REMEDIAL INVESTIGATION WORK PLAN

Mt. Baker Housing Association
McClellan St. and Martin Luther King Jr. Way S.
Seattle, Washington
PPCD No. 16-2-29584-3 SEA
Facility Site ID #96127971, Cleanup Site ID #13054

Prepared for: Mt. Baker Housing Association

Project No. 160324 • October 27, 2017 Final

Aspect CONSULTING

earth + water

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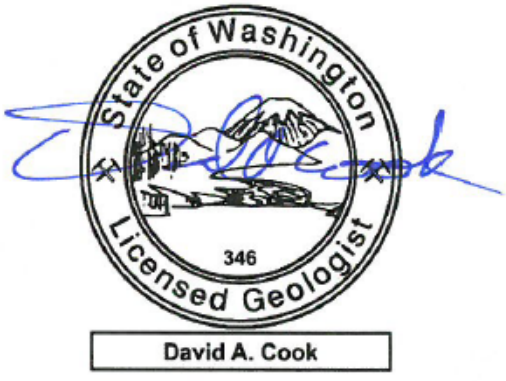

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Acronyms

Aspect	Aspect Consulting, LLC
ASTM	American Society for Testing and Materials
bgs	below ground surface
BETX	benzene, ethylbenzene, toluene and xylenes
CAP	Cleanup Action Plan
cfh	cubic feet per hour
CRA	Conestoga-Rovers & Associates
CSM	conceptual site model
DNR	Washington State Department of Natural Resources
Ecology	Washington Department of Ecology
EDB	1-2, dibromoethane
EDC	1,2-dichloroethane
EPA	U.S. Environmental Protection Agency
EPH	extractable petroleum hydrocarbon
ERM	Environmental Resources Management
ESA	Environmental Site Assessment
FS	Feasibility Study
GPR	ground penetrating radar
hVOC	halogenated volatile organic compound
JEM	Johnson and Ettinger Model
MBHA	Mt. Baker Housing Association
mg/kg	milligrams/kilograms
µg/L	micrograms per liter
MLK	Martin Luther King
ml/min	milliliters per minute
msl	mean sea level
MTCA	Model Toxics Control Act
PAH	polycyclic aromatic hydrocarbon

PCB	polychlorinated biphenyls
PCE	Tetrachloroethene
PPCD	Prospective Purchaser Consent Decree
psi	pounds per square inch
REC	Recognized Environmental Condition[1]
RI	Remedial Investigation
ROW	rights-of-way
ROZ	Redevelopment Opportunity Zone
SHA	Site Hazard Assessment
SVE	soil vapor extraction
TCE	trichloroethylene
TCLP	Toxicity Characteristic Leaching Procedure
UST	underground storage tank
VC	vinyl chloride
VCP	Voluntary Cleanup Program
VOC	volatile organic compound
VPH	volatile petroleum hydrocarbon
WAC	Washington Administrative Code

[1]As defined by Section 1.1.1 of ASTM E1527-13, RECs are: hazardous substances or petroleum products under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the properties or into the ground, groundwater, or surface water of the properties.

EXECUTIVE SUMMARY

This Remedial Investigation (RI) Work Plan has been prepared on behalf of the Mt. Baker Housing Association (MBHA) for the Mount Baker Properties Site located along S. McClellan Street and Martin Luther King (MLK) Jr. Way South in Seattle, Washington. The Mount Baker Properties Site consists of five (5) parcels (000360-0030, 000360-0032, 00360-008, 000360-0031, and 000360-0055) and are referred to collectively as the Subject Property. The purpose of this RI Work Plan is to describe the plan to obtain sufficient subsurface information to address data gaps, prepare a RI report in accordance with Washington Administrative Code (WAC) 173-340-350, and select a cleanup action under WAC 173-340-360.

Soil and groundwater contamination has been identified at the Subject Property as a result of several studies completed between 1989 and 2017 from the following sources of contamination:

1. Mt. Baker Cleaners located at 2864 S. McClellan St. (parcel 000360-0031). A dry cleaner has operated on this parcel since approximately 1940. Tetrachloroethene (PCE) was used at the dry cleaner from the establishment of the cleaner until February of 2017. Chlorinated solvent-contaminated soil and groundwater have been confirmed at parcel -0031 and beyond the parcel boundary.

2. Former Phillips 66 and Chevron gas station located at 2800 MLK Jr. Way S. (parcel 000360-0055). From the mid-1950s until the mid-1990s, parcel -0055 was operated as a gasoline service station. Following closure of the gasoline service station, the parcel was utilized as an automobile detail and service facility from the mid-1990s until its recent vacancy. PCE, gasoline-, diesel-, xylene-, lead-, and, arsenic-contaminated soil and/or groundwater have been confirmed at the parcel and beyond the western parcel boundary.

3. Heating oil was utilized at the Subject Property on the Mt. Baker Cleaners parcel at 2864 S. McClellan St., the single-family residence at 2806 S. McClellan St., and the former Phillips 66 gas station at 2800 MLK Jr. Way S. that may have resulted in releases to soil and/or groundwater. Diesel-range petroleum hydrocarbons were detected in the groundwater sample obtained on the Mt. Baker Cleaners parcel (AMW-1) above the Washington Model Toxics Control Act (MTCA) Method A cleanup level.

Additional soil, groundwater, and soil vapor evaluation is necessary to understand the nature, vertical and lateral extent of the subsurface contamination, and to prepare a Feasibility Study (FS) and Cleanup Action Plan (CAP) to mitigate contaminated media. The additional evaluation will consist of the installation of 15 monitoring wells, 12 soil borings, and 7 soil vapor samples, as described in Section 8.0 of this report.

1 INTRODUCTION

Aspect Consulting, LLC (Aspect) prepared this Remedial Investigation (RI) Work Plan on behalf of the Mt. Baker Housing Association (MBHA) for the Mount Baker Properties Site located along S. McClellan Street and Martin Luther King (MLK) Jr. Way South in Seattle, Washington. The RI Work Plan was prepared to comply with actions outlined in a Prospective Purchaser Consent Decree (PPCD) between Washington State Department of Ecology (Ecology) and MBHA (PPCD No. 16-2-29584-3 SEA).

The Mount Baker Properties Site consists of five (5) parcels (000360-0030, 000360-0032, 00360-008, 000360-0031, and 000360-0055) and are referred to collectively as the Subject Property. The Subject Property is shown relative to surrounding physical features on Figure 1, *Site Location*. The Subject Property parcels are shown on Figure 2, *Site Plan*. The Subject Property will be remediated and redeveloped with affordable and workforce housing.

Sources of soil and groundwater contamination are present at: 1) the Mt. Baker Cleaners parcel (2864 S. McClellan St.), 2) the Former Phillips 66 and Chevron Gas Station (2800 MLK Jr. Way S.), and 3) home heating-oil Underground Storage Tanks (USTs) associated with residential or commercial uses on the Mt. Baker Cleaners parcel, the single-family residence at 2806 S. McClellan St., and the former Phillips 66 gas station. The locations where contaminated soil or groundwater originating from these sources has come to be located is referred to herein as the Site. The extent of the contaminated Site has yet to be fully defined.

1.1 Site Information

Relevant information for the Subject Property as well as contact information are summarized in Table 1 below. The Subject Property is shown relative to surrounding physical features on Figure 2.

Table 1. Site Information Summary

Subject Property Information	
Property Addresses	2802-2864 S. McClellan Street, Seattle, WA 98144 and 2800 Martin Luther King Jr. Way S, Seattle, WA 98144
Name	Mount Baker Properties Site (also referred to as Mt. Baker Housing Association Gateway Project)
Ecology Site IDs	PPCD No. 16-2-29584-3 SEA Facility Site ID #96127971 Cleanup Site ID #13054
Parcel Numbers	000360-0030, 000360-0032, 000360-0008, 000360-0031 and 000360-0055.

Topography Description	The Subject Property slopes moderately toward to the southwest, from an elevation of approximately 90 feet above mean sea level (msl) at the northeast corner of the Mt. Baker Cleaners parcel to approximately 70 feet msl in the southwest corner of the former Phillips 66 gas station parcel.
Sources and Presence of Soil and/or Groundwater Contamination (discussed further in Section 3)	1. **Mt. Baker Cleaners**. A dry cleaner operated on this parcel since approximately 1940. Tetrachloroethene (PCE) was used at the dry cleaner from the establishment of the cleaner until February of 2017. Chlorinated solvent-contaminated soil and groundwater have been confirmed at parcel -0031 and beyond the parcel boundary. 2. **Former Phillips 66 and Chevron gas station.** From the mid-1950s until the mid-1990s, parcel -0055 operated as a gasoline service station. Following closure of the gasoline service station, the parcel was utilized as an automobile detail and service facility from the mid-1990s until its recent vacancy. Gasoline-, diesel-, xylene-, lead-, and, arsenic-contaminated soil and/or groundwater have been confirmed at the parcel and beyond the western parcel boundary. Chlorinated solvents also have been detected at concentrations exceeding groundwater cleanup levels beneath this property. 3. **Heating oil at Mt. Baker Cleaners, the single-family residence at 2806 S. McClellan St. and the former Phillips 66 gas station.** Heating oil use and storage may have resulted in releases to soil and/or groundwater. Diesel-range petroleum hydrocarbons were detected in the groundwater sample obtained on the Mt. Baker Cleaners parcel (AMW-1) above the Model Toxics Control Act (MTCA) Method A cleanup level.
Contact Information	
Property Owner	Mt. Baker Housing Association Contact: Conor J. Hansen 1423 31st Avenue South Seattle, WA 98144 206.257.2939
Environmental Consultant	Aspect Consulting, LLC Dave Cook, LG, CPG 401 2nd Avenue South #201 Seattle, Washington 98104 206.838.5837
Ecology Site Manager	Ching-Pi Wang 3190 160th Avenue SE Bellevue, Washington 98008-5452 425.649.7134

1.2 Subject Property Location and Current Uses

The Subject Property consists of five tax parcels totaling approximately 0.66 acres located in a mixed-use commercial and residential area of the Mount Baker neighborhood of Seattle, Washington. Current use and parcel characteristics are described in Table 2 below.

Table 2. Subject Property Characteristics and Current Use

Parcel Number (reference ID)	Associated Address(es)	Size (acres)	Current Use and Development
000360-0030	2802 S. McClellan St.	0.08	One multitenant mixed-use retail and residential building with paved patio and landscaped areas. The retail spaces are currently vacant.
000360-0032	2806 S. McClellan St.	0.11	One single-family residence, gravel paved, and landscaped areas.
000360-0008	2810 S. McClellan St.	0.11	One multi-tenant four-plex residential building with paved and landscaped areas.
000360-0031	2862 and 2864 S. McClellan St.	0.11	One two-tenant retail building, currently fully occupied by Mount Baker Cleaners dry cleaner, and landscaped areas.
000360-0055	2800 MLK Jr. Way S.	0.25	Vacant one-level building with concrete, gravel and vegetated surrounding area currently used as construction parking for the adjacent property.

1.3 Utility Considerations

Several utilities are present in utility corridors within both the S. McClellan Street and MLK Jr. Way South rights-of-ways (ROW), which are adjacent to the Subject Property. It is possible that the utility corridors are acting as a preferential pathway for contaminant migration in groundwater, but more evaluation is needed to confirm this potential. The approximate locations of the known utilities are shown in plan view on Figure 2, and in the cross sections, Figures 12 – 14.

1.4 Regulatory Status and Future Use of the Subject Property

The Phillips 66 parcel was initially enrolled in Ecology's Voluntary Cleanup Program (VCP) in July 2010 by Chevron Environmental Management Company and ConocoPhillips (Ecology VCP No. NW2321 and Facility/Site No. 42746846). Following enrollment in the VCP, several studies were completed and submitted to Ecology on behalf of ConocoPhillips and three opinion letters were issued by Ecology (Stantec, 2010; Ecology, 2010b; Stantec, 2012; Ecology, 2012; CRA, 2013; Ecology, 2014a; and, CRA, 2014), and are summarized in Section 4.2. In the most recent opinion letter from

Ecology (2014a), Ecology stated that additional soil, groundwater, and soil vapor evaluation is necessary.

The Mt. Baker Cleaners parcel was initially listed by Ecology as a known contaminated site in 2009, following the completion of groundwater sampling conducted on an adjacent parcel (PBS, 2009). In 2010, Ecology conducted an Initial Investigation of the Mt. Baker Cleaners parcel and concluded that topography indicates the source of the tetrachloroethene (PCE)-contaminated groundwater identified on the adjacent parcel to be the Mt. Baker Dry Cleaners (Ecology, 2010a). Ecology then sent an Early Notice Letter to Mt. Baker Cleaners stating that the parcel had been listed as a confirmed contaminated site and requesting that subsurface investigation and cleanup be completed (Ecology, 2010b). A Site Hazard Assessment (SHA) was conducted by Ecology during 2014 and 2015. Based on the results of the SHA, Ecology determined that the Mt. Baker Cleaners parcel is contaminated with PCE, trichloroethene (TCE) and cis-1,2-dichloroethene and was ranked as a 3, where 1 represents the highest relative risk and 5 the lowest (Ecology, 2014b; Ecology, 2015a; Ecology, 2015b).

On December 8, 2016, a PPCD for the Site was fully executed by MBHA, Ecology, and the Washington State Attorney General's office. Following execution of the PPCD, the parcels were purchased by MBHA in December 2016. On February 10, 2017, the parcels comprising the Subject Property were designated by the City of Seattle as a Redevelopment Opportunity Zone (ROZ), which, in addition to the PPCD, allows Ecology to provide funding to MBHA to investigate and remediate the Site, thus providing the ability for it to be redeveloped as affordable housing units. As part of the redevelopment process and in accordance with the PPCD, cleanup actions will be completed to mitigate the contamination at the Site.

1.5 RI Objectives and Purpose

The objective of the RI Work Plan is to describe the plan to obtain sufficient subsurface information to address data gaps, prepare a RI report in accordance with Washington Administrative Code (WAC) 173-340-350, and select a cleanup action under WAC 173-340-360. The RI Work Plan serves the following purposes:

- Provide a summary of the completed investigations to date at the Site.
- Describe the preliminary conceptual site model explaining contaminant movement through the subsurface and exposure pathways.
- Identify data gaps that require investigation to fully define the Site, and will enable evaluation and selection of a cleanup action as part of a Feasibility Study (FS).
- Provide the description and rationale for the scope of work to be performed for the RI.

2 ENVIRONMENTAL SETTING

2.1 Topography and Surface Water

The Subject Property slopes moderately toward the southwest, from an elevation of approximately 90 feet above mean sea level (msl) at the northeast corner of the Mt. Baker Cleaners parcel to approximately 70 feet above msl in the southwest corner of the former Phillips 66 gas station parcel. The nearest body of water to the Subject Property is Lake Washington, located approximately 0.57 miles to the east. A historic drainage is depicted on historical topographic maps dated 1894 through 1909 in a similar location to the existing Martin Luther King Junior Way South right-of-way. The orientation of this drainage roughly northeast to south-southwest relative to the Subject Property and positioned along the valley low point further supports the documented groundwater flow direction toward the south-southwest. There are no reported water wells (resource protection or public drinking water) within a 1-mile radius of the Subject Property (Aspect, 2016a and Aspect, 2016b).

2.2 Geology

According to the Washington Interactive Geologic Map, provided by the Washington State Department of Natural Resources (DNR), the Subject Property is underlain by Quaternary glacial till and outwash deposits of the Pleistocene's Fraser-age glaciation (about 30,000 to 10,000 years ago (DNR, 2016). Based on explorations completed at the Site, soil beneath the Subject Property generally consists of silty and gravelly sand fill soil overlying dense to very dense glacially consolidated silty sand with gravel. Fill soil at the Subject Property ranges in thickness from approximately 5 to 15 feet. Low permeability soil (silt and clay) were encountered in borings completed in the S. McClellan St. and MLK Jr. Way ROW (HC-MW-1 through HC-MW-6) at depths between approximately 16 and 18 feet below ground surface (bgs).

2.3 Groundwater

Groundwater has been encountered in the monitoring wells on the Subject Property and across the Site, between approximately 6 and 15 feet bgs (or elevations of 77 feet to 46 feet). Each of the monitoring wells on the Subject Property were surveyed on May 11, 2017, and depth to water was measured on May 12, 2017. Based on these groundwater measurements, the groundwater flow direction at the Subject Property is generally to the south-southwest, as shown on Figure 3, *Groundwater Elevations and Flow Direction.*

3 SITE HISTORY AND BACKGROUND

Historic uses of the Subject Property are described below. Parcel numbers and addresses are shown on Figure 2.

3.1 McClellan Street Parcels

The earliest identified use of the four McClellan St. parcels was as a portion of greater "vegetable gardens" in 1916 (Aspect, 2016b). The four existing buildings, each on their own separate parcels, are the first identified development on the McClellan Street Parcels, beginning with the existing Mount Baker Cleaners building in 1927, as described on a parcel-by-parcel basis, below.

