction	
0 1 2 3 4 5		POORLY-GRADED S mostly fine sand; no c	AND; brown; dry; loose; dor	100	0.7	B-47:1'			
5 - 6 - 7 - 8 -	SP			100	0.8	B-47:6'		Temporary Well 3/4" PVC	
9 - 10 - 11 - 12 - 13 -		WELL-GRADED SAN	ID; dark brown; wet; loose;	100	0.8	B-47:12'			
14 - 15 - 16 - 17 - 18 - 19 -	°		f Borehole			B-47:W		0.010" Slot	
20 NOT	ES:							1 of 1	

PARTNERS INC			во		D: B-48			
SITE ADDRESS	TE ADDRESS					CASIN	G MATERIAL AND SIZE:	
820 South Ada	20 South Adams St. Seattle, WA				Industries	1/2-inch PVC Temporary We		
DRILLING CONTR/		-	JECT #:		SCREEN SIZE:			
ESN Northwest			640	01		0.010	-inch Slot	
DRILLING EQUIPM	IENT:		DAT	E:		SCREE	EN INTERVAL:	
Limited Access	s DP Rig		3/2/	/15		10-15	feet bgs	
DRILLING METHO	-				ACE ELEV. FT AMSL:		R PACK:	
Direct-Push Te	chnoloav					N/A		
LOGGED BY:	5, 5,	BOREHOLE SIZE:	тот	AL DEPTH:			R PACK INTERVAL:	
M. Busbee		2.25 inch	15'			N/A		
Depth (feet)	Desc USCS name; Colo Plasticity; Dilatency;	c ription or; Moisture; Density; ; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well Construction	
0 2 4 - SP 6 - SP 6 - SP 10 - SM 12 - SP - - - - - - - - - - - - -	SILTY SAND; dark bro odor. Color change to brown	wn; moist; trace clay; no	60 80 100 100	1.3 1.1 1.5	B-48:0.5 B-48:4.5 B-48:7 B-48:12 B-48:RGW			
- 18 - -								
20 NOTES:							1 of 1	

	IRONMENTAL TNERS INC	BC	RING I	D: B-49			
SITE ADDRESS		CLIE	NT:		CASING N	ATERIAL AND SIZE:	
	ms St. Seattle, WA			Industries	1/2-inch PVC Temporary We SCREEN SIZE:		
DRILLING CONTR			JECT #:				
ESN Northwes		640			0.010-in	ch Slot	
DRILLING EQUIPM	IENT:	DAT	E:		SCREEN	INTERVAL:	
Limited Acces	s DP Rig	3/2/	15		10-15 fe	et bas	
DRILLING METHO	-	GRC	UND SUR	FACE ELEV. FT AMSL:	FILTER P		
Direct-Push Te	echnology				N/A		
LOGGED BY:	BOREHOLE SIZE:	тот	AL DEPTH		FILTER P	ACK INTERVAL:	
M. Busbee	2.25 inch	15'			N/A		
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	w	ell Construction	
0	Concrete		4 7	B 40:0 5			
2 -	POORLY-GRADED SAND; brown; dry; mostly very fine sand with trace silt; no odor.		1.7	B-49:0.5			
4 -		75					
			2.5	B-49:5			
6 - - - - - - - - - - - - - - - - - - -		100					
8 -			1.6	B-49:8			
10 -	Color change to black						
12 -	Moist at 13'	90	1.9	B-49:12			
14 -	Wet at 14' SILT; gray; moist to wet; silt with few shells; no odor.	_		B-49:RGW			
16 -	End of Borehole						
18 -							
20							
NOTES:						1 of 1	

	IRONMENTAL TNERS INC	BO	RING I	D: B-50			
SITE ADDRESS		CLIE	ENT:		CASING N	MATERIAL AND SIZE:	
	ams St. Seattle, WA			Industries	1/2-inch	PVC Temporary We	
DRILLING CONTR		PROJECT #:			SCREEN SIZE:		
ESN Northwes							
DRILLING EQUIP						INTERVAL:	
Limited Acces		3/2/			10-15 fe	et bas	
DRILLING METHO	-	_		FACE ELEV. FT AMSL:	FILTER P		
Direct-Push Te	echnology				N/A		
LOGGED BY:	BOREHOLE SIZE:	тот	AL DEPTH	:	FILTER P	ACK INTERVAL:	
M. Busbee	2.25 inch	15'			N/A		
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	w	/ell Construction	
0 2	Concrete POORLY-GRADED SAND; brown; dry; mostly fine sand; no odor.	90	1.8	B-50:0.5			
6 - - SP		100	1.8	B-50:5			
8			1.1	B-50:8			
12 - 14 - SPo	WELL-GRADED SAND; black; wet; fine to medium sand; trace fine gravel and trace shells; no odor.	100	1.9	B-50:12			
16 -	End of Borehole			B-50:RGW		-	
 20 NOTES:						1 of 1	

	IRONMENTAL TNERS INC	BORING ID: B-51						
SITE ADDRESS		CLIE	NT:		CASING M	ATERIAL AND SIZE:		
820 South Ada	ams St. Seattle, WA	Washington Industries PROJECT #:			1/2-inch	PVC Temporary Wel		
DRILLING CONTR					SCREEN SIZE:			
ESN Northwes					0.010-inch Slot			
DRILLING EQUIPM	MENT:	DAT	E:		SCREEN I	NTERVAL:		
Limited Acces	s DP Rig	3/2/	15-3/3/15	5	13-18 fe	et bgs		
DRILLING METHO)D:	GRC	UND SUR	FACE ELEV. FT AMSL:	FILTER PA	NCK:		
Direct-Push Te	echnology				N/A			
LOGGED BY:	BOREHOLE SIZE:		AL DEPTH	:		CK INTERVAL:		
M. Busbee	2.25 inch	18'		1	N/A			
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	W	ellConstruction		
0	Concrete		0.2	B-51:0.5				
-	POORLY-GRADED SAND; brown; dry; mostly fine sand; no odor.		0.2	G-01.0.0				
2 -	•	60						
4 -			0.1	B-51:5				
6 - - 8 - - SP		100	0.3	B-51:8				
10 -		100	0.2	B-51:11				
14 -	Moist at 13' Wet at 14'		0.9	B-51:14				
16 - ML 18	SILT; gray; moist to wet; silt with few shells; no odor.	100	0.9	B-51:18 and B-51:RGW				
20				501.000				
NOTES:						1 of 1		

	IRONMENTAL TNERSINC	во	RING I	D: B-52			
SITE ADDRESS		CLIE	INT:		CASIN	G MATERIAL AND SIZE:	
820 South Ada	ims St. Seattle, WA	Wa	shington Industries		1/2-inch PVC Temporary We		
DRILLING CONTR			JECT #:		SCREEN SIZE: 0.010-inch Slot		
ESN Northwes	t	640	01				
DRILLING EQUIPI	/ENT:	DAT	E:		SCREE	IN INTERVAL:	
Limited Acces	s DP Rig	3/2/15			10-15	feet bgs	
DRILLING METHO	D:	GRC	OUND SUR	ACE ELEV. FT AMSL:	FILTER	R PACK:	
Direct-Push Te	echnology				N/A		
LOGGED BY:	BOREHOLE SIZE:		AL DEPTH:	:		R PACK INTERVAL:	
S. Gilley	2.25 inch	15'			N/A		
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well Construction	
0	Concrete		0.2	B-52:0.5			
2	POORLY-GRADED SAND; brown; loose; no odor.	75	0.2	D-52.0.5			
4			0.1	B-52:5			
8 -	SILT; dark brown; moist; dense; no odor.	100	0.2	B-52:8			
10 -	Color change to gray with increased sand content					=	
- 12 - ML		90	0.2	B-52:12			
14 -				B-52:RGW		■	
16 -	End of Borehole						
18 -							
20							
NOTES:						1 of 1	

e DI	PAR	IRONMENTAL TNERS INC	BORING ID: B-53						
SITE A	DDRESS		CLIE	ENT:		CASING N	IATERIAL AND SIZE:		
820 S	outh Ada	ms St. Seattle, WA	Wa	shingtor	Industries	1/2-inch	PVC Temporary We		
	NG CONTR/			JECT #:		SCREEN			
ESN I	Northwest	t	640	64001			ch Slot		
DRILLI	NG EQUIPM	ENT:	DAT	E:		SCREEN I	NTERVAL:		
Limite	ed Access	s DP Rig	3/2/	3/2/15			et bgs		
DRILLI	NG METHO	D:	GRC	OUND SUR	FACE ELEV. FT AMSL:	FILTER P	ACK:		
Direc	t-Push Te	chnology				N/A			
	ED BY:	BOREHOLE SIZE:		AL DEPTH	:		ACK INTERVAL:		
	Isbee	2.25 inch	18'			N/A			
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	w	ell Construction		
0		Concrete		1.4	B-53:0.5 (Soil Dup 1)				
- 2 -		POORLY-GRADED SAND; brown; dry; mostly fine sand; no odor.		1.4					
- 4			70						
- 6 -				2.5	B-53:5				
- 8 - -	SP		100	2.1	B-53:8				
10 - - 12 -				2.3	B-53:11				
- 14 -		Wet at 14'	100	1.5	B-53:14				
- 16 - -	o o SP (WELL-GRADED SAND; black; wet; loose; medium-coarse sand with trace gravel and trace shells; no odor.	ə 100						
18 -	· • • .			1	B-53:18 and				
-		End of Borehole			B-53:RGW				
20									
	TES:								
							1 of 1		