- ***2864 S. McClellan St, Mount Baker Cleaners (Parcel -0031).*** The existing retail building at 2864 S. McClellan St. was constructed in 1927 and originally occupied by a grocery store, as indicated in city directories. A dry cleaner shared the building by as early as 1940, according to tax assessor records and city directories. The dry-cleaning business has been operating there since at least 1951 as Mount Baker Cleaners under several owners. Tax assessor records indicate the building was originally heated by a heating-oil system; the existing heating system is natural gas. PCE was utilized in the dry-cleaning equipment until February 2017, when the dry cleaner converted to non-PCE dry cleaning equipment as a condition of its lease with MBHA. We understand that during the 1940s through 1990s, dry cleaning and spot cleaning occurred in the northeast quadrant of the building. This portion of the building has a concrete slab with no drains. In the early 1990s, the concrete slab was extended to the south and a "closed system" dry-cleaning machine was installed on the new 2-foot-thick slab. The area in the central and south portions of the building have wood floors whereby contaminants could spill and discharge to soil beneath the building. These features are shown on Figure 2.
- ***2802 S. McClellan St., Multi-tenant Property (Parcel -0030).*** The existing multitenant retail and residential building on Parcel -0030 was constructed in 1928 and originally occupied by a shoe repair store and barber shop according to tax assessor records and city directories. The barber shop was replaced by a restaurant in the 1950s. The shoe repair store continued operation until the 1970s, when the space was converted to a grocery and novelty store, which operated (under various brands) until at least 2013. The building is currently only residentially occupied. Tax assessor records indicate that the building was originally heated by "stove," and is currently heated by natural gas.
- ***2806 S. McClellan St., Residence (Parcel -0032).*** The existing residential dwelling located on Parcel -0032 was constructed in 1950. Tax assessor records indicate the dwelling was originally heated by a heating-oil system; the existing heat system is natural gas.
- ***2810 S. McClellan St., Four-plex (Parcel -0008).*** The existing residential four-plex located on Parcel -0008 was constructed in 1959. Tax assessor records indicate that the complex has been heated by electric system since its construction.

3.2 Former Phillips 66 Gasoline Service Station Parcel

The first identified development of the former Phillips 66 gasoline service station parcel was in 1916 as part of a larger "vegetable gardens" (Aspect, 2016a). The gardens appear

to have been cleared and the first building constructed on the parcel by 1951, which consisted of a small, unheated real estate office building.

In 1955, the real estate office was replaced by the existing automobile service and gasoline station facility. Tax assessor records indicate that in 1955 the building was heated by an oil-burning furnace, and had two fuel islands with four total fuel pumps, one 4,000-gallon tank, one 5,000-gallon tank, one 280-gallon tank, and two hydraulic hoists.

City directory and tax assessor records indicate the following petroleum companies occupied the Subject Property building; we understand these companies were associated with (or predecessors of) ConocoPhillips Petroleum: Tidewater Oil (also listed as Associates Gas Station) from the 1950s to 1960s; Phillips Petroleum (listed as Phillips Gas Station and Rainier Bonanza Self-Serve) in the 1970s to 1990s. The following automobile detailing and repair facilities subsequently occupied the Subject Property from the 1990s until its recent vacancy, with the exception of an additional period of vacancy between 2004 and 2010: R&R Auto Repair, CK Auto Repair and Service, and Vu Auto Care Detail.

4 PREVIOUS INVESTIGATIONS

Several environmental investigations have been completed at the Subject Property. Each of the previous investigations are summarized in this section. Accessible boring logs for each of the previous explorations are included in Appendix A. Soil chemical analytical results are summarized in Table 3. Groundwater chemical analytical results are summarized in Table 4. Monitoring well construction information is summarized in Table 5 and groundwater elevations are summarized in Table 6. The following figures graphically present the information summarized in Section 4:

- Figure 4, *Existing Explorations and Historic Site Conditions,* shows the approximate locations of the explorations completed at the Subject Property.
- Figure 5, *Summary of Excavations Conducted at the Former Phillips 66 Gas Station*, presents the approximate locations of the excavations previously completed on the former Phillips 66 gas station parcel.
- Figure 6, *Chlorinated Solvents Concentrations in Soil,* presents the groundwater chemical analytical results of chlorinated solvents.
- Figure 7, *Diesel-Range Petroleum Hydrocarbon Concentrations in Soil,* presents the groundwater chemical analytical results of diesel-range petroleum hydrocarbons.
- Figure 8, *Gasoline-Range Petroleum Hydrocarbon and BTEX Concentrations in Soil*, presents the groundwater chemical analytical results of gasoline-range petroleum hydrocarbons.
- Figure 9, *Chlorinated Solvents Concentrations in Groundwater,* presents the groundwater chemical analytical results of chlorinated solvents.

- Figure 10, *Diesel-Range Petroleum Hydrocarbon Concentrations in Groundwater*, presents the groundwater chemical analytical results of diesel-range petroleum hydrocarbons.
- Figure 11, *Gasoline-Range Petroleum Hydrocarbon Concentrations in Groundwater*, presents the groundwater chemical analytical results of gasoline-range petroleum hydrocarbons.
- Figures 12 – 14, *Cross-Sections*, show the subsurface conditions and chemical analytical results along the cross-section lines shown in plan view on Figure 4.

4.1 South McClellan Street Parcels and Adjacent ROW

Since 2009, several environmental investigations have been completed at the McClellan Street parcels (2802, 2806, 2801 and 2864 S. McClellan Street), and in the adjacent ROW (S McClellan St., 29th Avenue S, and MLK Jr. Way S.). Each of the environmental investigations are summarized below (Sections 4.1.1 through 4.1.6).

4.1.1 Phase I Environmental Site Assessments (ESAs)

Phase I ESAs were conducted in 2009 on parcels -0030 and -0032 (2802 and 2806 S. McClellan Street), and in 2015 and 2016 for each of the 4 parcels on McClellan Street (Horus, 2009; GeoEngineers 2015b; Aspect, 2016b). Additionally, a due diligence evaluation was completed in 2015 (GeoEngineers, 2015a). Based on the results of the Phase I ESAs and historic evaluations, the following environmental conditions were identified on the four McClellan Street parcels:

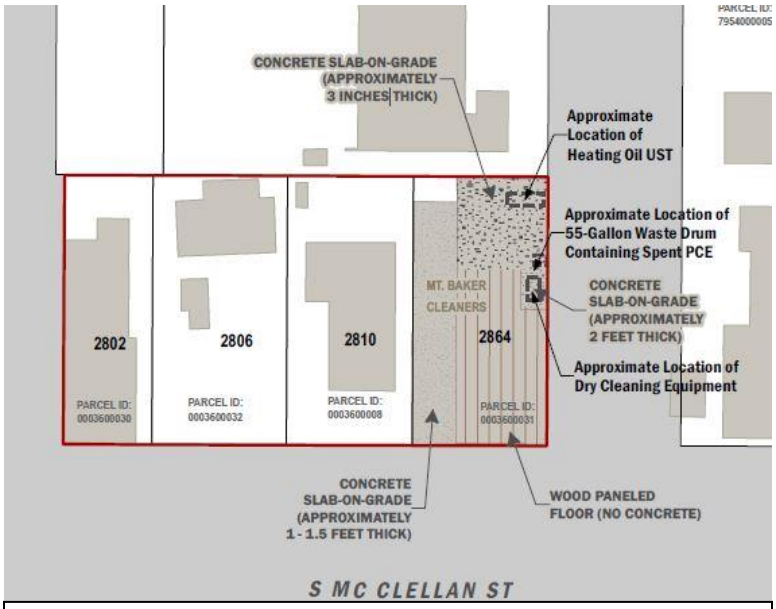
- A dry cleaner has been operated at 2864 S. McClellan Street (the Mt. Baker Cleaners) since the 1940s. Documented chlorinated solvent-contaminated soil and groundwater sourced from the Mt. Baker Cleaners parcel is migrating away from the parcel toward the southwest.
- A former gasoline service station is present at 2800 Martin Luther King Jr. Way S (the former Phillips 66 Gas Station). Petroleum-contaminated soil and groundwater has been identified on the former gas station parcel. This parcel is part of this RIWP, part of the Subject Property and encompassed by the Site.
- Several drums (both upright and overturned) that "contain or might once have held" petroleum, fuels and lubricants were observed throughout the basement of the 2802 S. McClellan Street parcel.
- Petroleum staining was observed in unpaved soils at 2806 S. McClellan Street where cars had been parked.

The 2016 Phase I ESA recommended that soil and groundwater sampling be conducted on each of the parcels to evaluate the extent of the chlorinated solvent contamination and potential presence of petroleum hydrocarbons.

Additional soil and groundwater testing was recommended to evaluate the extent of the chlorinated solvent contamination and potential presence of petroleum hydrocarbons.

4.1.2 Site Characterization: 2806 S. McClellan Street, Residence (Parcel -0032)

In 2009, A limited Phase II ESA was conducted to evaluate the presence of petroleum hydrocarbons in soil and chlorinated solvents in groundwater beneath parcel -0032 (2806 S. McClellan St.; PBS, 2009). Three borings (PBS-SB-1 through PBS-SB-3; see Figure 4) were completed to depths ranging between 14 and 18 feet bgs using a direct-push drill rig. Soil samples were obtained from each boring for chemical analysis of petroleum hydrocarbons and grab groundwater samples were obtained from PBS-SB-1 and PBS-SB-3 for chemical analysis of chlorinated solvents.



Location of 2806 S. McClellan St. parcel relative to Mt. Baker Cleaners parcel.

Petroleum hydrocarbons were not detected in three soil samples (PBS-SB-1 through PBS-SB-3) submitted for chemical analysis of hydrocarbon identification at depths between approximately 8 and 12 feet bgs (Figures 7 and 8).

PCE, trichloroethene (TCE), cis-1,2-Dichloroethene, and vinyl chloride (VC) were each detected in the groundwater sample obtained from boring PBS-SB-1 (located on the eastern edge of the parcel, closest to the dry cleaner; see Figure 9) at concentrations greater than the corresponding Washington Model Toxics Control Act (MTCA) Method A cleanup levels. PCE and TCE were detected at concentrations greater than the MTCA Method A cleanup levels in the groundwater sample (GW-2) obtained from boring PBS-SB-3 (located on the eastern portion of the parcel, farther away from the dry cleaner; see Figure 9).

4.1.3 Site Characterization: 2864 S. McClellan St, Mt. Baker Cleaners (Parcel -0031)

Site assessments were completed at the Mt. Baker Cleaners parcel in 2010, 2014, and 2017. Additionally, in 2014, the UST located in the northeast corner of the Mt. Baker Cleaners parcel was decommissioned in-place. Each of these assessments are summarized below.

4.1.3.1 Limited Phase II ESA (2010)

In 2010, borings were conducted at the Mt. Baker Cleaners parcel (parcel -0031, 2864 S. McClellan St.) to evaluate the presence of chlorinated solvents in soil and groundwater (KEE, 2010). Three borings (KEE-B1 through KEE-B3; approximate locations shown on Figure 4) were completed to depths of approximately 16 feet bgs. Soil samples were obtained from each boring at depths of 3 or 4 feet bgs and grab groundwater samples were obtained from two of the borings (KEE-B2 and KEE-B3) for chemical analysis of halogenated volatile organic compounds (hVOCs).

PCE was detected in the soil sample obtained at approximately 3 feet bgs from KEE-B2 at a concentration of 0.090 milligrams per kilogram (mg/kg), which is greater than the MTCA Method A cleanup level of 0.05 mg/kg. Chlorinated solvents were not detected in borings KEE-B1 and KEE-B3 (see Figure 6).

PCE and TCE were detected in the groundwater samples KEE-B3 and KEE-B2 at concentrations significantly greater than the MTCA Method A cleanup levels of 5 micrograms per liter (µg/L; PCE concentrations of 2,100 µg/L and 3,700 µg/L and TCE concentrations of 57 µg/L and 22 µg/L, respectively; see Figure 9).

In addition to the borings, the underground storage tank present in the northeast corner of the building was located using ground penetrating radar (GPR) and was determined to have a capacity of 500 gallons (approximate location shown on Figure 2). The UST, although originally utilized for home heating oil, reportedly appeared to be approximately ¼ full of product that appeared to be dry cleaning solvent. However, at the time the UST was decommissioned (discussed further in Section 4.1.3.2) it was reported that the contents did not appear to be cleaning solvent.

4.1.3.2 UST Decommissioning (2014)

The UST located in the northeast corner of the Mt. Baker Cleaners parcel (-0031, 2864 S. McClellan St.) was decommissioned in place on December 20, 2011 (AEG, 2011). During the UST decommissioning, the contents of the UST were removed, the UST was cleaned, filled with controlled density slurry fill (CDF), and then covered with the native soil that had been removed to access the tank. According to the 2014 UST decommission report (AEG, 2014), "Because the UST was 'closed in-place,' the entire tank could not be visually inspected, the actual condition of the tank, and if it had any holes, was not able to be determined." Additionally, the report states that there was no indication that the product in the UST was dry cleaning solvent, although it does not appear that the product in the UST was sampled.

Two soil samples (SE-B-6 and SW-B-7) were obtained from the area beneath the UST at depths of approximately 6 and 7 feet bgs and were submitted for chemical analysis of diesel-range petroleum hydrocarbons and chlorinated solvents. Diesel-range petroleum hydrocarbons were not detected in either sample and PCE was detected in both samples at concentrations greater than the MTCA Method A cleanup level (1.43 mg/kg and 0.322 mg/kg, respectively; see Figures 7 and 6).

4.1.3.3 Limited Phase II ESA (2017)

Six direct-push explorations (AB-01 through AB-04, AB-06 and AMW-01; see Figure 4) were completed within the Mt. Baker Cleaners parcel in February and March 2017 to

evaluate the extent of the chlorinated solvents in soil (Aspect, 2017) beneath the parcel and evaluate whether the PCE contaminated soil meets the toxicity characteristics of a dangerous waste. One of the borings (AMW-1) was completed as a permanent groundwater monitoring well.

A total of 13 soil samples were submitted for chemical analysis of petroleum hydrocarbons, metals, polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs, and/or PCE toxicity characteristic leaching procedure (TCLP). Petroleum hydrocarbons, metals and PAHs either were not detected or were detected at concentrations less than the MTCA Method A cleanup levels in each of the soil samples (Figures 7 and 8). PCE was detected in each of the borings at concentrations greater than the MTCA Method A cleanup levels at depths ranging from 2 feet to 15 feet (the base of the borings). Additionally, TCE was detected at concentrations greater than the MTCA Method A cleanup levels in borings AB-1 and AB-3, and depths of 11 and 9.5 feet bgs, respectively (Figure 6).

Based on the results of the TCLP testing, the PCE contaminated soil beneath the Mt. Baker Cleaners parcel does not meet the toxicity characteristics of a dangerous waste and can be designated as a Contained-In dangerous waste by Ecology.

PCE and diesel-range petroleum hydrocarbons were detected at concentrations greater than the corresponding MTCA Method A cleanup levels in the groundwater sample obtained from AMW-1. TCE was detected at a concentration less than the MTCA Method A cleanup level (Figure 9).

4.1.4 Limited Phase II ESA, ROWs Adjacent to McClellan Street Parcels (2016)

In 2016, seven groundwater monitoring wells (HC-MW-1 through HC-MW-7) and two soil borings (HC-SB-1 and HC-SB-2) were completed within the ROW adjacent to parcels -0031, -0030, and -0032 (Hart Crowser, 2016; see Figure 4). Soil samples obtained from each of the borings and monitoring wells and groundwater samples obtained from the monitoring wells were submitted for chemical analysis of diesel-, heavy oil-, and gasoline-range hydrocarbons, metals, and volatile organic compounds.

Contaminants of concern were not detected or were detected at concentrations less than the MTCA Method A cleanup levels in each of the soil samples, with the following exceptions:

- **HC-MW-1 at 10 feet bgs**: benzene was detected at a concentration of 0.3 mg/kg, which is greater than the MTCA Method A cleanup level of 0.03 mg/kg.
- **HC-MW-5 at 10 and 12.5 feet bgs:** PCE was detected at concentrations of 1.2 and 2.7 mg/kg, respectively, which are greater than the MTCA Method A cleanup level of 0.05 mg/kg.

Contaminants of concern were not detected or were detected at concentrations less than the MTCA Method A cleanup levels in each of the groundwater samples, with the following exceptions:

- **HC-MW-1, HC-MW-2, HC-MW-3, HC-MW-5, and HC-MW-6:** Chlorinated solvents (PCE, TCE and/or VC) were detected at concentrations greater than the MTCA Method A cleanup levels.
- **HC-MW-2, HC-MW-4, HC-MW-6, and HC-MW-7:** Total and dissolved arsenic was detected at concentrations ranging between 6.4 and 13 µg/L, which are greater than the MTCA Method A cleanup level of 5 µg/L.
- **HC-MW-2 and HC-MW-5:** Gasoline-range hydrocarbons were detected at concentrations greater than the MTCA Method A cleanup level; however, the laboratory stated in their report that based on their review of the chromatograms, the "detected gasoline" was PCE and that gasoline-range petroleum hydrocarbons are not actually present in the groundwater samples.

Based on these results, the northern extent of the chlorinated solvent-contaminated groundwater was identified (HC-MW-4). The extent of the chlorinated solvent-contaminated groundwater to the east, west, and south has not yet been defined (see Figure 9).

4.2 Former Phillips 66 Gas Station Parcel

Several environmental investigations have been completed at the former Phillips 66 gas station parcel beginning in 1989 when the USTs were removed. Each of the environmental investigations are summarized below (Sections 4.2.1 through 4.2.8).