	IRONMENTAL TNERS INC	BC	ORING I	D: B-54			
SITE ADDRESS		CLI	ENT:		CASING M	ATERIAL AND SIZE:	
820 South Ada	ms St. Seattle, WA			Industries	1/2-inch PVC Temporary Wel		
DRILLING CONTR			DJECT #:		SCREEN SIZE: 0.010-inch Slot SCREEN INTERVAL:		
ESN Northwes		640					
DRILLING EQUIP	1ENT:	DAT	ſE:				
Limited Acces	s DP Rig	3/3	/15		10-15 fee	et bas	
DRILLING METHC				FACE ELEV. FT AMSL:	FILTER PA		
Direct-Push Te	chnology				N/A		
LOGGED BY:	BOREH	HOLE SIZE: TOT	TAL DEPTH:	:	FILTER PA	CK INTERVAL:	
M. Busbee	2.25 i				N/A		
Depth (feet)	Descriptio USCS name; Color; Moist Plasticity; Dilatency; EPI des	an and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second seco	PID (ppm)	Sample	We	ell Construction	
0	Concrete		0.1	D 5405			
	POORLY-GRADED SAND; bro fine sand; no odor.	own; dry; mostly	0.1	B-54:0.5			
2 -		50					
4 - - - - - SP			0.1	B-54:5			
6		90	0.2	B-54:8 (Soil Dup 2)			
10 -	POORLY-GRADED SAND; bla fine sand with minor silt and tra	ack; moist; mostly ace gravel; no odor.					
				D 5440			
12 - SP	Moist at 12.5' Wet at 13.5'	70	0.1	B-54:12			
14 -	End of Devel			B-54:RGW			
16 -	End of Boreh						
- 18 -							
20							
NOTES:	1					1 of 1	

	IRONMENTAL TNERSINC	BO	RING I	D: B-55			
SITE ADDRESS		CLIE	NT:		CASING M	IATERIAL AND SIZE:	
820 South Ada	ms St. Seattle, WA	Wa	shington	Industries	1/2-inch	PVC Temporary We	
DRILLING CONTR.		_	JECT #:		SCREEN SIZE: 0.010-inch Slot SCREEN INTERVAL:		
ESN Northwes	t	640	01				
DRILLING EQUIPM	IENT:	DAT	E:				
Limited Acces	s DP Rig	3/3/15			10-15 fe	et bgs	
DRILLING METHO	D:	GRC	UND SUR	ACE ELEV. FT AMSL:	FILTER PA		
Direct-Push Te	echnology				N/A		
LOGGED BY:	BOREHOLE SIZE:		AL DEPTH	:		ACK INTERVAL:	
M. Busbee	2.25 inch	15'			N/A		
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	w	ellConstruction	
0	Concrete		0.2	B 55:0 5			
2 -	POORLY-GRADED SAND; brown; dry; mostly fine sand with trace silt; no odor.	80	0.2	B-55:0.5			
4 - SP			0.2	B-55:5			
6	POORLY-GRADED SAND; black; moist; loose; mostly fine sand; no odor.	50	0.2	B-55:8			
10 - 12 - SP		100	0.1	B-55:12			
14 -	Wet at 13' End of Borehole			B-55:RGW			
16 -							
18 -							
20							
NOTES:						1 of 1	

BITE ADDRESS B12 South Ada DRILLING CONTRA ESN Northwes DRILLING EQUIPM Geoprobe Truc DRILLING METHO Direct-Push Te LOGGED BY:	t				CASING	MATERIAL AND SIZE:	
DRILLING CONTRA ESN Northwes DRILLING EQUIPM Geoprobe Truc DRILLING METHO Direct-Push Te LOGGED BY:	ACTOR: t		shinaton				
ESN Northwes DRILLING EQUIPM Geoprobe Truc DRILLING METHO Direct-Push Te LOGGED BY:	t		siiiiiyioii	Industries	1/2-inch Stainless Steel Tem SCREEN SIZE:		
DRILLING EQUIPM Geoprobe Truc DRILLING METHO Direct-Push Te LOGGED BY:		PRO	JECT #:				
Geoprobe Truc DRILLING METHO Direct-Push Te LOGGED BY:		640	01		0.010-i	nch Slot	
DRILLING METHO Direct-Push Te OGGED BY:	IENT.	DAT	E:	SCREEN INTERVAL:			
Direct-Push Te OGGED BY:	:k	3/9/	15		10-14 f	eet bgs	
OGGED BY:	D:	GRC	UND SURI	ACE ELEV. FT AMSL:	FILTER	PACK:	
	chnology				N/A		
	BOREHOLE SIZE:		AL DEPTH:	:		PACK INTERVAL:	
A. Busbee	2.25 inch	15'			N/A		
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well Construction	
0	Concrete			B-56:0.5			
SP	POORLY-GRADED SAND; brown; dry; mostly fine sand with minor gravel; no odor. Bricks			B-30:0.5			
2 -	Asphalt	1					
2		60					
-							
4 -	SILT; dry brown; mostly silt with minor gravel; no	-		B-56:4			
ML	odor.						
-4-1-1-1-1-1	POORLY-GRADED SAND; brown; dry; mostly						
6 -	fine sand; no odor.						
-							
		100					
8 -							
SP				D 50-0			
				B-56:9			
10 -	Wet at 10'					-	
						_	
-							
						=	
12	SILT; wet; soft; mostly silt with trace shells; no					7	
	odor.	100					
14 -				B-56:RGW			
	End of Borehole	+					
10							
16 -							
18 -							
-							
20							
NOTES:							
						1 of 1	

SiTE ADDRESS CLIENT: CASING MATERIAL AND SIZE: SiT2 South Adams St. Seattle, WA Washington Industries 1/2-inch Stainless Steel Tem DRILLING CONTRACTOR: PROJECT #: SCREEN SIZE: SN Northwest 64001 0.010-inch Slot DRILLING EQUIPMENT: DATE: SCREEN INTERVAL: Seoprobe Truck 3/9/15 14-18 feet bgs DRILLING METHOD: GROUND SURFACE ELEV. FT AMSL: FILTER PACK: Direct-Push Technology BOREHOLE SIZE: TOTAL DEPTH: FILTER PACK INTERVAL:	PARTNERS INC	BC	RING I	D: B-57		
H12 South Adams St. Seattle, WA Washington Industries 1/2-inch Statiless Steel Tem NRILLING CONTRACTOR: PROJECT #: SCREEN SIZE: SSN Northwest 64001 0.010 inch Slot SRILLING METHOD: DATE: SCREEN NETWAL: Seporbe Truck 39015 14-18 feet bgs SRILLING METHOD: GROUND SURFACE ELEV. FT ANSL: PILTER PACK NTERVAL: SRILLING METHOD: OREHOLE SIZE: N/A OGGED BY: BOREHOLE SIZE: TOTAL DEPTH: N/A AusSch method: Description Bit Time Pack Note: N/A Subsch method: Description Bit Time Statiless Steel Tem N/A Statiless Steel Tem Statiless Steel Tem N/A Statiless Steel Tem Description Bit Time Pack Note: N/A Statiless Steel Tem Statiless Steel Tem N/A Statiless Steel Tem Statiless Steel Tem N/A Statiless Steel Tem Description Bit Time Pack Note: N/A Statiless Steel Tem Statiless Steel Tem N/A Statiless Steel Tem Ste	SITE ADDRESS	CLIE	INT:		CASING M	ATERIAL AND SIZE:
DRILLING CONTRACTOR: PROJECT #: 54001 SCREEN SIZE: 0.010-inch Sidt 0.010-inch Sidt SILLING COUMENT: DATE: SCREEN INTERVAL: Jack Provided Truck Jay15 1418 det bgs SILLING COUND SURFACE ELEV. FT AMSL: PLICE Te: SCREEN INTERVAL: MILLING METHOD: BOREHOLE SIZE: TOTAL DEPTH: PLICE PRACE N/A Mage USCS Description Pleasing/r: Diversition Content Pleasing/r: Diversition; Density Pleasing/r: Diversity: Density Pleasing/r: Diversity: Density Pleasing/r: Diversity: Density Pleasing/r: Diversity: Density Pleasing/r: Diversity: Density Pleasing/r: Diversity: Density Pleasing/r: Diversity: Density Pleasing/r: Density: Density Pleasing/r: Diversity: Diversity: Diversity Pleasing/r: Diversity: Diversity: Diversity: Diversity Pleasing/r: Diversity: Diversity: Diversity: Diversity: Diversity Pleasing/r: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diversity: Diver	812 South Adams St. Seattle, WA			Industries		
BRILLING EQUIPMENT: DATE: SCREEN INTERVAL: Beoprobe Truck 39915 14-18 feet bgs PILLING METHOD; GROUND SURFACE ELEV. FT AMSL: FUTER PACK: NA NA NA Sege DBY: BOREHOLE SIZE: TOTAL DEFTH: FUTER PACK INTERVAL: MA NA NA Sege DBY: BOREHOLE SIZE: TOTAL DEFTH: NA Sege DBS: Description 180 NA Sege DBS: Description 100 B-57.05 Plotter PACK: NA NA Sege DBS: Description 100 Sege DBS: Description 100 Concrete 100 B-57.05 SILT: dry: hard; no odor. 100 ML SILT: dry: hard; no odor. 100 B-57.9 Wet at 10' 100 SILT: wet; trace abella. 100 B-57.18 B-57.18 and B-57.18 and B-57.18 and	DRILLING CONTRACTOR:		_			
Bioprobe Truck 39/15 14-18 feet bgs DRILLING METHOD: GROUND SURFACE ELEV. FT AMSL: FULTE PACK: Wath DOREHOLE SIZE: TOTAL DEPTH: NA OCGED BY: DOREHOLE SIZE: TOTAL DEPTH: NA Busbee 18' NA OCGED BY: DESCription Bescription Busbee USCS USCS name Calor biosum; Daning: Plable(IV; Disting; Description; Officer PID Surger USCS USCS name Calor biosum; Daning: Plable(IV; Disting; Description; Officer PiD Surger Surger Surger B-57.0.5 Well Construction Concrete SulTY GRAVEL; most. 100 B-57.3 B-57.3 Mu SulT; dir; hard; no odor. 100 B-57.6 B-57.6 B SP Wet at 10' 100 B-57.15 B-57.15 Mu SulT; wet; trace shells. 100 B-57.15 and B-57.15 and B-57.15 and B-57.15 and B-57.15 and B-57.15 and B-57.15 and B-57.15 and B-57.15 and B-57.15 and Image Sult Sult; Sult Sult Sult; Sult Sult; Sult Sult Sult Sult Sult Sult Sult Sult	ESN Northwest	640	01	0.010-inch Slot		ch Slot
DRILLING METHOD: GROUND SURFACE ELEV. FT AMSL: PLITER PACK: Direct-Push Technology BOREHOLE SIZE: 2.25 inch 18" A Busbee 2.25 inch 18" FLITER PACK INTERVAL: N/A Description 18" FLITER PACK INTERVAL: N/A USCS Description 18" USCS Description 18" PID SILTY GRAVEL; molst. 100 8-57:0.5 Well Construction SILTY GRAVEL; molst. 100 8-57:3 8-57:3 A POORLY-GRADED SAND; brown; dry mostly fine sand; no odor. 100 8-57:6 B SP Wet at 10 00 8-57:15 ML SILTY SAND; wat; silt with fine sand. 100 8-57:15 18 End of Borehole 100 8-57:16 and B-57:80	DRILLING EQUIPMENT:	DAT	E:		SCREEN IN	NTERVAL:
DRILLING METHOD: GROUND SURFACE ELEV. FT AMSL: PLITER PACK: Direct-Push Technology BOREHOLE SIZE: 2.25 inch 18" A Busbee 2.25 inch 18" FLITER PACK INTERVAL: N/A Description 18" FLITER PACK INTERVAL: N/A USCS Description 18" USCS Description 18" PID SILTY GRAVEL; molst. 100 8-57:0.5 Well Construction SILTY GRAVEL; molst. 100 8-57:3 8-57:3 A POORLY-GRADED SAND; brown; dry mostly fine sand; no odor. 100 8-57:6 B SP Wet at 10 00 8-57:15 ML SILTY SAND; wat; silt with fine sand. 100 8-57:15 18 End of Borehole 100 8-57:16 and B-57:80	Geoprobe Truck	3/9/				et bgs
Direct-Push Technology BOREHOLE SIZE: TOTAL DEPTH: PLITER PACK INTERVAL: 0 Description USCS name; Color; Mosture; Density; Planticity; Directory; EP description; Other Planticity; Directory; Planticity; Directory; Planicity; Planticity; Directory; Planticity; Planticity; Direc	DRILLING METHOD:			FACE ELEV. FT AMSL:		
OGGED BY: BOREHOLE SIZE: IOTAL DEPTH: PLITER PACK INTERVAL: A. Busbee 2.25 inch 18" N/A Image: Second Status, Dialeterory, EPI description, USCS and Color, Motifier, Density; Plasticity, Dialeterory, EPI description, Other 100 Sample Well Construction 0 Concrete Concrete 100 B-57.05 Image: Second Status, Dialeterory, EPI description, Other 100 B-57.3 2 Image: Second Status, Dialeterory, EPI description, Other 100 B-57.6 Image: Second Status, Dialeterory, EPI description, Other 12						
The section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the		ZE: TOT	AL DEPTH	:		CK INTERVAL:
0 Concrete 100 2 SILTY GRAVEL: moist. 100 4 SILT; dry; hard; no odor. 100 6 FOORLY-GRADED SAND; brown; dry; mostly B-57:3 6 FOORLY-GRADED SAND; brown; dry; mostly B-57:6 8 SP. 100 10 B-57:9 FOORLY-GRADED SAND; brown; dry; mostly 10 B-57:9 Formation of the sand; no odor. 11 SILT; wet; trace shells. 100 12 SILT; wet; trace shells. 100 14 ML SILTY SAND; wet; silt with fine sand. 100 18 End of Borehole B-57:18 and 20 End of Borehole B-57:18 and	M. Busbee 2.25 inch				N/A	
0 Concrete 100 2 SILTY GRAVEL: moist. 100 4 SILT; dry; hard; no odor. 100 6 FOORLY-GRADED SAND; brown; dry; mostly B-57:3 6 FOORLY-GRADED SAND; brown; dry; mostly B-57:6 8 SP. 100 10 B-57:9 FOORLY-GRADED SAND; brown; dry; mostly 10 B-57:9 Formation of the sand; no odor. 11 SILT; wet; trace shells. 100 12 SILT; wet; trace shells. 100 14 ML SILTY SAND; wet; silt with fine sand. 100 18 End of Borehole B-57:18 and 20 End of Borehole B-57:18 and	Image: Construction Description Email USCS USCS name; Color; Moisture; Den Plasticity; Dilatency; EPI description;	sity; ; Other States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States State States States r>States States	Sample	We	ellConstruction	
2 SLIT GRVEL mole. 100 4 SLT; dry; hard; no odor. 100 6 B-57.3 6 B-57.6 8 SP 10 B-57.6 11 B-57.16 12 B-57.15 13 B-57.16 and 14 B-57.16 and 18 End of Borehole 100 B-57.18 and						
2 ML SILT; dry; hard; no odor. 4 100 6 POORLY-GRADED SAND; brown; dry; mostly 6 POORLY-GRADED SAND; brown; dry; mostly 7 B-57:6 8 SP 9 Wet at 10' 10 B-57:79 11 SILT; wet; trace shells. 100 100 12 ML 14 SILT; wet; trace shells. 100 B-57:15 101 B-57:18 and 18 End of Borehole 20 U	SILTY GRAVEL; moist.	100		B-57:0.5		
4 Image: Mine sand; no odor. 100 6 POORLY-GRADED SAND; brown; dry; mostly B-57:6 8 SP. 100 10 Wet at 10' B-57:9 12 SILT; wet; trace shells. 100 14 Image: SP. 100 15 SILT; wet; trace shells. 100 16 SILTY SAND; wet; slit with fine sand. 100 18 End of Borehole B-57:15 and B-57:RGW	2 - SILT; dry; hard; no odor.					
6 6 8 5P 100 8-57:6 10 8 SP 100 8-57:9 10 9 8-57:9 8-57:9 12 10 100 8-57:15 14 10 100 8-57:15 16 SNM SILTY SAND; wet; silt with fine sand. 100 18 End of Borehole 100 8-57:18 and B-57:RGW 20 100 100 100		100		B-57:3		
8 SP Wet at 10" 12 SILT; wet; trace shells. 100 14 ML 16 SILTY SAND; wet; silt with fine sand. 18 End of Borehole 20 End of Borehole	fine sand; no odor.	mostly		B-57:6		
12 SILT; wet; trace shells. 14 ML 16 SM 18 End of Borehole 20 End of Borehole		100		B-57:9		
14 100 14 100 16 100 18 End of Borehole 20 100					•	
16 - SM 100 18 End of Borehole 100 20 - -	-	100				
18 End of Borehole B-57:RGW 20	16 –	100		B-57:15		
				1	1	
	NUTES:					