4.2.1 Removal of USTs (1989)

The first reported remedial action at the former Phillips 66 parcel occurred in 1989 and included removal of three USTs (one 4,000-gallon UST and one 5,000-gallon UST, each used for storage of gasoline, and one 500-gallon UST used for storage of used oil) from the northwest corner of the Phillips 66 property (shown on Figure 5). According to the 2005 Phase I ESA (G-Logics, 2005a), eight soil samples were obtained from the limits of the UST removal excavation and gasoline-range petroleum hydrocarbons were detected in one soil sample at 90 mg/kg. However, the specific location of the soil sample is unknown so is not shown on the site plans included in this report. The MTCA Method A cleanup level for gasoline is 30 mg/kg when benzene is present and 100 mg/kg when benzene is not present. No other documentation regarding the 1989 UST removals has been identified and it is unknown whether benzene was analyzed. It is also unknown whether the soil excavated during the UST removal was transported off-site or re-used as backfill in the UST removal. Based on these data, gasoline was likely released from one or more USTs in the northwest corner of the property and gasoline-contaminated soil likely remains in place.

4.2.2 Removal of Gas Station Equipment (2005)

The next documented remedial action occurred in 2005 and consisted of removal of two underground vehicle hoists, a 270-gallon heating-oil UST, an oil/water separator, a floor drain sump, and approximately 200 feet of abandoned product lines (shown on Figure 5). Soil samples were obtained at the limits of each of the excavations, as summarized in the bullets below (G-Logics 2005b and G-Logics 2005c).

- The heating-oil UST was reportedly located approximately 4 feet bgs, was rusted, and contained a 2-inch diameter hole in the bottom at a depth of approximately 7.5 feet bgs. Following removal of the heating-oil UST, one soil sample was obtained from the limits of the heating-oil UST excavation. One soil sample was obtained from the limits of the UST excavation and diesel- and heavy oil-range petroleum hydrocarbons were detected at concentrations less than the MTCA Method A cleanup levels in the sample. However, due to excessive caving of soils during the excavation soil samples could not obtained where stained soil was observed on the southern end of the excavation at an approximate depth of 7.5 feet bgs and the UST excavation was backfilled with the soil excavated during the UST removal.
- The two hydraulic hoists removed from the Phillips 66 property were located in the service bay. One sample was obtained at the base of the northern hoist at a depth of approximately 9.5 feet bgs and at the base of the southern hoist at a depth of approximately 8 feet bgs. Oil-range petroleum hydrocarbons were detected at the northern hoist excavation at a concentration of 1,000 mg/kg (MTCA Method A cleanup level is 2,000 mg/kg) and were not detected in the soil sample obtained from the limits of the southern hoist excavation However, diesel-range petroleum hydrocarbons were detected at a concentration of 2,200 mg/kg in the stockpile sample obtained from the stockpiled generated during the hoist removal. Stockpiled soil was reportedly placed in the upper two feet of the hoist excavation along with concrete rubble from the floor slab demolition.
- The oil/water separator was located on the west garage exterior. Diesel-range petroleum hydrocarbons were not detected in one soil sample obtained from the base of the oil/water separator removal at a depth of approximately 4.5 feet bgs. Soil excavated during the removal was combined with broken asphalt and used as backfill.
- The floor drain sump was located in the interior of the garage. Staining was observed in soil at the limits of the sump removal, but oil-range hydrocarbons were not detected in the sample obtained from the base of the excavation at approximately 4.0 feet bgs. An additional soil sample was obtained from the stockpile generated during the excavation of the floor drain sump and oil-range hydrocarbons were detected at a concentration of 230 mg/kg in the stockpile sample. Soil removed during the excavation (including the soil stockpile) of the sump was used as backfill.
- Approximately 200 feet of abandoned product piping was removed from the western portion of the property in 2005 from depths less than 3 feet bgs (G-Logics, 2005c). Gasoline-range petroleum hydrocarbons and benzene, ethylbenzene, toluene, and xylenes (BTEX) either were not detected or were detected at concentrations below the MTCA Method A cleanup levels in four soil samples obtained at the limits of the pipe excavation. During the removal of the piping, approximately 15 tons of soil was stockpiled and sampled (G-Logics, 2005c). Gasoline-range hydrocarbons and xylenes were detected at concentrations less than the MTCA Method A cleanup level in the stockpile sample. In their report, G-Logics states that the stockpile was placed on and

covered with plastic sheeting and that, "based on the analytical results of the two collected soil samples, the excavated and stockpiled soils would be acceptable for disposal at a Subtitle D landfill." However, the actual end use of the approximately 15 tons of stockpiled soil is unknown.

4.2.3 Soil and Groundwater Sampling (2005 – 2007)

Between February 2005 and July 2006, four rounds of drilling with soil and groundwater sampling and monitoring well installations were conducted at the Phillips66 property (G-Logics, 2008). Five monitoring wells were installed (MW-1 through MW-5) and twenty-two (22) borings were completed (GL-1 through GL-6 and P-1 through P16; Figure 4). Groundwater samples were obtained from the monitoring wells beginning in August 2005 through April 2007.

Based on the Phase II ESA activities, gasoline- and BTEX-contaminated soil is present to the north, south, and west of the pump islands at depths of approximately 8 to 20 feet bgs (Figure 8).

Groundwater was encountered at depths of 9 to 11 feet bgs between December and February, and 12 to 13 feet bgs between August and October. Groundwater flow direction was consistently to the south-southwest. Gasoline- and BTEX-contaminated groundwater was identified in monitoring wells MW-2, MW-3 and MW-5 (gasoline concentrations ranging from 1,200 to 65,000 µg/L; Figure 11). Contaminants were not detected in MW-1 (sampled 5 times between August 2005 and April 2007) and were not detected in MW-4 (sampled 3 times between June 2006 and April 2007).

4.2.4 In-Situ *Treatment (2005 – 2007)*

In-situ remediation equipment was installed at the property in August 2005 in the vicinity of the former pump islands along the western property boundary to treat gasoline and benzene contaminated soil present between approximately 15 and 20 feet bgs and the contaminated groundwater in this area. The system initially consisted of an ozone generator, an air compressor, five injection wells (depths ranging from 19 to 22 feet bgs) and the monitoring wells installed during the Phase II ESA activities. Each day, 2 pounds of ozone per day was injected at a pressure of up to 30 pounds per square inch (psi) until August 2006, when a second air compressor was added and the original compressor was dedicated to the ozone generator. In December 2006, the system was shut down for repairs and in January 2007, the repaired compressor was reinstalled and ozone was injected into the primary compressed-air feed with a total flow rate of 200 standard cubic feet per hour (cfh) at 30 psi. Concentrations of gasoline-range hydrocarbons were reduced during the August to December 2006, but rebounded to elevated levels after that.

In December 2006, a perforated pipe approximately 40-feet in length was installed in a trench upgradient of the former pump islands at a depth of approximately 6-7 feet bgs and Fenton's reagent (a mixture of hydrogen peroxide and iron catalyst) was introduced into the pipe in January 2007. In March 2007, a treatment well was installed immediately west of the former western pump island and was screened at a depth of 16 to 19 feet bgs. Between January and March 2007, approximately 1,700 gallons of Fenton's reagent was applied in the horizontal pipe, the treatment well, and monitoring wells MW-1, MW-3, and MW-4 during several applications to supplement the ozone remediation system.

However, after almost 2 years of *in-situ* treatment, contaminant concentrations remained at concentrations greater than the MTCA Method A cleanup levels in groundwater and G-Logics concluded that the geologic and hydrogeologic conditions at the property (primarily consisting of dense silts and clays) were limiting adequate dispersion of product through the strata and continued *in-situ* remediation was not practical or cost effective. The *in-situ* treatment system was shut down in 2007 (G-Logics, 2008).

4.2.5 Additional Subsurface Characterization (2008)

In October and November 2008, Environmental Resources Management (ERM) completed four borings (B-1 through B-4) and obtained groundwater samples from MW-1 through MW-5 to evaluate the presence of chlorinated solvents in groundwater beneath the Phillips 66 property. Groundwater flow direction was toward the south during the sampling. Chlorinated solvents (PCE, TCE, and VC) were detected at concentrations greater than the MTCA Method A cleanup level in groundwater samples obtained from MW-1, MW-3, and MW-4, and in B-2 (located on the northeast property boundary, upgradient of the gas station; Figure 9) and B-3. Based on these findings, ERM concluded that the source of the chlorinated solvents is the Mt. Baker Cleaners property located to the northeast.

4.2.6 Additional Subsurface Characterization (2009 – 2011)

In November 2009, groundwater samples were obtained from monitoring wells MW-1 through MW-5 (Stantec, 2010). During the sampling event, the reported groundwater flow direction was to the southwest at an approximate gradient of 0.065 foot/foot. Each of the groundwater samples were submitted for chemical analysis of gasoline-range petroleum hydrocarbons and BTEX.

Gasoline and BTEX were not detected in MW-1 and MW-4 (consistent with previous sampling events). Gasoline was detected at concentrations less than the MTCA Method A cleanup levels in MW-2 and MW-3 and BTEX were not detected in these wells (lower concentrations than in previous events). Gasoline was detected at a concentration greater than the MTCA Method A cleanup level and BTEX were detected at concentrations less than the MTCA Method A cleanup levels in MW-5 (similar to previous events).

In 2011, seven borings (B-1 through B-7) were completed at the former Phillips 66 gas station parcel using a direct-push drill rig, and five monitoring wells (MW-6 through MW-10) were installed using a hollow-stem auger rig. Borings B-1 through B-7 were located on the parcel and MW-6 through MW-10 were located both on and off the parcel. Soil samples were obtained from each of the borings and monitoring wells for chemical analysis of petroleum hydrocarbons, BTEX and lead. Grab groundwater samples obtained from each of the borings and groundwater samples obtained from each of the monitoring wells were submitted for chemical analysis of petroleum hydrocarbons, BTEX, total lead, 1-2, dibromoethane (EDB), and 1,2-dichloroethane (EDC).

Gasoline-, heavy oil-, diesel-range petroleum hydrocarbons and/or xylenes were detected at concentrations greater than the MTCA Method A cleanup levels in soil samples obtained at depths between approximately 5 and 15 feet bgs in borings B-2, B-3, B-6, MW-8, and MW-9 (Figure 8).

Gasoline and/or xylenes were detected at concentrations greater than the MTCA Method A cleanup levels in groundwater samples obtained from each of the grab groundwater samples except for B-4 and B-5, in which contaminants of concern were not detected. Gasoline- and/or diesel-range hydrocarbons were detected at concentrations greater than the MTCA Method A cleanup levels in groundwater samples obtained from the monitoring wells except for MW-4, MW-6, and MW-9.

Based on the chemical analytical results, it was concluded that the lateral extent of the gasoline-contaminated groundwater plume had been identified. It was also concluded that additional assessment was required at the former Phillips 66 gas station parcel to evaluate the extent of soil contamination immediately west of B-6 and in the vicinity of the former heating-oil UST (B-3 and MW-9).

4.2.7 Shallow Subsurface Explorations (2015)

In 2015, seven direct-push borings (DP-1 through DP-7) were completed at the former Phillips 66 gas station parcel to evaluate the presence of chlorinated solvents in the shallow (ground surface to 6 feet bgs), unsaturated soil (GeoEngineers 2015c). Soil samples were obtained from each of the explorations at depths of 2 and 6 feet bgs for chemical analysis of hVOCs.

PCE was detected in each of the samples submitted for analysis from borings DP-1 through DP-3 and DP-5 through DP-7 at concentrations less than the MTCA Method A cleanup level of 0.05 mg/kg. PCE was not detected in the soil samples obtained from DP-4 (Figure 6). PCE concentrations increased with depth in borings DP-1, DP-3 and DP-6 and decreased with depth in borings DP-2 and DP-7. Due to the inconsistency in the increasing and decreasing concentrations with depth, it was concluded that the source of the shallow PCE-impacted soil could either be from "off-gassing" of PCE from the groundwater plume beneath the parcel or from historic use and releases at the gas station.

4.2.8 RI Activities, CRA (2013 – 2016)

Additional remedial investigation activities were completed between 2014 and 2016 by Conestoga-Rovers & Associates (CRA) on behalf of Phillips 66. However, the results of the investigation have not been provided to us and are not available in Ecology's files.

4.2.9 Ecology Opinion Letters

Ecology issued opinion letters regarding the Phillips 66 parcel in 2010, 2012 and 2014 (Ecology, 2010; Ecology, 2012; and, Ecology, 2014). In their opinion letters, Ecology stated that subsurface soil and groundwater contamination had been confirmed on the parcel as a result of the former gasoline service station operations, that PCE contamination at the parcel could be a result of parts washing in the former service garage, and that additional characterization is needed at the parcel to understand the nature and extent of subsurface contamination. Ecology also recommended that soil vapor sampling be conducted at the parcel.

4.3 Northern Adjacent Property, Mount Baker Village Apartments

In 2006, a Phase I ESA and Limited Phase II ESA was conducted at the Mount Baker Village Apartments property (2530 – 2580 29th Avenue South), located immediately adjacent to the north of the McClellan St. Subject Property parcels (Kane, 2006). The 2006 Phase I ESA identified the Mt. Baker Cleaners parcel as a REC and three borings (K-SB-1 through K-SB-3) were completed on the Mount Baker Village Apartments property to evaluate whether chlorinated solvents had migrated from the Mt. Baker Cleaners to the north onto the Mount Baker Village property. Four soil samples obtained from the borings were submitted for chemical analysis of chlorinated solvents. PCE was detected in sample K-SB-3 obtained at approximately 7 feet bgs at a concentration of 0.05 mg/kg, which is equal to the cleanup level. Chlorinated solvents either were not detected or were detected at concentrations less than the cleanup level in the remaining soil samples submitted for chemical analysis. Additionally, two grab groundwater samples were obtained from K-SB-1 and K-SB-3. Chlorinated solvents were not detected in groundwater samples obtained from these borings.

In 2016, 6 borings (ATC-B-1 through ATC-B-6) were completed on the Mount Baker Village Apartments property immediately north of the Mt. Baker Cleaners. One soil sample per boring was submitted for chemical analysis of petroleum hydrocarbons and VOCs, which were not detected in each of the soil samples.

Grab groundwater samples were also obtained from borings ATC-B-1 through ATC-B-5 and were analyzed for petroleum hydrocarbons and VOCs. Contaminants were not detected, except for the following:

- PCE was detected at concentrations greater than the MTCA Method A cleanup level in groundwater samples obtained from borings ATC-B-1 and ATC-B-2.
- TCE was detected at a concentration less than the MTCA Method A cleanup level in ATC-B-1.

In 2016, five subslab soil vapor samples were obtained from beneath the Mount Baker Village Apartment building immediately north of the Mt. Baker Cleaners. Based on the chemical analytical results and follow-up Johnson-Ettinger Model calculations, the presence of chlorinated solvents in groundwater beneath the Mt. Baker Cleaners property does not represent a threat to indoor air quality at the Mount Baker Village Apartments.

5 CONCEPTUAL SITE MODEL

As Ecology determined in the PPCD, the Site includes the releases at the Mt. Baker Cleaners parcel and the Phillips 66 gas station parcel, which are comingled for purposes of this RI Work Plan—because there are two sources of contamination that are located on different parcels that span S. McClellan St.—we have broken the conceptual site model (CSM) into two parts; a CSM for a chlorinated solvent release at the Mt Baker Cleaners

parcel and a CSM for a petroleum release at the former Phillips 66 gas station parcel. The transport mechanism and direction of plume migration is the same for the CSMs which merge into one groundwater plume south and southwest of the former Phillips 66 parcel.

5.1 Mt. Baker Cleaners Parcel CSM

Based on our evaluation of the dry-cleaner processes, machines in use (historic and new), significant amount of soil testing data, and our site reconnaissance and interviews, the following represents our working conceptual site model.

Releases of PCE likely occurred in two areas of the dry cleaner business prior to the 1990s when the "closed system" dry cleaning machine was installed. Historically, we understand that dry cleaning and spot cleaning occurred in the northeast quadrant of the building. This area has a thick concrete slab with no drains. However, the area in the central and south portions of the building have wood floors whereby contaminants could spill and discharge to soil beneath the building. The secondary mechanism of release to the subsurface could have occurred from PCE that allegedly was stored in the heating-oil UST (now decommissioned) located in the northeast corner of the building. Releases from this tank, which is in contact with soil, would have migrated beneath the north portion of the building (below the concrete slab that founded the dry-cleaning equipment). If either or both release mechanisms occurred, PCE migrated downward to the unconfined shallow groundwater table which flows from northeast to southwest. Groundwater monitoring and testing results are consistent with this conceptual site model and fit with either possible release mechanism. Each of these potential sources were/are located in the northeast portion of the parcel (Figure 2).

Based on chemical analytical testing of soil samples at the Mt. Baker Cleaners parcel, chlorinated solvents are present from near the ground surface to depths of at least 15 feet bgs. The vertical extent of the chlorinated solvent soil contamination has not been identified on the Mt. Baker Cleaners parcel, however, low permeability soil (clay and silt) was encountered in HC-MW-1 through HC-MW-6 (located in the ROWs adjacent to the Mt. Baker Cleaners parcel) at depths between approximately 16 and 18 feet bgs and it is likely that soil contamination does not extend beneath this low permeability soil. Soil samples obtained from parcels -0030, -0032, and -0008 have not been analyzed for chlorinated solvents, so the lateral extent of the chlorinated solvent contamination on the parcels to the west is unknown. However, the chlorinated solvent-contaminated soil is bounded to the west by HC-MW-6 and HC-MW-7, which are located in the MLK Jr. Way ROW. The PCE-contaminated soil is bounded to the south by HC-MW-01 and HC-MW-02, to the east by HC-MW-03 and HC-SB-01, and to the north by K-SB-3, ATC-B-1 through ATC-B-6, and HC-MW-4 (see Figure 6).

Groundwater is present at the Subject Property at depths ranging between approximately 6 and 15 feet bgs and flows south/southwest. Groundwater is in contact with the chlorinated solvent-contaminated soil at the Mt. Baker Cleaners parcel year-round. Chlorinated solvent-contaminated groundwater has migrated from Parcel -0031 to the south/southwest. The northern extent of the groundwater contamination is bounded by

HC-MW-4 and the subsurface explorations completed on the Mount Baker Village Apartments property to the north, which included K-SB-1, K-SB-3, ATC-B-3 through ATC-B-5 and soil vapor samples SV-1 through SV-5. The southern, western, and eastern extent of the chlorinated solvent-contaminated groundwater plume is unknown. It is possible that utility corridors located in S. McClellan St. and MLK Jr. Way S. are impacting the migration of chlorinated solvents in groundwater. The vertical extent (downward migration) of chlorinated solvents is likely bounded by a thick low permeability layer of silt and clay, which was encountered in borings HC-MW-1 through HC-MW-6 at depths of approximately 16 to 18 feet below the ground surface (elevations from 63 to 47 feet).

Soil vapor sampling has not been conducted at the Mt. Baker Cleaners parcel, and there is an unknown risk related to vapor intrusion from the chlorinated solvent contaminated soil and groundwater beneath the existing building.

5.2 Former Phillips 66 Gas Station Parcel CSM

Gasoline- and diesel-range petroleum hydrocarbons were released into soil at the former Phillips 66 parcel prior to closure of the gas and auto service station in 1989. Additionally, in Ecology's 2014 opinion letter, they identified the service garage as a potential source of PCE at the parcel and PCE was detected in shallow, unsaturated soil in borings completed in 2014 (GeoEngineers, 2015c).

Based on the location of the heaviest petroleum-impacted area, the petroleum release(s) were likely associated with the former pump islands in the southwestern portion of the parcel and the heating-oil UST located in the southeastern portion of the parcel, which were present on the property beginning in approximately 1955. Remedial excavations were completed to remove the gas station equipment and USTs, while soil with petroleum hydrocarbon contamination was used to backfill the equipment excavations and remains on the parcel.

Based on the chemical analytical results of the soil samples obtained on the parcel, the petroleum-contaminated soil near the former pump islands is present between approximately 15 and 20 feet bgs, and near the heating-oil UST between at least 10 and 15 feet bgs. The contaminated soil in both of these locations is likely in contact with (and possibly deeper than) groundwater throughout the majority of the year.

The groundwater beneath the Subject Property flows to the south-southwest and was measured in May 2017 at depths of approximately 9 to 12 feet bgs on the former Phillips 66 gas station parcel.

Gasoline- and diesel-contaminated groundwater was identified in the immediate vicinity of the pump islands (MW-3, MW-5 and MW-8). The gasoline-contaminated groundwater appears to have migrated off the parcel to the west, but is bounded by MW-6. However, the lack of contaminants in MW-6 may be due to diversion of contaminated groundwater into the sanitary sewer and storm drain utility corridor located in MLK Jr. Way S. It is possible that the utility corridor in the ROW is acting as a preferential pathway for groundwater migration and have intercepted the western migration of contaminated groundwater from the former Phillips 66 gas station. The petroleum-contaminated

groundwater is also bounded to the north, east, and south by monitoring wells MW-1, MW-4, MW-7, and MW-2. The gasoline- and diesel-contaminated groundwater are associated with former gasoline service station facilities and remaining contaminated soil.

Chlorinated solvent-contaminated groundwater is present beneath the parcel. It is unclear if the documented shallow solvent-contaminated soil from service station area contributed to this contamination or if the PCE-contaminated groundwater is solely related to the documented releases at the upgradient Mt. Baker Cleaners. Soil vapor sampling has not been conducted at the Phillips 66 parcel; however, there is a risk of vapor intrusion from the chlorinated solvent-contaminated soil and groundwater beneath the existing building.

5.3 Potential Exposure Pathways

Exposure pathways considered for the Site include nonaqueous phase liquid (NAPL) to groundwater, groundwater to surface water, soil to groundwater, soil direct contact, and soil vapor inhalation. Of these potential exposure pathways, the only complete pathways are soil to groundwater, soil direct contact, and soil vapor inhalation, as described in the Conceptual Site Model. The proposed explorations in this RI Work Plan will address each of the complete pathways, as described in Section 8.0.

5.4 Terrestrial Ecological Protection

The site qualifies for an exclusion from the terrestrial ecological evaluation because there is less than 1.5 acres of contiguous undeveloped land on the site or within 500 feet of any area of the site (WAC 173-340-7491(c)(i)(ii)(iii)).

6 CLEANUP STANDARDS

6.1 Constituents of Potential Concern

The primary sources of contamination at the Site are dry cleaning operations, gasoline service station operations (gasoline USTs, hydraulic hoists, parts washing with solvents, and a waste-oil UST) and heating-oil USTs (both on the Mt. Baker Cleaners parcel and the former Phillips 66 gasoline service station parcel).

Constituents of potential concern for the Site include: chlorinated solvents (PCE, TCE, cis-1,2-Dichloroethene, and VC), gasoline-, diesel- and heavy oil-range petroleum hydrocarbons, and BTEX. Of these, additional evaluation is necessary to evaluate the vertical and/or lateral extents of chlorinated solvents, gasoline-, diesel- and heavy oil-range petroleum hydrocarbons. Testing of additional potential constituents of concern based on MTCA 173-340-900 Table 830-1 (including PAHs, polychlorinated biphenyls (PCBs), and other VOCs) have been completed.

6.2 Preliminary Screening Levels

MTCA Method A cleanup levels are available for all of the constituents of concern at the Site and are shown in Tables 3 and 4 of this report. Following completion of the RI,

additional evaluation will be conducted to ensure that the MTCA Method A cleanup levels are appropriate for the contaminants at the site.

7 AREAS REQUIRING FURTHER EVALUATION

Several environmental studies have been completed at both the dry cleaner and former gasoline service station, however, data gaps remain at the Site. The purpose of this section of the RI Work Plan is to identify the data gaps remaining at the site that will be evaluated during the RI, as discussed in Section 8. The data gaps include:

1. **Soil Data Gaps.**

    a. **Nature and extent of PCE-contaminated soil at the Mt. Baker Cleaners and surrounding parcels.** Borings conducted on the Mt. Baker Cleaners parcel in 2017 extended between 9.5 and 15 feet bgs and solvents (PCE and TCE) were present at concentrations greater than the MTCA Method A cleanup level at these depths. The lateral extent of the PCE-contaminated soil is not bounded to the west. Additionally, TCLP testing is needed on the parcels surrounding the Mt. Baker Cleaners parcel to evaluate whether soil meets the toxicity characteristics of a dangerous waste.

    b. **Soil conditions related to the closed in-place heating-oil UST located in the northeast corner of the Mt. Baker Cleaners parcel.** Based on MTCA 173-340-900 Table 830-1, PCB testing is required near the closed-in-place heating-oil UST. Additionally, diesel-range hydrocarbons above the MTCA Method A cleanup level are present in groundwater at AMW-1. The specific source of the diesel likely is related to the heating-oil UST. Soil testing for petroleum hydrocarbons should be conducted in the vicinity of AMW-1.

    c. **Petroleum hydrocarbon-contaminated soil at the former Phillips 66 gas station parcel.** The eastern and northern extent of heating-oil contamination near the former heating-oil UST on the eastern edge of the former gas station parcel has not yet been established. Additionally, the western lateral extent of gasoline-contaminated soil near B-6 (located along the western parcel boundary) has not been evaluated and the presence of soil contamination beneath the groundwater table should be reevaluated.

2. **Groundwater Data Gaps.**

    a. **Lateral extent of chlorinated solvent-contaminated groundwater.** The lateral extent of the chlorinated solvent-contaminated groundwater to the south-southeast is unknown. And additional verification of whether solvents may be following preferential utility pathways needs evaluated along MLK Way S and S. McClellan Street.

    b. **Effect of utility corridors on contaminant migration.** It is possible that the utility corridors present in both the S. McClellan St. and MLK Jr. Way S. ROWs are impacting the lateral migration of chlorinated solvents in groundwater.

3. **Soil Vapor Data Gaps.**

   a. **Soil Vapor testing to evaluate the potential for vapor intrusion.** Soil vapor sampling to evaluate the potential vapor intrusion of volatile compounds such as chlorinated solvents, gasoline and gasoline additives has not been conducted at the Site.

8 REMEDIAL INVESTIGATION APPROACH

8.1 RI Soil Investigation

Ten soil borings (AB-07 through AB-16) will be completed at the Site to evaluate the vertical and lateral extents of the soil contamination. The locations of the proposed borings are shown on Figure 15, *Proposed Locations of Additional Borings and Monitoring Wells*. Borings AB-11, AB-12, AB-15, AMW-2, AMW-4, and AMW-10 will be completed with a hollow-stem auger drill rig and the remaining borings will be completed using a limited-access direct-push drill rig. The rationale for each proposed soil boring location is summarized in Table 7 below.

Table 7. Summary of Proposed Soil Sampling Locations, RI

Proposed Boring ID	Proposed Depth of Boring (feet bgs)	Purpose	Proposed Sample Depths (feet bgs)	Proposed Chemical Analysis
AB-17	20	Dry cleaner parcel. Evaluate soil impacts associated with the former heating-oil UST (which may have been used to store solvents) and dry cleaner operations.	2, 6, 10, 15, and 20	PCBs, Chlorinated solvents, diesel-range petroleum hydrocarbons, PCE TCLP (if PCE detected at or above 15 mg/kg).
ADP-20	20-25	Dry cleaner and parcels to west. Evaluate soil impacts associated with dry cleaner operations.	2, 5, 10, 15, 20, and 25	Chlorinated solvents, PCE TCLP (if PCE detected at or above 15 mg/kg).
AB-21	20-25	Dry cleaner and parcels to west. Evaluate soil impacts associated with dry cleaner operations.	2, 5, 10, 15, 20, and 25	Chlorinated solvents, PCE TCLP (if PCE detected at or above 15 mg/kg).
AB-22	20-25	Dry cleaner and parcels to west. Evaluate soil impacts associated with dry cleaner operations.	2, 5, 10, 15, 20, and 25	Chlorinated solvents, PCE TCLP (if PCE detected at or above 15 mg/kg).
AB-23	20	Gas station parcel. Evaluate soil impacts from the pump islands to the west of boring B-6.	15, 20	Gasoline-range petroleum hydrocarbons,

ADP-24	20	Gas station parcel. Evaluate soil impacts from the heating-oil UST to the north and east of borings B-3 and MW-9.	5, 10, 15, and 20	Diesel-range petroleum hydrocarbons.
AB-25	30	Gas station parcel. Evaluate the depth of residual contaminated soil in the vicinity of the former pump island relative to groundwater.	5, 10, 12.5, 15, 17.5, 20, 25, and 30	Gasoline-range petroleum hydrocarbons, BTEX, volatile petroleum hydrocarbons (VPH), and extractable petroleum hydrocarbons (EPH).
ADP-26	20	Private residence parcel. Evaluate soil impacts associated with dry cleaner operations.	5, 10, 15, and 20	Chlorinated solvents, PCE TCLP (if PCE detected at or above 15 mg/kg).
AMW-2	20-25	Dry cleaner and parcels to west. Evaluate soil impacts associated with dry cleaner operations and heating-oil UST	2, 5, 10, 15, 20 and 25	Chlorinated solvents, Diesel-range petroleum hydrocarbons, PCE TCLP (if PCE detected at or above 15 mg/kg).
AMW-4	20	Gas station parcel. Evaluate soil impacts from the heating-oil UST to the north and east of borings B-3 and MW-9.	5, 10, 15, 20	Chlorinated solvents, Diesel-range petroleum hydrocarbons.
AMW-10	20-25	Dry cleaner and parcels to west. Evaluate soil impacts associated with dry cleaner operations. Evaluate whether the utilities present in the S. McClellan St. and MLK Jr. Way S. ROWs are impacting the lateral migration of chlorinated solvents in groundwater.	2, 5, 10, 15, 20 and 25	Chlorinated solvents, PCE TCLP (if PCE detected at or above 15 mg/kg).

8.2 Contained-In Determination Soil Investigation

In addition to the soil investigation described above, additional soil sampling and chemical analysis has been requested by Ecology to evaluate whether the soil at the Mt. Baker Cleaners parcels meets the criteria for a "Contained-In" dangerous waste. To fulfill this request, six additional borings (ADP-18, ADP-19, ADP-27 through ADP-30) will be completed within the Mt. Baker Cleaners parcel and two additional borings (ADP-31 and ADP-32) will be completed on the parcels west of Mt. Baker Cleaners, as shown on Figures 15 and 16. Each of these borings will be completed using limited access direct-push drilling equipment. The rationale for each proposed soil boring location is summarized in Table 8 below.

Table 8. Summary of Proposed Soil Sampling Locations, CID

Proposed Boring ID	Proposed Depth of Boring (feet bgs)	Purpose	Proposed Sample Depths (feet bgs)	Proposed Chemical Analysis
ADP-18	20	Dry cleaner parcel. Evaluate soil impacts associated with dry cleaner operations.	2, 5, 10, 15, and 20	Chlorinated solvents, PCE TCLP (if PCE detected at or above 15 mg/kg).
ADP-19	20	Dry cleaner parcel. Evaluate soil impacts associated with dry cleaner operations and heating-oil UST.	2, 5, 10, 15, and 20	Chlorinated solvents, diesel-range petroleum hydrocarbons, PCE TCLP (if PCE detected at or above 15 mg/kg).
ADP-27	20	Dry cleaner parcel. Evaluate soil impacts associated with dry cleaner operations.	2, 5, 10, 15, and 20	Chlorinated solvents, PCE TCLP (if PCE detected at or above 15 mg/kg).
ADP-28	20	Dry cleaner parcel. Evaluate soil impacts associated with dry cleaner operations.	2, 5, 10, 15, and 20	Chlorinated solvents, PCE TCLP (if PCE detected at or above 15 mg/kg).
ADP-29	20	Dry cleaner parcel. Evaluate soil impacts associated with dry cleaner operations.	2, 5, 10, 15, and 20	Chlorinated solvents, PCE TCLP (if PCE detected at or above 15 mg/kg).
ADP-30	20	Dry cleaner parcel. Evaluate soil impacts associated with dry cleaner operations.	2, 5, 10, 15, and 20	Chlorinated solvents, PCE TCLP (if PCE detected at or above 15 mg/kg).
ADP-31	15	Parcels west of the dry cleaner. Evaluate soil impacts associated with dry cleaner operations.	2, 5, 10, and 15	Chlorinated solvents, PCE TCLP (if PCE detected at or above 15 mg/kg).
ADP-32	15	Parcels west of the dry cleaner. Evaluate soil impacts associated with dry cleaner operations.	2, 5, 10, and 15	Chlorinated solvents, PCE TCLP (if PCE detected at or above 15 mg/kg).

8.3 Groundwater Evaluation

Fifteen monitoring wells (AMW-2 through AMW-16) will be completed at the Site to evaluate the lateral extent of the chlorinated solvent-contaminated groundwater plume and the diesel-range petroleum hydrocarbons identified in monitoring well AMW-1. Monitoring wells will be installed using a hollow-stem auger drill rig. Additionally,

reconnaissance "grab" groundwater samples will be obtained from each of the hollow-stem auger borings that are not completed as monitoring wells (AB-17, AB-21, AB-22, AB-23, and AB-25) and submitted for chemical analysis of chlorinated solvents. The grab groundwater sample obtained from AB-23 will also be submitted for chemical analysis of gasoline-range petroleum hydrocarbons to evaluate the western extent of gasoline-contaminated groundwater present in MW-3 and MW-5. The locations of the proposed monitoring wells are shown on Figure 15, *Proposed Locations of Additional Borings and Monitoring Wells*.

Each of the monitoring wells will be completed with a 2-inch polyvinyl chloride (PVC) screen with 0.010-inch slots. The well annulus will be backfilled with a 10-20 size washed sand pack to at least 1 foot above the top of the screen and sealed with hydrated bentonite chips and concrete to the ground surface. The monitoring wells will be finished with a flush-mount traffic-rated monument. Following installation, water levels and groundwater samples will be obtained from each of the monitoring wells at the Site (including monitoring wells installed during previous studies). The rationale for each proposed monitoring well and well construction details are summarized in Table 9 below.

Based on the boring logs of soil borings HC-MW-1 through HC-MW-2, low permeability soil (silt and clay) is expected to be encountered at each monitoring well location at depths of approximately 15 to 20 feet bgs. This low permeability soil is acting as a barrier for downward migration of PCE (an aquitard). As long as the expected aquitard is encountered, a deep monitoring well to evaluate the vertical extent of PCE is not necessary.