	IRONMENTAL TNERSINC	BORING ID: B-58						
SITE ADDRESS		CLIE	NT:		CASING	MATERIAL AND SIZE:		
812 South Ada	ims St. Seattle, WA			Industries		ch Stainless Steel Tem		
DRILLING CONTR		_	JECT #:		SCREEI			
ESN Northwes	t	640	01		0.010-	inch Slot		
DRILLING EQUIP	/ENT:	DATE: SCREEN INTERVAL:		N INTERVAL:				
Geoprobe Tru	ck	3/9/15			10-14	feet bgs		
DRILLING METHO		_		FACE ELEV. FT AMSL:	FILTER			
Direct-Push Te	echnology				N/A			
LOGGED BY:	BOREHOLE SIZE:	тот	AL DEPTH	:	FILTER	PACK INTERVAL:		
M. Busbee	2.25 inch	15'			N/A			
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample		Well Construction		
0	Concrete							
_	Fine sand fill			B-58:0.5				
	Bricks							
2 -	Asphalt							
_	No recovery	30						
4 -								
	POORLY-GRADED SAND; brown; dry; mostly			B-58:5				
6 - 8 - SP	fine sand; no odor.	100						
10 -	Wet at 10'			B-58:9 (Soil Dup 4)		•		
12	SILT; wet; soft; mostly silt with trace shells; no odor.	100						
	End of Borehole			B-58:RGW				
16 -								
_								
18 -								
-								
20 NOTES:								
						1 of 1		