Table 9. Summary of Proposed Monitoring Wells and Groundwater Sampling

Proposed Boring ID	Proposed Depth of Monitoring Well (feet bgs)	Proposed Screen Interval (feet bgs)	Purpose	Proposed Chemical Analysis
AMW-2	15	5-15	Evaluate lateral extent of chlorinated solvent- and diesel-range petroleum hydrocarbon contaminated groundwater to the southwest. Evaluate whether the utilities present in the S. McClellan St. and MLK Jr. Way S. ROWs are impacting the lateral migration of chlorinated solvents in groundwater.	Chlorinated solvents and diesel-range petroleum hydrocarbons.
AMW-3	15	5-15	Evaluate eastern lateral extent of chlorinated solvent-contaminated groundwater.	Chlorinated solvents.
AMW-4	20	10-20	Evaluate lateral extent of chlorinated solvent-contaminated groundwater to the south and southwest.	Chlorinated solvents.
AMW-5	20	10-20	Evaluate lateral extent of chlorinated solvent-contaminated groundwater to the south and southwest.	Chlorinated solvents.
AMW-6	20	10-20	Evaluate lateral extent of chlorinated solvent-contaminated groundwater to the south and southwest. Evaluate whether the utilities present in the S. McClellan St. and MLK Jr. Way S. ROWs are impacting the lateral migration of chlorinated solvents in groundwater.	Chlorinated solvents.
AMW-7	20	10-20	Evaluate lateral extent of chlorinated solvent-contaminated groundwater to the south and southwest.	Chlorinated solvents.

AMW-8	20	10-20	Evaluate lateral extent of chlorinated solvent-contaminated groundwater to the south and southwest.	Chlorinated solvents.
AMW-9	20	10-20	Evaluate lateral extent of chlorinated solvent-contaminated groundwater to the south and southwest. Evaluate whether the utilities present in the S. McClellan St. and MLK Jr. Way S. ROWs are impacting the lateral migration of chlorinated solvents in groundwater.	Chlorinated solvents.
AMW-10	20	10-20	Evaluate lateral extent of chlorinated solvent-contaminated groundwater to the south and southwest.	Chlorinated solvents.
AMW-11	20	10-20	Evaluate lateral extent of chlorinated solvent-contaminated groundwater to the south and southwest. Evaluate whether the utilities present in the S. McClellan St. and MLK Jr. Way S. ROWs are impacting the lateral migration of chlorinated solvents in groundwater.	Chlorinated solvents.
AMW-12	20	10-20	Evaluate lateral extent of chlorinated solvent-contaminated groundwater to the southwest prior to the MLK utilidor. Evaluate whether the utilities present in the S. McClellan St. and MLK Jr. Way S. ROWs are impacting the lateral migration of chlorinated solvents in groundwater.	Chlorinated solvents.
AMW-13	20	10-20	Evaluate whether there is a source of VOCs on the former gas station property south of MW-9 in the vicinity of the former heating-oil UST.	Chlorinated solvents.

AMW-14	20	10-20	Evaluate lateral extent of chlorinated solvent-contaminated groundwater to the south and southwest. Evaluate whether the utilities present in the S. McClellan St. and MLK Jr. Way S. ROWs are impacting the lateral migration of chlorinated solvents in groundwater.	Chlorinated solvents.
AMW-15	20	10-20	Evaluate lateral extent of chlorinated solvent-contaminated groundwater to the south and southwest. Evaluate whether the utilities present in the S. McClellan St. and MLK Jr. Way S. ROWs are impacting the lateral migration of chlorinated solvents in groundwater.	Chlorinated solvents.
AMW-16	20	10-20	Evaluate lateral extent of chlorinated solvent-contaminated groundwater to the south and southwest.	Chlorinated solvents.

8.4 Soil Vapor Evaluation

Seven soil vapor samples (ASV-1 through ASV-7) will be completed at the Site to evaluate the potential for vapor intrusion into the existing buildings. The soil vapor samples will be completed in the approximate locations shown on Figure 16, *Proposed Locations for Subslab Soil Vapor Sampling*. Each of the soil vapor samples will be completed using subslab soil vapor sampling methods directly below the interior concrete basement slab. This will consist of the following:

Temporary vapor extraction points will be installed through the slab in each location using a rotary hammer drill. Soil vapor samples will be collected using laboratory-supplied and individually certified evacuated 1-liter SUMMA canisters fitted with 150-milliliters-per-minute (ml/min) flow controllers and dedicated sampling trains, per the following procedures:

- Prior to sampling, a shut-in test will be performed by inducing a vacuum to the sampling train (including dedicated disposable Teflon tubing, fittings, and connections to the SUMMA canister). A minimum vacuum of 10 inches of mercury will be applied for a period of 5 minutes to observe that no change in vacuum occurs, which indicates that the sampling train was free of leaks that could introduce ambient indoor air to the soil vapor sample.

- The vapor extraction point will then be enclosed in a leak-testing shroud, and helium tracer gas will be applied until approximately 30 percent helium was measured inside the shroud. A total of 700 ml of air/vapor will be purged through each extraction point to ensure that any remaining ambient indoor air inside the sampling train is removed, to identify a poor seal between the vapor extraction point and the slab, and to facilitate field screening of subslab vapors prior to sampling.
- After confirming that no significant leakage is present in the sampling train or around the vapor extraction point seal and that all remaining ambient indoor air had been removed from the sampling apparatus, the SUMMA canisters will be opened and allowed to fill at 150 ml/min over approximately 5 minutes, or when the canister vacuum reached -5 inches of mercury.

Samples will be analyzed using U.S. Environmental Protection Agency (EPA) Method TO-15 for VOCs and American Society for Testing and Materials (ASTM) method D1946 for helium. If necessary, follow-up evaluation using the Johnson and Ettinger Model (JEM[2]) will be conducted to calculate estimated indoor air concentrations of contaminants that are detected above the subslab soil vapor screening levels.

9 REFERENCES

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[2] The JEM is a mathematical model that is endorsed by the United States Environmental Protection Agency (EPA) and Ecology for predicting estimated indoor air concentrations of volatile contaminants identified in the subsurface. The estimate includes consideration of exposure rates, contaminant chemical properties, contaminant transport mechanisms, soil and groundwater properties, and building construction specifications. Default values for these parameters developed by the EPA and recommended for use by Ecology are the most conservative in the range of values, including use of exposure rates for the residential scenario. Alternatively, the EPA and Ecology allow for inputting of non-default values for some select parameters to tailor the estimate to known site conditions (such as building construction parameters, soil types, depth to groundwater or the contaminant mass, etc.).

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10 LIMITATIONS

Work for this project was performed for the Mt. Baker Housing Association (Client), and this report was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This report does not represent a legal opinion. No other warranty, expressed or implied, is made.

All reports prepared by Aspect Consulting for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Aspect Consulting. Aspect Consulting's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

TABLES

Table 3 - Chemical Analytical Results of Soil Samples Obtained at the Site

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Date and Consultant			2005 G-Logics														
Boring ID			GL-1	GL-2	GL-2	GL-3	GL-4	GL-4	GL-4	GL-5	GL-5	GL-5	GL-6	GL-6	N HOIST BOTTOM	NORTH PUMP-2	S HOIST BOTTOM
Sample Depth			5 ft	4 ft	9 ft	6 ft	9 ft	14 ft	18 ft	10 ft	15 ft	20 ft	15 ft	20 ft	9.5 ft	2 ft	8 ft
Sample Date			2/9/2005	2/9/2005	2/9/2005	2/9/2005	2/9/2005	2/9/2005	2/9/2005	2/9/2005	2/9/2005	2/9/2005	2/9/2005	2/9/2005	2/4/2005	2/4/2005	2/4/2005
Sample Code			GL1-5	GL2-4	GL2-9	GL3-6	GL4-9	GL4-14	GL4-18	GL5-10	GL5-15	GL5-20	GL6-15	GL6-20	N HOIST BOTTOM-9.5	NORTH PUMP-2	S HOIST BOTTOM-8
Chemical Name	Units	MTCA Method A Cleanup Level															
Benzene, Toluele, Ethylbenzene, and Total Xylenes using EPA Method 8260B																	
Benzene	mg/kg	0.03	< 0 U	< 0 U	< 0 U		< 0 U	< 0 U	< 0 U							< 0.02 U	
Toluene	mg/kg	7	< 0 U	< 0 U	< 0 U		< 0 U	< 0 U	< 0 U							< 0.05 U	
Ethylbenzene	mg/kg	6	< 0 U	< 0 U	< 0 U		< 0 U	< 0 U	< 0 U							< 0.05 U	
Total Xylenes	mg/kg	9	< 0 U	< 0 U	< 0 U		< 0 U	< 0 U	< 0 U							< 0.05 U	
Carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs) using EPA Method 8270D/SIM																	
Benz(a)anthracene	mg/kg																
Benzo(a)pyrene	mg/kg	0.1															
Benzo(b)fluoranthene	mg/kg																
Benzo(k)fluoranthene	mg/kg																
Chrysene	mg/kg																
Dibenzo(a,h)anthracene	mg/kg																
Naphthalene (8260)	mg/kg	5															
Naphthalene (8270 SIM)	mg/kg	5															
Naphthalene (8270)	mg/kg	5															
Total cPAHs TEQ (ND = 1/2 RDL)	mg/kg	0.1															
Total Petroleum Hydrocarbons using Northwest Methods NWTPH-Dx and NWTPH-Gx																	
Gasoline Range Organics	mg/kg	30|100	< 0 U	< 0 U	< 0 U		< 0 U	< 0 U	< 0 U							< 5 U	
Diesel Range Organics	mg/kg	2000				< 0 U		< 0 U		**1400**	**550**	< 0 U	< 0 U	< 0 U	< 20 U	< 20 U	< 20 U
Motor Oil Range Organics	mg/kg	2000				**280**		< 0 U		**120**	< 0 U	< 0 U	**530**	< 0 U	**1000**	< 50 U	< 50 U
Select Volatile Organic Compounds (VOCs) using EPA Methods 8260B																	
1,2-Dibromoethane (EDB)	mg/kg	0.005															
1,2-Dichloroethane (EDC)	mg/kg																
cis-1,2-Dichloroethene (DCE)	mg/kg																
Methyl tert-butyl ether (MTBE)	mg/kg	0.1															
Methylene Chloride	mg/kg	0.02															
Tetrachloroethene (PCE)	mg/kg	0.05															
Tetrachloroethene (PCE) (TCLP)	ug/L																
Trichloroethene (TCE)	mg/kg	0.03															
Trichlorofluoromethane	mg/kg																
Vinyl Chloride	mg/kg																

Notes
Bold - detected
Blue - exceeded MTCA A
U = Not Detected
J = Estimated Value

Table 3 - Chemical Analytical Results of Soil Samples Obtained at the Site

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Date and Consultant					2006 Kane													
Boring ID			SOUTH PUMP-2	SUMP-B-4	K-SB-1	K-SB-2	K-SB-2	K-SB-3	MW-4	MW-5	MW-5	MW-5	P-1	P-1	P-2	P-3	P-3	P-3
Sample Depth			2 ft	4 ft	3 ft	4 ft	6 ft	7 ft	20 ft	12 ft	16 ft	20 ft	12 ft	16 ft	16 ft	12 ft	16 ft	20 ft
Sample Date			2/4/2005	2/4/2005	1/25/2006	1/25/2006	1/25/2006	1/25/2006	6/22/2006	6/22/2006	6/22/2006	6/22/2006	6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/6/2005
Sample Code			SOUTH PUMP-2	SUMP BOTTOM-4	K-SB-1-3	K-SB-2-4	K-SB-2-6	K-SB-3-7	MW4-20	MW5-12	MW5-16	MW5-20	P1-12	P1-16	P2-16	P3-12	P3-16	P3-20
Chemical Name	Units	MTCA Method A Cleanup Level																
Benzene, Toluele, Ethylbenzene, and Total Xylenes using EPA																		
Benzene	mg/kg	0.03	< 0.02 U		< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0 U	< 0 U	< 0 U	**0.03**	< 0 U	**0.37**	< 0 U	< 0 U	**0.075**	< 0 U
Toluene	mg/kg	7	< 0.05 U		< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0 U	< 0 U	< 0 U	< 0 U	< 0 U	**0.082**	< 0 U	< 0 U	< 0 U	< 0 U
Ethylbenzene	mg/kg	6	< 0.05 U		< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0 U	< 0 U	< 0 U	**0.06**	< 0 U	< 0 U	< 0 U	< 0 U	**0.6**	< 0 U
Total Xylenes	mg/kg	9	< 0.05 U		< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0 U	< 0 U	**0.16**	**0.36**	**0.16**	< 0 U	< 0 U	< 0 U	**1.9**	< 0 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs) using E																		
Benz(a)anthracene	mg/kg																	
Benzo(a)pyrene	mg/kg	0.1																
Benzo(b)fluoranthene	mg/kg																	
Benzo(k)fluoranthene	mg/kg																	
Chrysene	mg/kg																	
Dibenzo(a,h)anthracene	mg/kg																	
Naphthalene (8260)	mg/kg	5																
Naphthalene (8270 SIM)	mg/kg	5																
Naphthalene (8270)	mg/kg	5																
Total cPAHs TEQ (ND = 1/2 RDL)	mg/kg	0.1																
Total Petroleum Hydrocarbons using Northwest Methods NWTF																		
Gasoline Range Organics	mg/kg	30|100	< 5 U						< 0 U	< 0 U	< 0 U	**22**	< 0 U	< 0 U	< 0 U	< 0 U	**52**	< 0 U
Diesel Range Organics	mg/kg	2000	**23**	< 20 U														
Motor Oil Range Organics	mg/kg	2000	< 50 U	< 50 U														
Select Volatile Organic Compounds (VOCs) using EPA Method:																		
1,2-Dibromoethane (EDB)	mg/kg	0.005																
1,2-Dichloroethane (EDC)	mg/kg																	
cis-1,2-Dichloroethene (DCE)	mg/kg				< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U										
Methyl tert-butyl ether (MTBE)	mg/kg	0.1																
Methylene Chloride	mg/kg	0.02																
Tetrachloroethene (PCE)	mg/kg	0.05			< 0.02 U	**0.04**	**0.05**	< 0.02 U										
Tetrachloroethene (PCE) (TCLP)	ug/L																	
Trichloroethene (TCE)	mg/kg	0.03			< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U										
Trichlorofluoromethane	mg/kg																	
Vinyl Chloride	mg/kg				< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U										

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

J = Estimated Value

Table 3 - Chemical Analytical Results of Soil Samples Obtained at the Site

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Chemical Name	Units	MTCA Method A Cleanup Level	Date and Consultant																
			2008 G-Logics																
Boring ID			P-4	P-5	P-6	P-6	P-6	P-7	P-7	P-8	P-8	P-8	P-9	P-9	P-9	P-10	P-11	P-12	P-12	P-13
Sample Depth			14 ft	15 ft	12 ft	16 ft	18 ft	12 ft	18 ft	12 ft	16 ft	20 ft	12 ft	15 ft	20 ft	16 ft	12 ft	4 ft	15 ft	20 ft
Sample Date			6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/6/2005	6/22/2006	6/22/2006	6/22/2006
Sample Code			P4-14	P5-15	P6-12	P6-16	P6-18	P7-12	P7-18	P8-12	P8-16	P8-20	P9-12	P9-15	P9-20	P10-16	P11-12	P12-4	P12-15	P13-20
Benzene, Toluele, Ethylbenzene, and Total Xylenes using EPA																				
Benzene	mg/kg	0.03	< 0 U	< 0 U	< 0 U	**0.26**	< 0 U	< 0 U	**25 J**	< 0 U	**7**	**0.16**	< 0 U	**14**	< 0 U	**0.034**	< 0 U	< 0 U	< 0 U	< 0 U
Toluene	mg/kg	7	< 0 U	< 0 U	< 0 U	**0.05**	< 0 U	< 0 U	**18 J**	< 0 U	**10**	**0.04**	< 0 U	**2.2**	< 0 U	**0.05**	< 0 U	< 0 U	< 0 U	< 0 U
Ethylbenzene	mg/kg	6	< 0 U	< 0 U	< 0 U	< 0 U	< 0 U	< 0 U	**120 J**	< 0 U	**45**	**0.63**	< 0 U	< 0 U	< 0 U	**0.35**	< 0 U	< 0 U	< 0 U	< 0 U
Total Xylenes	mg/kg	9	< 0 U	< 0 U	< 0 U	**0.03**	< 0 U	< 0 U	**390 J**	< 0 U	**310**	**4**	< 0 U	**4.1**	**0.3**	**1.6**	< 0 U	< 0 U	< 0 U	< 0 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs) using E																				
Benz(a)anthracene	mg/kg																			
Benzo(a)pyrene	mg/kg	0.1																		
Benzo(b)fluoranthene	mg/kg																			
Benzo(k)fluoranthene	mg/kg																			
Chrysene	mg/kg																			
Dibenzo(a,h)anthracene	mg/kg																			
Naphthalene (8260)	mg/kg	5																		
Naphthalene (8270 SIM)	mg/kg	5																		
Naphthalene (8270)	mg/kg	5																		
Total cPAHs TEQ (ND = 1/2 RDL)	mg/kg	0.1																		
Total Petroleum Hydrocarbons using Northwest Methods NWTF																				
Gasoline Range Organics	mg/kg	30|100	< 0 U	< 0 U	< 0 U	**16**	< 0 U	< 0 U	**6000 J**	< 0 U	**4000**	**80**	< 0 U	**1300**	**53**	**40**	< 0 U	< 0 U	< 0 U	< 0 U
Diesel Range Organics	mg/kg	2000																		
Motor Oil Range Organics	mg/kg	2000																		
Select Volatile Organic Compounds (VOCs) using EPA Method:																				
1,2-Dibromoethane (EDB)	mg/kg	0.005																		
1,2-Dichloroethane (EDC)	mg/kg																			
cis-1,2-Dichloroethene (DCE)	mg/kg																			
Methyl tert-butyl ether (MTBE)	mg/kg	0.1																		
Methylene Chloride	mg/kg	0.02																		
Tetrachloroethene (PCE)	mg/kg	0.05																		
Tetrachloroethene (PCE) (TCLP)	ug/L																			
Trichloroethene (TCE)	mg/kg	0.03																		
Trichlorofluoromethane	mg/kg																			
Vinyl Chloride	mg/kg																			

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

J = Estimated Value

Table 3 - Chemical Analytical Results of Soil Samples Obtained at the Site

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Date and Consultant							2009 PBS			2010 KEE							
Boring ID			P-14	P-15	P-16	P-16	PBS-SB-1	PBS-SB-2	PBS-SB-3	KEE-B-1	KEE-B-2	KEE-B-3	B-1	B-1	B-1	B-1	B-2
Sample Depth			16 ft	20 ft	16 ft	20 ft	9 - 12 ft	8 - 11 ft	9 - 12 ft	-	-	-	5 ft	10 ft	15 ft	18 ft	5 ft
Sample Date			6/22/2006	6/22/2006	6/22/2006	6/22/2006	6/25/2009	6/25/2009	6/25/2009	5/24/2010	5/24/2010	5/24/2010	4/18/2011	4/19/2011	4/19/2011	4/19/2011	4/18/2011
Sample Code			P14-16	P15-20	P16-16	P16-20	SB-1-SO	SB-2-SO	SB-3-SO	B1-3	B2-3	B3-4	B-1-5	B-1-10	B-1-15	B-1-18	B-2-5
Chemical Name	Units	MTCA Method A Cleanup Level															
Benzene, Toluele, Ethylbenzene, and Total Xylenes using EPA																	
Benzene	mg/kg	0.03	< 0 U	< 0 U	< 0 U	< 0 U							< 0.0005 U	< 0.0005 U	< 0.02 U	< 0.0005 U	**0.002**
Toluene	mg/kg	7	< 0 U	< 0 U	< 0 U	< 0 U							< 0.001 U	< 0.001 U	< 0.04 U	< 0.0009 U	**0.001**
Ethylbenzene	mg/kg	6	< 0 U	< 0 U	< 0 U	< 0 U							< 0.001 U	< 0.001 U	< 0.04 U	< 0.0009 U	< 0.001 U
Total Xylenes	mg/kg	9	< 0 U	< 0 U	< 0 U	< 0 U							< 0.001 U	< 0.001 U	< 0.04 U	< 0.0009 U	**0.002**
Carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs) using E																	
Benz(a)anthracene	mg/kg																
Benzo(a)pyrene	mg/kg	0.1															
Benzo(b)fluoranthene	mg/kg																
Benzo(k)fluoranthene	mg/kg																
Chrysene	mg/kg																
Dibenzo(a,h)anthracene	mg/kg																
Naphthalene (8260)	mg/kg	5															
Naphthalene (8270 SIM)	mg/kg	5															
Naphthalene (8270)	mg/kg	5															
Total cPAHs TEQ (ND = 1/2 RDL)	mg/kg	0.1															
Total Petroleum Hydrocarbons using Northwest Methods NWTF																	
Gasoline Range Organics	mg/kg	30|100	< 0 U	< 0 U	< 0 U	< 0 U	< 20 U	< 20 U	< 20 U				< 1.1 U	**2**	**40**	< 1.4 U	**1.4**
Diesel Range Organics	mg/kg	2000					< 50 U	< 50 U	< 50 U								
Motor Oil Range Organics	mg/kg	2000					< 100 U	< 100 U	< 100 U								
Select Volatile Organic Compounds (VOCs) using EPA Method:																	
1,2-Dibromoethane (EDB)	mg/kg	0.005								< 0.0011 U	< 0.0011 U	< 0.0012 U					
1,2-Dichloroethane (EDC)	mg/kg									< 0.0011 U	< 0.0011 U	< 0.0012 U					
cis-1,2-Dichloroethene (DCE)	mg/kg									< 0.0011 U	< 0.0011 U	< 0.0012 U					
Methyl tert-butyl ether (MTBE)	mg/kg	0.1											< 0.0005 U	< 0.0005 U	< 0.02 U	< 0.0005 U	< 0.0005 U
Methylene Chloride	mg/kg	0.02								< 0.0056 U	< 0.0053 U	< 0.0062 U					
Tetrachloroethene (PCE)	mg/kg	0.05								**0.0036**	**0.09**	**0.0027**					
Tetrachloroethene (PCE) (TCLP)	ug/L																
Trichloroethene (TCE)	mg/kg	0.03								< 0.0011 U	< 0.0011 U	< 0.0012 U					
Trichlorofluoromethane	mg/kg									< 0.0011 U	< 0.0011 U	< 0.0012 U					
Vinyl Chloride	mg/kg									< 0.0011 U	< 0.0011 U	< 0.0012 U					

Notes
Bold - detected
Blue - exceeded MTCA A
U = Not Detected
J = Estimated Value

Table 3 - Chemical Analytical Results of Soil Samples Obtained at the Site

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Chemical Name	Units	MTCA Method A Cleanup Level	Date and Consultant														2012 Stantec
			Boring ID	B-2	B-2	B-2	B-3	B-3	B-3	B-3	B-4	B-4	B-4	B-4	B-5	B-5	B-5	B-5
			Sample Depth	11 ft	15 ft	18 ft	5 ft	10 ft	15 ft	20 ft	5 ft	10 ft	15 ft	17 ft	5 ft	10 ft	15 ft	18 ft
			Sample Date	4/19/2011	4/19/2011	4/19/2011	4/18/2011	4/19/2011	4/19/2011	4/19/2011	4/18/2011	4/19/2011	4/19/2011	4/19/2011	4/18/2011	4/19/2011	4/19/2011	4/19/2011
			Sample Code	B-2-11	B-2-15	B-2-18	B-3-5	B-3-10	B-3-15	B-3-20	B-4-5	B-4-10	B-4-15	B-4-17	B-5-5	B-5-10	B-5-15	B-5-18
Benzene, Toluele, Ethylbenzene, and Total Xylenes using EPA																		
Benzene	mg/kg	0.03	**0.001**	< 0.045 U	**0.003**	**0.0008**	< 0.022 U	< 0.024 U	< 0.0005 U	**0.001**	< 0.0009 U	< 0.0005 U	**0.005**	< 0.0005 U	< 0.0006 U	< 0.0006 U	**0.002**
Toluene	mg/kg	7	**0.002**	< 0.089 U	< 0.001 U	< 0.001 U	< 0.043 U	< 0.048 U	< 0.001 U	< 0.001 U	< 0.002 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U
Ethylbenzene	mg/kg	6	< 0.001 U	**1.2**	**0.007**	< 0.001 U	< 0.043 U	< 0.048 U	< 0.001 U	< 0.001 U	< 0.002 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U
Total Xylenes	mg/kg	9	**0.005**	**26**	**0.15**	< 0.001 U	< 0.043 U	< 0.048 U	< 0.001 U	< 0.001 U	< 0.002 U	< 0.001 U	**0.004**	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs) using E																		
Benz(a)anthracene	mg/kg																	
Benzo(a)pyrene	mg/kg	0.1																
Benzo(b)fluoranthene	mg/kg																	
Benzo(k)fluoranthene	mg/kg																	
Chrysene	mg/kg																	
Dibenzo(a,h)anthracene	mg/kg																	
Naphthalene (8260)	mg/kg	5													< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U
Naphthalene (8270 SIM)	mg/kg	5				< 0.037 U	< 0.038 U	**2.7**	< 0.00079 U						< 0.0019 U	< 0.00075 U	< 0.00077 U	**0.0017**
Naphthalene (8270)	mg/kg	5																
Total cPAHs TEQ (ND = 1/2 RDL)	mg/kg	0.1																
Total Petroleum Hydrocarbons using Northwest Methods NWTF																		
Gasoline Range Organics	mg/kg	30|100	**12**	**820**	**4.5**	< 13 U	**450**	**720**	< 1.2 U	< 1.2 U	< 200 U	< 18 U	**1.9**	< 1.4 U	< 1.2 U	< 1.4 U	< 1.3 U
Diesel Range Organics	mg/kg	2000				**150**	**10000**	**3200**	< 3.6 U					**11**	< 3.4 U	**12**	< 3.8 U
Motor Oil Range Organics	mg/kg	2000				**1000**	< 570 U	< 620 U	< 12 U					< 11 U	< 11 U	< 12 U	< 13 U
Select Volatile Organic Compounds (VOCs) using EPA Method																		
1,2-Dibromoethane (EDB)	mg/kg	0.005																
1,2-Dichloroethane (EDC)	mg/kg																	
cis-1,2-Dichloroethene (DCE)	mg/kg													< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U
Methyl tert-butyl ether (MTBE)	mg/kg	0.1	< 0.0005 U	< 0.045 U	< 0.0006 U	< 0.0005 U	< 0.022 U	< 0.024 U	< 0.0005 U	< 0.0005 U	< 0.0009 U	< 0.0005 U	< 0.0007 U	< 0.0005 U	< 0.0006 U	< 0.0006 U	< 0.0005 U
Methylene Chloride	mg/kg	0.02																
Tetrachloroethene (PCE)	mg/kg	0.05												< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U
Tetrachloroethene (PCE) (TCLP)	ug/L																	
Trichloroethene (TCE)	mg/kg	0.03												< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U
Trichlorofluoromethane	mg/kg																	
Vinyl Chloride	mg/kg													< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

J = Estimated Value

Table 3 - Chemical Analytical Results of Soil Samples Obtained at the Site

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Chemical Name	Units	MTCA Method A Cleanup Level	Date and Consultant														
			Boring ID	B-6	B-6	B-6	B-6	B-7	B-7	B-7	B-7	MW-6	MW-6	MW-7	MW-7	MW-8	MW-8	MW-9
			Sample Depth	5 ft	10 ft	15 ft	17 ft	5 ft	10 ft	15 ft	17 ft	10 ft	15 ft	5 ft	15 ft	10 ft	15 ft	10 ft
			Sample Date	4/18/2011	4/19/2011	4/19/2011	4/19/2011	4/18/2011	4/19/2011	4/19/2011	4/19/2011	12/11/2007	12/11/2007	12/11/2007	7/13/2011	12/11/2007	12/11/2007	12/11/2007
			Sample Code	B-6-5	B-6-10	B-6-15	B-6-17	B-7-5	B-7-10	B-7-15	B-7-17	MW-6-10	MW-6-15	MW-7-5	MW-7-15	MW-8-10	MW-8-15	MW-9-10
Benzene, Toluele, Ethylbenzene, and Total Xylenes using EPA																		
Benzene	mg/kg	0.03	< 0.0004 U	< 0.0005 U	< 0.29 U	< 0.0008 U	< 0.0005 U	< 0.0004 U	**0.0006**	**0.003**	< 0 U	**0.002**	< 0 U	**0.002**	< 0 U	< 0 UJ	**0.002**
Toluene	mg/kg	7	< 0.0009 U	< 0.001 U	< 0.58 U	< 0.002 U	< 0.001 U	< 0.0008 U	**0.001**	**0.002**	< 0 U	**0.002**	< 0 U	< 0 U	**0.001**	< 0 UJ	**0.002**
Ethylbenzene	mg/kg	6	< 0.0009 U	< 0.001 U	**1.9**	< 0.002 U	< 0.001 U	< 0.0008 U	**0.001**	**0.006**	< 0 U	< 0 U	< 0 U	< 0 U	< 0 U	< 0 UJ	< 0 U
Total Xylenes	mg/kg	9	< 0.0009 U	< 0.001 U	**8.4**	**0.025**	< 0.001 U	< 0.0008 U	**0.006**	**0.015**	< 0 U	< 0 U	< 0 U	< 0 U	**0.012**	**0.077 J**	< 0 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs) using E																		
Benz(a)anthracene	mg/kg																	**0.16**
Benzo(a)pyrene	mg/kg	0.1																**0.21**
Benzo(b)fluoranthene	mg/kg																	**0.16**
Benzo(k)fluoranthene	mg/kg																	< 0.073 U
Chrysene	mg/kg																	**0.37**
Dibenzo(a,h)anthracene	mg/kg																	< 0.073 U
Naphthalene (8260)	mg/kg	5																
Naphthalene (8270 SIM)	mg/kg	5																
Naphthalene (8270)	mg/kg	5																< 0.073 U
Total cPAHs TEQ (ND = 1/2 RDL)	mg/kg	0.1																
Total Petroleum Hydrocarbons using Northwest Methods NWTF																		
Gasoline Range Organics	mg/kg	30|100	< 1.1 U	< 1.3 U	**1300**	< 24 U	< 1.1 U	< 1.1 U	**1.1**	**35**	< 0 U	**1.7**	< 0 U	< 0 U	**1**	**110**	< 0 UJ
Diesel Range Organics	mg/kg	2000									< 0 U	**14**	< 0 U	**11**	< 0 U	< 0 U	**860**
Motor Oil Range Organics	mg/kg	2000									**43**	**50**	< 0 U	**25**	**29**	< 0 U	**13000**
Select Volatile Organic Compounds (VOCs) using EPA Method:																		
1,2-Dibromoethane (EDB)	mg/kg	0.005																
1,2-Dichloroethane (EDC)	mg/kg																	
cis-1,2-Dichloroethene (DCE)	mg/kg																	
Methyl tert-butyl ether (MTBE)	mg/kg	0.1	< 0.0004 U	< 0.0005 U	< 0.29 U	< 0.0008 U	< 0.0005 U	< 0.0004 U	< 0.0005 U	< 0.0007 U								
Methylene Chloride	mg/kg	0.02																
Tetrachloroethene (PCE)	mg/kg	0.05																
Tetrachloroethene (PCE) (TCLP)	ug/L																	
Trichloroethene (TCE)	mg/kg	0.03																
Trichlorofluoromethane	mg/kg																	
Vinyl Chloride	mg/kg																	

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

J = Estimated Value

Table 3 - Chemical Analytical Results of Soil Samples Obtained at the Site

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Date and Consultant							2014 AEG		2015 GeoEng							
Boring ID			MW-9	MW-9	MW-10	MW-10	SW-B-6	SW-B-7	DP-1	DP-1	DP-2	DP-2	DP-3	DP-3	DP-4	DP-4
Sample Depth			15 ft	20 ft	10 ft	15 ft	-	-	2 ft	6 ft	2 ft	6 ft	2 ft	4 ft	2 ft	6 ft
Sample Date			12/11/2007	12/11/2007	7/13/2011	7/13/2011	12/20/2011	12/20/2011	9/2/2015	9/2/2015	9/2/2015	9/2/2015	9/2/2015	9/2/2015	9/2/2015	9/2/2015
Sample Code			MW-9-15	MW-9-20	MW-10-10	MW-10-15	SE-B-6	SW-B-7	DP-1-2.0	DP-1-6.0	DP-2-2.0	DP-2-6.0	DP-3-2.0	DP-3-4.0	DP-4-2.0	DP-4-6.0
Chemical Name	Units	MTCA Method A Cleanup Level														
Benzene, Toluele, Ethylbenzene, and Total Xylenes using EPA																
Benzene	mg/kg	0.03	**0.002**	< 0 U	< 0 U	< 0 U										
Toluene	mg/kg	7	**0.001**	< 0 U	< 0 U	< 0 U										
Ethylbenzene	mg/kg	6	< 0 U	< 0 U	< 0 U	< 0 U										
Total Xylenes	mg/kg	9	< 0 U	< 0 U	< 0 U	< 0 U										
Carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs) using E																
Benz(a)anthracene	mg/kg		**0.21**													
Benzo(a)pyrene	mg/kg	0.1	**0.22**													
Benzo(b)fluoranthene	mg/kg		**0.16**													
Benzo(k)fluoranthene	mg/kg		< 0.078 U													
Chrysene	mg/kg		**0.48**													
Dibenzo(a,h)anthracene	mg/kg		< 0.078 U													
Naphthalene (8260)	mg/kg	5														
Naphthalene (8270 SIM)	mg/kg	5														
Naphthalene (8270)	mg/kg	5	< 0.078 U													
Total cPAHs TEQ (ND = 1/2 RDL)	mg/kg	0.1														
Total Petroleum Hydrocarbons using Northwest Methods NWTF																
Gasoline Range Organics	mg/kg	30|100	< 0 UJ	< 0 U	< 0 U	< 0 U										
Diesel Range Organics	mg/kg	2000	**200**	< 0 U	< 0 U	< 0 U	< 25 U	< 25 U								
Motor Oil Range Organics	mg/kg	2000	**3600**	< 0 U	< 0 U	**35**										
Select Volatile Organic Compounds (VOCs) using EPA Method:																
1,2-Dibromoethane (EDB)	mg/kg	0.005							< 0.00085 U	< 0.00081 U	< 0.00080 U	< 0.00097 U	< 0.00085 U	< 0.0011 U	< 0.00083 U	< 0.00079 U
1,2-Dichloroethane (EDC)	mg/kg						< 0.03 U	< 0.03 U	< 0.00085 U	< 0.00081 U	< 0.00080 U	< 0.00097 U	< 0.00085 U	< 0.0011 U	< 0.00083 U	< 0.00079 U
cis-1,2-Dichloroethene (DCE)	mg/kg						< 0.02 U	< 0.02 U	< 0.00085 U	< 0.00081 U	< 0.00080 U	< 0.00097 U	< 0.00085 U	< 0.0011 U	< 0.00083 U	< 0.00079 U
Methyl tert-butyl ether (MTBE)	mg/kg	0.1														
Methylene Chloride	mg/kg	0.02							< 0.0043 U	< 0.0041 U	< 0.0040 U	< 0.0049 U	< 0.0042 U	< 0.0055 U	< 0.0041 U	< 0.0039 U
Tetrachloroethene (PCE)	mg/kg	0.05					**1.43**	**0.31**	**0.0012**	**0.003**	**0.016**	**0.01**	**0.002**	**0.0075**	< 0.00083 U	< 0.00079 U
Tetrachloroethene (PCE) (TCLP)	ug/L															
Trichloroethene (TCE)	mg/kg	0.03					< 0.03 U	< 0.03 U	< 0.00085 U	< 0.00081 U	< 0.00080 U	< 0.00097 U	< 0.00085 U	< 0.0011 U	< 0.00083 U	< 0.00079 U
Trichlorofluoromethane	mg/kg								< 0.00085 U	< 0.00081 U	< 0.00080 U	< 0.00097 U	< 0.00085 U	< 0.0011 U	< 0.00083 U	< 0.00079 U
Vinyl Chloride	mg/kg						< 0.02 U	< 0.02 U	< 0.00085 U	< 0.00081 U	< 0.00080 U	< 0.00097 U	< 0.00085 U	< 0.0011 U	< 0.00083 U	< 0.00079 U