	TNERS INC			RING I	D. D-39			
SITE ADDRESS			CLIE	INT:		CASING	MATERIAL AND SIZE:	
	ms St. Seattle, WA		Washington Industries				h Stainless Steel Tem	
DRILLING CONTRA			-	JECT #:		SCREEN SIZE:		
ESN Northwes			640	01	0.010-inch Slot		nch Slot	
DRILLING EQUIPM	IENT:		DATE:			SCREEN	INTERVAL:	
Geoprobe Truc	k		3/9/	15		10-14 fe	eet bas	
DRILLING METHO			_		ACE ELEV. FT AMSL:	FILTER F		
Direct-Push Te	chnology					N/A		
LOGGED BY:	В	OREHOLE SIZE:	тот	AL DEPTH:		FILTER F	PACK INTERVAL:	
M. Busbee	2	.25 inch	15'			N/A		
Depth (feet)	Descr USCS name; Color; Plasticity; Dilatency; E	Moisture: Density:	Interval & % Recovery	PID (ppm)	Sample	v	Vell Construction	
0	Loose concrete							
_ GP 2	POORLY-GRADED GRA sandy gravel; limited reco	overy; no odor.			B-59:0.5			
	POORLY-GRADED SAN fine sand; no odor.	D; brown; dry; mostly	20					
4 -					B-59:5			
6 - SP			70					
8					B-59:9			
12	Wet at 10'							
	SILT; gray; wet; no odor.		100					
	End of B	orehole			B-59:RGW			
16 -								
-								
18 -								
20								
NOTES:							1 of 1	