Notes
Bold - detected
Blue - exceeded MTCA A
U = Not Detected
J = Estimated Value

Table 3 - Chemical Analytical Results of Soil Samples Obtained at the Site

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Date and Consultant									2016 ATC						
Boring ID			DP-5	DP-5	DP-6	DP-6	DP-7	DP-7	ATC-B-1	ATC-B-2	ATC-B-2	ATC-B-3	ATC-B-4	ATC-B-5	ATC-B-6
Sample Depth			2 ft	4 ft	2 ft	6 ft	2 ft	6 ft	9.5 - 10 ft	4.5 - 5 ft	9.5 - 10 ft	7.5 - 8 ft	4.5 - 5 ft	4.5 - 5 ft	4.5 - 5 ft
Sample Date			9/2/2015	9/2/2015	9/2/2015	9/2/2015	9/2/2015	9/2/2015	1/8/2016	1/8/2016	1/8/2016	1/8/2016	1/8/2016	1/8/2016	1/8/2016
Sample Code			DP-5-2.0	DP-5-4.0	DP-6-2.0	DP-6-6.0	DP-7-2.0	DP-7-6.0	B-1-9.5-10	B-2-4.5-5	B-2-9.5-10	B-3-7.5-8	B-4-4.5-5	B-5-4.5-5	B-6-4.5-5
Chemical Name	Units	MTCA Method A Cleanup Level													
Benzene, Toluele, Ethylbenzene, and Total Xylenes using EPA															
Benzene	mg/kg	0.03							< 0.00269 U	< 0.0332 U	< 0.0455 U	< 0.0278 U	< 0.0289 U	< 0.0289 U	< 0.0500 U
Toluene	mg/kg	7							< 0.00269 U	< 0.0332 U	< 0.0455 U	< 0.0278 U	< 0.0289 U	< 0.0289 U	< 0.0500 U
Ethylbenzene	mg/kg	6							< 0.00404 U	< 0.0498 U	< 0.0682 U	< 0.0417 U	< 0.0433 U	< 0.0433 U	< 0.0750 U
Total Xylenes	mg/kg	9							< 0.00269 U	< 0.0332 U	< 0.0455 U	< 0.0278 U	< 0.0289 U	< 0.0289 U	< 0.0500 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs) using E															
Benz(a)anthracene	mg/kg														
Benzo(a)pyrene	mg/kg	0.1													
Benzo(b)fluoranthene	mg/kg														
Benzo(k)fluoranthene	mg/kg														
Chrysene	mg/kg														
Dibenzo(a,h)anthracene	mg/kg														
Naphthalene (8260)	mg/kg	5							< 0.00404 U	< 0.0498 U	< 0.0682 U	< 0.0417 U	< 0.0433 U	< 0.0433 U	< 0.0750 U
Naphthalene (8270 SIM)	mg/kg	5													
Naphthalene (8270)	mg/kg	5													
Total cPAHs TEQ (ND = 1/2 RDL)	mg/kg	0.1													
Total Petroleum Hydrocarbons using Northwest Methods NWTF															
Gasoline Range Organics	mg/kg	30|100							< 22.3 U		< 21.3 U				
Diesel Range Organics	mg/kg	2000							< 55.8 U		< 53.3 U				
Motor Oil Range Organics	mg/kg	2000							< 112 U		< 107 U				
Select Volatile Organic Compounds (VOCs) using EPA Method:															
1,2-Dibromoethane (EDB)	mg/kg	0.005	< 0.00073 U	< 0.00078 U	< 0.00074 U	< 0.00080 U	< 0.00081 U	< 0.00085 U	< 0.000674 U	< 0.00831 U	< 0.0114 U	< 0.00695 U	< 0.00722 U	< 0.00722 U	< 0.0125 U
1,2-Dichloroethane (EDC)	mg/kg		< 0.00073 U	< 0.00078 U	< 0.00074 U	< 0.00080 U	< 0.00081 U	< 0.00085 U	< 0.00404 U	< 0.0498 U	< 0.0682 U	< 0.0417 U	< 0.0433 U	< 0.0433 U	< 0.0750 U
cis-1,2-Dichloroethene (DCE)	mg/kg		< 0.00073 U	< 0.00078 U	< 0.00074 U	< 0.00080 U	< 0.00081 U	< 0.00085 U	< 0.00269 U	< 0.0332 U	< 0.0455 U	< 0.0278 U	< 0.0289 U	< 0.0289 U	< 0.0500 U
Methyl tert-butyl ether (MTBE)	mg/kg	0.1							< 0.00674 U	< 0.0831 U	< 0.114 U	< 0.0695 U	< 0.0722 U	< 0.0722 U	< 0.125 U
Methylene Chloride	mg/kg	0.02	< 0.0037 U	< 0.0039 U	< 0.0037 U	< 0.0040 U	< 0.0041 U	< 0.0042 U	< 0.00269 U	< 0.0332 U	< 0.0455 U	< 0.0278 U	< 0.0289 U	< 0.0289 U	< 0.0500 U
Tetrachloroethene (PCE)	mg/kg	0.05	**0.00082**	**0.00081**	**0.0026**	**0.0058**	**0.0046**	**0.002**	< 0.00269 U	< 0.0332 U	< 0.0455 U	< 0.0278 U	< 0.0289 U	< 0.0289 U	< 0.0500 U
Tetrachloroethene (PCE) (TCLP)	ug/L														
Trichloroethene (TCE)	mg/kg	0.03	< 0.00073 U	< 0.00078 U	< 0.00074 U	< 0.00080 U	< 0.00081 U	< 0.00085 U	< 0.00269 U	< 0.0332 U	< 0.0455 U	< 0.0278 U	< 0.0289 U	< 0.0289 U	< 0.0500 U
Trichlorofluoromethane	mg/kg		< 0.00073 U	< 0.00078 U	< 0.00074 U	< 0.00080 U	< 0.00081 U	< 0.00085 U	< 0.00674 U	< 0.0831 U	< 0.114 U	< 0.0695 U	< 0.0722 U	< 0.0722 U	< 0.125 U
Vinyl Chloride	mg/kg		< 0.00073 U	< 0.00078 U	< 0.00074 U	< 0.00080 U	< 0.00081 U	< 0.00085 U	< 0.000269 U	< 0.00332 U	< 0.00455 U	< 0.00278 U	< 0.00289 U	< 0.00289 U	< 0.00500 U

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

J = Estimated Value

Table 3 - Chemical Analytical Results of Soil Samples Obtained at the Site

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Date and Consultant			2016 HC Data											
Boring ID			HC-MW-1	HC-MW-1	HC-MW-2	HC-MW-2	HC-MW-3	HC-MW-3	HC-MW-4	HC-MW-4	HC-MW-5	HC-MW-5	HC-MW-6	HC-MW-6
Sample Depth			10 ft	15 ft	8.5 ft	20 ft	5 ft	7.5 ft	12 ft	25 ft	10 ft	12.5 ft	10 ft	15 ft
Sample Date			5/16/2016	5/16/2016	5/17/2016	5/17/2016	9/26/2016	9/27/2016	9/20/2016	9/20/2016	9/29/2016	9/29/2016	9/29/2016	9/29/2016
Sample Code			HC-MW-1-10	HC-MW-1-15	HC-MW-2-8.5	HC-MW-2-20	HC-MW-3-5	HC-MW-3-7.5	HC-MW-4-12	HC-MW-4-25	HC-MW-5-10	HC-MW-5-12.5	HC-MW-6-10	HC-MW-6-15
Chemical Name	Units	MTCA Method A Cleanup Level												
Benzene, Toluele, Ethylbenzene, and Total Xylenes using EPA														
Benzene	mg/kg	0.03	**0.3**	< 0.020 U	< 0.020 U	< 0.020 U	< 0.00092 U	< 0.00075 U	< 0.0010 U	< 0.0011 U	< 0.0010 U	< 0.057 U	< 0.0011 U	< 0.00098 U
Toluene	mg/kg	7	< 0.062 U	< 0.057 U	< 0.048 U	< 0.059 U	< 0.0046 U	< 0.0038 U	< 0.0050 U	< 0.0053 U	< 0.0050 U	< 0.29 U	< 0.0056 U	< 0.0049 U
Ethylbenzene	mg/kg	6	< 0.062 U	< 0.057 U	< 0.048 U	< 0.059 U	< 0.00092 U	< 0.00075 U	< 0.0010 U	< 0.0011 U	< 0.0010 U	< 0.057 U	< 0.0011 U	< 0.00098 U
Total Xylenes	mg/kg	9	< 0.062 U	< 0.057 U	< 0.048 U	< 0.059 U	< 0.0018 U	< 0.0015 U	< 0.0020 U	< 0.0021 U	< 0.0020 U	< 0.11 U	< 0.0023 U	< 0.0020 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs) using E														
Benz(a)anthracene	mg/kg													
Benzo(a)pyrene	mg/kg	0.1												
Benzo(b)fluoranthene	mg/kg													
Benzo(k)fluoranthene	mg/kg													
Chrysene	mg/kg													
Dibenzo(a,h)anthracene	mg/kg													
Naphthalene (8260)	mg/kg	5					< 0.00092 U	< 0.00075 U	< 0.0010 U	< 0.0011 U	< 0.0010 U	< 0.057 U	< 0.0011 U	< 0.00098 U
Naphthalene (8270 SIM)	mg/kg	5												
Naphthalene (8270)	mg/kg	5												
Total cPAHs TEQ (ND = 1/2 RDL)	mg/kg	0.1												
Total Petroleum Hydrocarbons using Northwest Methods NWTF														
Gasoline Range Organics	mg/kg	30|100	< 6.2 U	< 5.7 U	< 4.8 U	< 5.9 U	< 5.5 U	< 5.1 U	< 6.0 U	< 6.5 U	< 6.2 U	< 6.3 U	< 7.1 U	< 5.6 U
Diesel Range Organics	mg/kg	2000	< 30 U	< 30 U	< 28 U	< 30 U	< 28 U	< 28 U	< 30 U	< 30 U	< 31 U	< 29 U	< 32 U	< 30 U
Motor Oil Range Organics	mg/kg	2000	**87**	< 59 U	< 57 U	< 59 U	< 56 U	< 56 U	< 59 U	< 60 U	< 62 U	< 59 U	**120**	< 59 U
Select Volatile Organic Compounds (VOCs) using EPA Method:														
1,2-Dibromoethane (EDB)	mg/kg	0.005	< 0.0010 U	< 0.0011 U	< 0.0010 U	< 0.0012 U	< 0.00092 U	< 0.00075 U	< 0.0010 U	< 0.0011 U	< 0.0010 U	< 0.057 U	< 0.0011 U	< 0.00098 U
1,2-Dichloroethane (EDC)	mg/kg		< 0.0010 U	< 0.0011 U	< 0.0010 U	< 0.0012 U	< 0.00092 U	< 0.00075 U	< 0.0010 U	< 0.0011 U	< 0.0010 U	< 0.057 U	< 0.0011 U	< 0.00098 U
cis-1,2-Dichloroethene (DCE)	mg/kg		< 0.0010 U	**0.0043**	**0.0027**	< 0.0012 U	< 0.00092 U	< 0.00075 U	< 0.0010 U	< 0.0011 U	**0.0016**	< 0.057 U	< 0.0011 U	< 0.00098 U
Methyl tert-butyl ether (MTBE)	mg/kg	0.1					< 0.00092 U	< 0.00075 U	< 0.0010 U	< 0.0011 U	< 0.0010 U	< 0.057 U	< 0.0011 U	< 0.00098 U
Methylene Chloride	mg/kg	0.02	< 0.0050 U	< 0.0053 U	< 0.0050 U	< 0.0058 U	< 0.0046 U	< 0.0038 U	< 0.0050 U	< 0.0053 U	< 0.0050 U	< 0.29 U	< 0.0056 U	< 0.0049 U
Tetrachloroethene (PCE)	mg/kg	0.05	< 0.0010 U	**0.044**	**0.0053**	< 0.0012 U	**0.0078**	**0.0047**	< 0.0010 U	< 0.0011 U	**1.2**	**2.7**	< 0.0011 U	< 0.00098 U
Tetrachloroethene (PCE) (TCLP)	ug/L													
Trichloroethene (TCE)	mg/kg	0.03	< 0.0010 U	**0.0032**	**0.0036**	< 0.0012 U	< 0.00092 U	< 0.00075 U	< 0.0010 U	< 0.0011 U	**0.0062**	< 0.057 U	< 0.0011 U	< 0.00098 U
Trichlorofluoromethane	mg/kg		< 0.0010 U	< 0.0011 U	< 0.0010 U	< 0.0012 U	< 0.00092 U	< 0.00075 U	< 0.0010 U	< 0.0011 U	< 0.0010 U	< 0.057 U	< 0.0011 U	< 0.00098 U
Vinyl Chloride	mg/kg		< 0.0010 U	< 0.0011 U	< 0.0010 U	< 0.0012 U	< 0.0014 U	< 0.0011 U	< 0.0015 U	< 0.0011 U	< 0.0015 U	< 0.086 U	< 0.0017 U	< 0.0015 U

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

J = Estimated Value

Table 3 - Chemical Analytical Results of Soil Samples Obtained at the Site

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Date and Consultant									2017 Aspect 1								
Boring ID			HC-MW-7	HC-MW-7	HC-SB-1	HC-SB-1	HC-SB-2	HC-SB-2	AB-1	AB-1	AB-2	AB-2	AB-3	AB-3	AB-4	AB-6	AB-6
Sample Depth			7.5 ft	10 ft	10 ft	15 ft	10 ft	12.5 ft	6 ft	11 ft	8 ft	13.6 ft	2 ft	9.5 ft	6 ft	6 ft	14 ft
Sample Date			9/30/2016	9/30/2016	9/28/2016	9/29/2016	9/20/2016	9/20/2016	2/18/2017	2/18/2017	2/18/2017	2/18/2017	2/18/2017	2/18/2017	3/8/2017	3/8/2017	3/8/2017
Sample Code			HC-MW-7-7.5	HC-MW-7-10	HC-SB-1-10	HC-SB-1-15	HC-SB-2-10	HC-SB-2-12.5	AB-1-6.0	AB-1-11.0	AB-2-8.0	AB-2-13.6	AB-3-2.0	AB-3-9.5	AB-4-6.0	AB-6-6.0	AB-6-14.0
Chemical Name	Units	MTCA Method A Cleanup Level															
Benzene, Toluele, Ethylbenzene, and Total Xylenes using EPA																	
Benzene	mg/kg	0.03	< 0.0011 U	< 0.0010 U	< 0.0010 U	< 0.00094 U	< 0.0011 U	< 0.00081 U	< 0.03 U	< 0.03 U	< 0.03 U	< 0.03 U	< 0.03 U	< 0.03 U	< 0.03 U	< 0.03 U	< 0.03 U
Toluene	mg/kg	7	< 0.0055 U	< 0.0051 U	< 0.0051 U	< 0.0047 U	< 0.0056 U	< 0.0041 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Ethylbenzene	mg/kg	6	< 0.0011 U	< 0.0010 U	< 0.0010 U	< 0.00094 U	< 0.0011 U	< 0.00081 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Total Xylenes	mg/kg	9	< 0.0022 U	< 0.0021 U	< 0.0020 U	< 0.0019 U	< 0.0022 U	< 0.0016 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs) using E																	
Benz(a)anthracene	mg/kg								**0.045**				< 0.01 U				
Benzo(a)pyrene	mg/kg	0.1							**0.067**				< 0.01 U				
Benzo(b)fluoranthene	mg/kg								**0.079**				< 0.01 U				
Benzo(k)fluoranthene	mg/kg								**0.029**				< 0.01 U				
Chrysene	mg/kg								**0.058**				< 0.01 U				
Dibenzo(a,h)anthracene	mg/kg								< 0.01 U				< 0.01 U				
Naphthalene (8260)	mg/kg	5	< 0.0011 U	< 0.0010 U	< 0.0010 U	< 0.00094 U	< 0.0011 U	< 0.00081 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Naphthalene (8270 SIM)	mg/kg	5							< 0.01 U				< 0.01 U				
Naphthalene (8270)	mg/kg	5															
Total cPAHs TEQ (ND = 1/2 RDL)	mg/kg	0.1							**0.08968**				< 0.00755 U				
Total Petroleum Hydrocarbons using Northwest Methods NWTF																	
Gasoline Range Organics	mg/kg	30|100	< 6.1 U	< 7.0 U	< 5.6 U	< 5.9 U	< 6.2 U	< 4.8 U	< 2 U				< 2 U				
Diesel Range Organics	mg/kg	2000	< 30 U	< 32 U	< 29 U	< 28 U	< 31 U	< 28 U	< 50 U				< 50 U				
Motor Oil Range Organics	mg/kg	2000	< 59 U	< 64 U	< 58 U	< 57 U	< 61 U	< 57 U	< 250 U				< 250 U				
Select Volatile Organic Compounds (VOCs) using EPA Method:																	
1,2-Dibromoethane (EDB)	mg/kg	0.005	< 0.0011 U	< 0.0010 U	< 0.0010 U	< 0.00094 U	< 0.0011 U	< 0.00081 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
1,2-Dichloroethane (EDC)	mg/kg		< 0.0011 U	< 0.0010 U	< 0.0010 U	< 0.00094 U	< 0.0011 U	< 0.00081 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
cis-1,2-Dichloroethene (DCE)	mg/kg		< 0.0011 U	< 0.0010 U	**0.0022**	< 0.00094 U	**0.0079**	**0.0019**	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Methyl tert-butyl ether (MTBE)	mg/kg	0.1	< 0.0011 U	< 0.0010 U	< 0.0010 U	< 0.00094 U	< 0.0011 U	< 0.00081 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Methylene Chloride	mg/kg	0.02	< 0.0055 U	< 0.0051 U	< 0.0051 U	< 0.0047 U	< 0.0056 U	< 0.0041 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Tetrachloroethene (PCE)	mg/kg	0.05	< 0.0011 U	< 0.0010 U	< 0.0051 U	**0.0076**	**0.027**	**0.03**	**1.7**	**11**	**4.8**	**4.2**	**0.42**	**15**	**0.032**	< 0.025 U	**0.95**
Tetrachloroethene (PCE) (TCLP)	ug/L									**280**	**200**			**260**			**20**
Trichloroethene (TCE)	mg/kg	0.03	< 0.0011 U	< 0.0010 U	< 0.0010 U	< 0.00094 U	**0.0065**	**0.0019**	< 0.02 U	**0.22**	< 0.02 U	< 0.02 U	< 0.02 U	**0.13**	< 0.02 U	< 0.02 U	< 0.02 U
Trichlorofluoromethane	mg/kg		< 0.0011 U	< 0.0010 U	< 0.0010 U	< 0.00094 U	< 0.0011 U	< 0.00081 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Vinyl Chloride	mg/kg		< 0.0017 U	< 0.0015 U	< 0.0015 U	< 0.0014 U	< 0.0011 U	< 0.0012 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