	IRONMENTAL TNERSINC	BC	RING I	D: B-60			
SITE ADDRESS		CLIE	ENT:		CASING MA	TERIAL AND SIZE:	
812 South Ada	ims St. Seattle, WA	Washington Industries			1/2-inch S	1/2-inch Stainless Steel Temp	
DRILLING CONTR	ACTOR:	PROJECT #:			SCREEN SIZE:		
ESN Northwes	lorthwest			0.010-inch Slot			
DRILLING EQUIP	/ENT:	DATE:			SCREEN IN	TERVAL:	
Geoprobe Tru	ck	3/9/	/15		14-18 feet	bgs	
DRILLING METHO	ID:	GRC	OUND SURI	FACE ELEV. FT AMSL:	FILTER PAC	K:	
Direct-Push Te	echnology				N/A		
LOGGED BY:	BOREHOLE SIZE:		AL DEPTH:	:		K INTERVAL:	
M. Busbee	2.25 inch	18'			N/A		
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Wel	Construction	
0	Concrete and gravel; no odor						
- SP	POORLY-GRADED SAND; filll; no odor.			B-60:0.5			
2 -	Bricks						
2	Asphalt	80					
-	POORLY-GRADED SAND; brown; dry; fine sand; no odor.						
4 -				B-60:4			
6 -							
SP		100					
8 -				B-60:8			
10 -	Wet at 10'						
-							
12	SILT; gray; wet; silt; no odor.	100		B-60:12			
14 -							
- ML				B-60:15		Water comes	
16 –		100				slowly	
18	End of Borehole			B-60:18 (Soil Dup 5) and B-60:RGW			
20							
NOTES:	1	1			1		
						1 of 1	

	IRONMENTAL TNERS INC	BORING ID: B-61							
SITE ADDRESS		CLIE	ENT:		CASING I	MATERIAL AND SIZE:			
	ams St. Seattle, WA			Industries		n Stainless Steel Tem			
DRILLING CONTR			JECT #:			SCREEN SIZE:			
ESN Northwes	t	640			0.010-ir	nch Slot			
DRILLING EQUIPM	MENT:	DAT	E:		SCREEN	INTERVAL:			
Geoprobe True	ck	3/9/	/15		10-14 fe	et bgs			
DRILLING METHO	DD:	GRC	OUND SUR	FACE ELEV. FT AMSL:	FILTER P				
Direct-Push Te	echnology				N/A				
LOGGED BY:	BOREHOLE SIZE:		AL DEPTH	:	FILTER P	ACK INTERVAL:			
M. Busbee	2.25 inch	15'			N/A				
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	v N	/ell Construction			
0	Concrete; very limited recovery; collapsed liner.			Not Sampled					
2 -		5							
4 -									
6 - 8 - SP	POORLY-GRADED SAND; brown; mostly fine sand; no odor.	90		B-61:5					
10 - 12	Wet at 10'			B-61:10					
	End of Borehole	80		B-61:RGW					
16 -									
18 -									
20 NOTES:						1 of 1			

	IRONMENTAL TNERS INC	BO	RING I	D: B-70			
SITE ADDRESS 825 S. Dakota St. Seattle, WA DRILLING CONTRACTOR: Holt Services		CLIENT: Washington Industries			CASING MATERIAL AND SIZE: 2.25-inch rods		
		640	01		1/2-inch	SST wire	
		DRILLING EQUIP	/IENT:	DAT	E:		SCREEN IN
Geoprobe 782	2DT	5/26	6/15		15'-19'		
DRILLING METHO		GRC	UND SURI	FACE ELEV. FT AMSL:	FILTER PA	CK:	
Direct-Push Te	echnology				Native		
LOGGED BY:			AL DEPTH:	:	FILTER PACK INTERVAL:		
M. Busbee		20' >			NA		
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	We	ell Construction	
0	Asphalt						
	Concrete						
2 -	Gravel; dry; no odor. POORLY-GRADED SAND; light brown; dry;	100	0				
4 -	mostly fine sand; no odor.						
6 -							
8 -		70	0	B-70:8			
SP							
10 -						Temporary well	
-							
12 -	Wet	70					
-		70	2	B-70:RGW			
14 -							
·····	No recovery						
16 -							
-		0					
18 -							
20 -	End of Borehole						
22							
22 -							
24 -							
26 -							
_							
28 -							
4							
30 -							
-							
32 -							
_							
34 -							
36							
	1			1	1		
NOTES:							

PARTNERS INC		BORING ID: P-08					
SITE ADDRESS 812 South Adams Street DRILLING CONTRACTOR: ESN		CLIENT:					
				ndustries			
			JECT #:				
		640					
ORILLI	NG EQUIPM	IENT:	DATE	Ξ:			
Powe	rProbe 96	30	5/16	6/16			
					CE ELEV. FT AMSL:	DECOMMISSIONIN	NG MATERIAL
	Push			Measured			
OGGE				AL DEPTH:	-	BOREHOLE SIZE:	
S. Trii	mble		10 ft bgs			2.25"	
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Sheen	Notes
0		4" Concrete					
		POORLY-GRADED SAND; brown; dry; minor gravel; no odor		1.0	P-08:0.5		
1 -	SP						
2 -			70				
3 -		6" Layer of Brick 6" Layer of Asphalt					
-							
4 -	ML	SANDY SILT; brown; dry; no odor		2.5	P-08:4		
5 -		POORLY-GRADED SAND; dark brown; moist; medium grained; no odor					
6 -				1.5	P-08:6		
7 -	SP						
- 8			90	1.8	P-08:8		
9 -							
- 10 -							
- 01		End of Borehole					
11							

PARTNERS INC		BORING ID: P-09					
SITE ADDRESS 812 South Adams Street DRILLING CONTRACTOR: ESN		CLIENT:					
				ndustries			
			-				
		PROJECT #: 64001.3					
	EQUIPM	ENT:	DATE				
PowerPr			5/16				
DRILLING					ACE ELEV. FT AMSL:	DECOMMISSIONIN	
Direct Pu		5.		Measured		DECOMINISSION	
LOGGED B				AL DEPTH:	J	BOREHOLE SIZE:	
S. Trimb			10 ft bgs			2.25"	
Depth (feet)	ISCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Sheen	Notes
0		4" Concrete					
-		POORLY-GRADED SAND; brown; dry; fine grained; minor gravel; no odor		1.5	P-09:0.5		
1	SP						
2 -				1.5			
		6" Layer of Brick	60				
3 -				3.8			
-		6" Layer of Asphalt					
4 -	ML	SANDY SILT; dark brown; dry; minor gravel; no odor		2.5	P-09:4		
5		POORLY-GRADED SAND; dark brown; moist; medium grained; no odor					
6 -				2.0	P-09:6		
7 -							
8 -	SP		90	1.6	P-09:8		
9 -							
ר ש ק							
10 + • • •		End of Borehole					
11							

PARTNERS INC		BORING ID: P-10						
SITE ADDRESS 812 South Adams Street DRILLING CONTRACTOR:		CLIENT:						
		Washington Industries						
			JECT #:					
ESN		640	01.3					
DRILLING EQUIP	MENT:	DAT	E:					
PowerProbe 9	9630	5/16	6/16					
DRILLING METH	DD:	GRC	UND SURF	ACE ELEV. FT AMSL:	DECOMMISSIONIN	IG MATERIAL		
Direct Push			Measure	d				
LOGGED BY:		TOTAL DEPTH:			BOREHOLE SIZE:			
S. Trimble		10 t	t bgs		2.25"			
Depth (feet)	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Sheen	Notes		
0	4" Concrete							
1	POORLY-GRADED SAND; brown; dry; fine grained with minor gravel; no odor		1.8					
2 -		60						
3 -	6" Layer of Brick							
-	12" Layer of Asphalt							
4 -								
- ML	SANDY SILT; dark brown; dry; minor gravel; no odor		3.2					
	POORLY-GRADED SAND; dark brown; moist; medium grained; no odor							
6 - 7 -			2.3					
8 - -		75	1.8					
9	 A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A<							
_	End of Borehole							
11								

BITE ADDRESS B12 South Ad RILLING CONTR ESN PRILLING EQUIP PowerProbe 9 DRILLING METHO Direct Push .OGGED BY: 5. Trimble	ACTOR: MENT: 9630		shington I JECT #:	ndustries		
RILLING CONTR ESN DRILLING EQUIP PowerProbe 9 DRILLING METHO DIRECT Push .OGGED BY: 5. Trimble	ACTOR: MENT: 9630	PRO 640	JECT #:	ndustries		
ESN DRILLING EQUIP PowerProbe 9 DRILLING METHO Direct Push OGGED BY: 5. Trimble	MENT: 9630	640				
DRILLING EQUIP PowerProbe S DRILLING METHO Direct Push LOGGED BY: S. Trimble	9630	_	01 2			
PowerProbe 9 DRILLING METHO Direct Push .OGGED BY: 5. Trimble	9630	DAT	01.5			
DRILLING METHO Direct Push OGGED BY: 5. Trimble						
Direct Push OGGED BY: S. Trimble	DD:	5/16			-	
.OGGED BY: 5. Trimble				CE ELEV. FT AMSL:	DECOMMISSIONIN	G MATERIAL
6. Trimble			Measured	1		
		_	AL DEPTH: t bgs		BOREHOLE SIZE: 2.25"	
(fee			t bys		2.23	
Dep USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Sheen	Notes
0	4" Concrete					
1	POORLY-GRADED SAND; brown; dry; fine grained with minor gravel; no odor		2.0	P-11:0.5		
	6" Layer of Brick	60				
3 -						
_	12" Layer of Asphalt					
4 -						
- ML	SANDY SILT; dark brown; dry; minor gravel; no odor		3.2	P-11:4.5		
5	 POORLY-GRADED SAND; dark brown; moist; medium grained; no odor 					
6 -	- - - - - -		2.1	P-11:6		
7 - SP		90				
8 -	· · ·		2.0	P-11:8		
9 -						
10	End of Borehole					
11						