J = Estimated Value

Table 3 - Chemical Analytical Results of Soil Samples Obtained at the Site

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Date and Consultant						
		Boring ID	AB-6	AMW-1	AMW-1	AMW-1
		Sample Depth	15 ft	4 ft	11 ft	15 ft
		Sample Date	3/8/2017	3/8/2017	3/8/2017	3/8/2017
		Sample Code	AB-6-15.0	AMW-1-4.0	AMW-1-11.0	AMW-1-15.0
Chemical Name	Units	MTCA Method A Cleanup Level				
Benzene, Toluele, Ethylbenzene, and Total Xylenes using EPA						
Benzene	mg/kg	0.03	< 0.03 U	< 0.03 U	< 0.03 U	< 0.03 U
Toluene	mg/kg	7	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Ethylbenzene	mg/kg	6	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Total Xylenes	mg/kg	9	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs) using E						
Benz(a)anthracene	mg/kg					< 0.01 U
Benzo(a)pyrene	mg/kg	0.1				< 0.01 U
Benzo(b)fluoranthene	mg/kg					< 0.01 U
Benzo(k)fluoranthene	mg/kg					< 0.01 U
Chrysene	mg/kg					< 0.01 U
Dibenzo(a,h)anthracene	mg/kg					< 0.01 U
Naphthalene (8260)	mg/kg	5	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Naphthalene (8270 SIM)	mg/kg	5				< 0.01 U
Naphthalene (8270)	mg/kg	5				
Total cPAHs TEQ (ND = 1/2 RDL)	mg/kg	0.1				< 0.00755 U
Total Petroleum Hydrocarbons using Northwest Methods NWTF						
Gasoline Range Organics	mg/kg	30|100				< 2 U
Diesel Range Organics	mg/kg	2000				< 50 U
Motor Oil Range Organics	mg/kg	2000				< 250 U
Select Volatile Organic Compounds (VOCs) using EPA Method:						
1,2-Dibromoethane (EDB)	mg/kg	0.005	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
1,2-Dichloroethane (EDC)	mg/kg		< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
cis-1,2-Dichloroethene (DCE)	mg/kg		< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Methyl tert-butyl ether (MTBE)	mg/kg	0.1	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Methylene Chloride	mg/kg	0.02	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Tetrachloroethene (PCE)	mg/kg	0.05	**0.48**	**0.036**	**0.54**	**0.58**
Tetrachloroethene (PCE) (TCLP)	ug/L		**14**		**11**	**11**
Trichloroethene (TCE)	mg/kg	0.03	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U
Trichlorofluoromethane	mg/kg		< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Vinyl Chloride	mg/kg		< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U

Notes
Bold - detected
Blue - exceeded MTCA A
U = Not Detected
J = Estimated Value

Table 4 - Summary of Groundwater Results

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

		Year and Consultant	2006 Kane		2009 PBS		2009 Stantec					2010 KEE		2012 Stante			
		Boring/Monitoring Well ID	K-SB-1	K-SB-3	PBS-SB-1	PBS-SB-3	MW-1	MW-2	MW-3	MW-4	MW-5	KEE-B-2	KEE-B-3	B-1	B-2	B-3	B-4
		Sample Date	1/25/2006	1/25/2006	6/25/2009	6/25/2009	11/12/2009	11/12/2009	11/12/2009	11/12/2009	11/12/2009	5/24/2010	5/24/2010	4/19/2011	4/19/2011	4/19/2011	4/19/2011
Chemical Name	Units	MTCA Method A Cleanup Level															
Benzene, Toluene, Ethylbenzene, and Total Xylenes using EPA Method 8270D/SIM																	
Benzene	ug/L	5	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**1.3**			< 0.5 U	< 1 U	**1**	< 0.5 U
Toluene	ug/L	1000	< 1 U	< 1 U	**3.2**	**1.3**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U			< 0.5 U	**3**	**28**	< 0.5 U
Ethylbenzene	ug/L	700	< 1 U	< 1 U	**1.1**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**36.3**			< 0.5 U	**290**	**33**	< 0.5 U
Total Xylenes	ug/L	1000	< 1 U	< 1 U	**4.6**	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U	**125**			**1**	**5100**	**150**	< 0.5 U
Field Parameters																	
Temperature	deg C																
Specific Conductance	uS/cm																
Dissolved Oxygen	mg/L																
pH	pH units																
Oxidation Reduction Potential	mV																
Turbidity	NTU																
Select Metals using EPA Method 6000/7000 Series																	
Arsenic (Dissolved)	ug/L	5															
Arsenic (Total)	ug/L	5															
Lead (Dissolved)	ug/L	15															
Lead (Total)	ug/L	15												**18.5**	**32.9**	**9.2**	**48.5**
Polycyclic Aromatic Hyrodrcarbons (PAHs) using EPA Method 8270D/SIM																	
Naphthalene (8260 SIM)	ug/L	160															
Naphthalene (8260)	ug/L	160	< 1 U	< 1 U	**2.4**	**1.7**											
Naphthalene (8270 SIM)	ug/L	160														**570**	
Total Petroleum Hydrocarbons using Northwest Methods NWTPH-Dx and NWTPH-Gx																	
Gasoline Range Organics	ug/L	800|1000					< 50 U	**455**	**71.7**	< 50 U	**2340**			**1700**	**20000**	**3400**	< 50 U
Diesel Range Organics	ug/L	500														**100000**	
Motor Oil Range Organics	ug/L	500														< 3400 U	
Select Volatile Organic Compounds (VOCs) using EPA Method 8260B																	
1,1,1-Trichloroethane	ug/L	200										< 20 U	< 20 U				
1,2-Dibromoethane (EDB) (8011)	ug/L	0.01															
1,2-Dibromoethane (EDB) (8260)	ug/L	0.01										< 20 U	< 20 U				
1,2-Dichloroethane (EDC)	ug/L	5										< 20 U	< 20 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U
1,2-Dichloropropane	ug/L											< 20 U	< 20 U				
cis-1,2-Dichloroethene (DCE)	ug/L		< 1 U	< 1 U	**350**	**32**						< 20 U	**49**				
Methyl tert-butyl ether (MTBE)	ug/L	20												< 0.5 U	< 1 U	< 0.5 U	< 0.5 U
Methylene Chloride	ug/L	5										< 100 U	< 100 U				
Tetrachloroethene (PCE)	ug/L	5	< 1 U	< 1 U	**2200**	**330**						**3700**	**2100**				
Trichloroethene (TCE)	ug/L	5	< 1 U	< 1 U	**250**	**28**						**22**	**57**				
Vinyl Chloride	ug/L	0.2	< 0.2 U	< 0.2 U	**6.3**	< 0.2 U						< 20 U	< 20 U				

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

Only select analytes shown on the table. See laboratory reports for full lists.

Table 4 - Summary of Groundwater Results

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

		Year and Consultant				2016 ATC					2016 GHC Data							
		Boring/Monitoring Well ID	B-5	B-6	B-7	ATC-B-1	ATC-B-2	ATC-B-3	ATC-B-5	ATC-B-6	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
		Sample Date	4/19/2011	4/19/2011	4/19/2011	1/8/2016	1/8/2016	1/8/2016	1/8/2016	1/8/2016	5/25/2016	5/25/2016	5/26/2016	5/25/2016	5/26/2016	5/26/2016	5/26/2016
Chemical Name	Units	MTCA Method A Cleanup Level																
Benzene, Toluene, Ethylbenzene, and Total Xylenes using EPA Method 82																		
Benzene	ug/L	5	< 0.5 U	< 1 U	**0.6**	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U								
Toluene	ug/L	1000	< 0.5 U	< 1 U	**7**	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U								
Ethylbenzene	ug/L	700	< 0.5 U	**330**	**140**	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U								
Total Xylenes	ug/L	1000	< 0.5 U	**2000**	**570**	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U								
Field Parameters																		
Temperature	deg C																	
Specific Conductance	uS/cm																	
Dissolved Oxygen	mg/L																	
pH	pH units																	
Oxidation Reduction Potential	mV																	
Turbidity	NTU																	
Select Metals using EPA Method 6000/7000 Series																		
Arsenic (Dissolved)	ug/L	5																
Arsenic (Total)	ug/L	5																
Lead (Dissolved)	ug/L	15																
Lead (Total)	ug/L	15	**116**	**18.4**	**15.7**													
Polycyclic Aromatic Hyrodrcarbons (PAHs) using EPA Method 8270D/SIM																		
Naphthalene (8260 SIM)	ug/L	160																
Naphthalene (8260)	ug/L	160	< 1 U			< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U								
Naphthalene (8270 SIM)	ug/L	160	< 0.032 U															
Total Petroleum Hydrocarbons using Northwest Methods NWTPH-Dx and N																		
Gasoline Range Organics	ug/L	800|1000	< 50 U	**27000**	**3900**	< 399 U		< 399 U										
Diesel Range Organics	ug/L	500	**530**			< 499 U		< 498 U										
Motor Oil Range Organics	ug/L	500	< 74 U			< 499 U		< 498 U										
Select Volatile Organic Compounds (VOCs) using EPA Method 8260B																		
1,1,1-Trichloroethane	ug/L	200				< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U								
1,2-Dibromoethane (EDB) (8011)	ug/L	0.01																
1,2-Dibromoethane (EDB) (8260)	ug/L	0.01				< 0.0600 U	< 0.0600 U	< 0.0600 U	< 0.0600 U	< 0.0600 U								
1,2-Dichloroethane (EDC)	ug/L	5		< 1 U	< 0.5 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U								
1,2-Dichloropropane	ug/L					< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U								
cis-1,2-Dichloroethene (DCE)	ug/L		< 0.8 U			< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U								
Methyl tert-butyl ether (MTBE)	ug/L	20	< 0.5 U	< 1 U	< 0.5 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U								
Methylene Chloride	ug/L	5				< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U								
Tetrachloroethene (PCE)	ug/L	5	< 0.8 U			**90.4**	**11.9**	< 1.00 U	< 1.00 U	< 1.00 U	**3**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.7 J**
Trichloroethene (TCE)	ug/L	5	< 1 U			**1.45**	< 0.500 U	< 0.500 U	< 0.500 U	< 0.500 U	**3**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**4**
Vinyl Chloride	ug/L	0.2	< 1 U			< 0.200 U	< 0.200 U	< 0.200 U	< 0.200 U	< 0.200 U	**1**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**3**

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

Only select analytes shown on the table. See laboratory reports for full lists.

Table 4 - Summary of Groundwater Results

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Year and Consultant								2016 HC Data										
Boring/Monitoring Well ID			MW-8	MW-9	MW-10	MW-11	MW-13	HC-MW-1	HC-MW-2	HC-MW-3	HC-MW-4	HC-MW-5	HC-MW-6	HC-MW-7	MW-1	MW-2	MW-3	MW-4
Sample Date			5/26/2016	5/25/2016	5/26/2016	5/25/2016	5/25/2016	9/30/2016	9/29/2016	9/30/2016	10/3/2016	9/30/2016	10/3/2016	10/3/2016	8/8/2016	8/8/2016	8/8/2016	8/9/2016
Chemical Name	Units	MTCA Method A Cleanup Level																
Benzene, Toluene, Ethylbenzene, and Total Xylenes using EPA Method 82																		
Benzene	ug/L	5						< 2.0 U	< 4.0 U	< 0.20 U	< 0.20 U	< 20 U	< 0.20 U	< 0.20 U	< 1	< 1	< 1	< 1
Toluene	ug/L	1000						< 10 U	< 20 U	< 1.0 U	< 1.0 U	< 100 U	< 1.0 U	< 1.0 U	< 1	< 1	< 1	< 1
Ethylbenzene	ug/L	700						< 2.0 U	< 4.0 U	< 0.20 U	< 0.20 U	< 20 U	< 0.20 U	< 0.20 U	< 1	< 1	**61**	< 1
Total Xylenes	ug/L	1000						< 4.0 U	< 8.0 U	< 0.40 U	< 0.40 U	< 40 U	< 0.40 U	< 0.40 U	< 1	**1**	**39**	< 1
Field Parameters																		
Temperature	deg C							**19.67**	**19.99**	**20.24**	**16.64**	**19.95**	**18.23**	**19.17**				
Specific Conductance	uS/cm							**156.5**	**446**	**129.6**	**406**	**122**	**205.7**	**163.4**				
Dissolved Oxygen	mg/L							< 0	< 0	**0.01**	**7.07**	**7.87**	**1.47**	**2.84**				
pH	pH units							**6.49**	**7.48**	**7.14**	**9.24**	**7.61**	**7.4**	**6.74**				
Oxidation Reduction Potential	mV							**118**	**65**	**67**	**55**	**65**	**57**	**91**				
Turbidity	NTU							**4.7**	**1.6**	**11.3**	**2**	**2.9**	**5.3**	**19.5**				
Select Metals using EPA Method 6000/7000 Series																		
Arsenic (Dissolved)	ug/L	5						< 3.0 U	**11**	< 3.0 U	**9.1**	< 3.0 U	**12**	**6.8**				
Arsenic (Total)	ug/L	5						< 3.3 U	**11**	< 3.3 U	**9.3**	< 3.3 U	**13**	**6.4**				
Lead (Dissolved)	ug/L	15						< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U				
Lead (Total)	ug/L	15						< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	**0.19 J**	**0.18 J**	**0.23 J**	**0.12 J**
Polycyclic Aromatic Hyrodrcarbons (PAHs) using EPA Method 8270D/SIM																		
Naphthalene (8260 SIM)	ug/L	160													< 0.060	< 0.061	**3.1**	< 0.061
Naphthalene (8260)	ug/L	160						< 10 U	< 20 U	< 1.0 U	< 1.0 U	< 100 U	< 1.0 U	< 1.0 U	< 5	< 5	**5 J**	< 5
Naphthalene (8270 SIM)	ug/L	160																
Total Petroleum Hydrocarbons using Northwest Methods NWTPH-Dx and N																		
Gasoline Range Organics	ug/L	800|1000						< 430 X	< 1100 X	< 100 U	< 100 U	< 2700 X	< 100 U	< 100 U	< 250	**640**	**4400**	**62 J**
Diesel Range Organics	ug/L	500						< 260 U	< 260 U	< 260 U	< 270 U	< 260 U	< 260 U	< 260 U	< 100	**72 J**	**99 J**	< 100
Motor Oil Range Organics	ug/L	500						< 410 U	< 420 U	< 410 U	< 440 U	< 410 U	< 410 U	< 410 U	< 250	< 250	< 250	< 260
Select Volatile Organic Compounds (VOCs) using EPA Method 8260B																		
1,1,1-Trichloroethane	ug/L	200						< 2.0 U	< 4.0 U	< 0.20 U	< 0.20 U	< 20 U	< 0.20 U	< 0.20 U	< 1	< 1	< 1	< 1
1,2-Dibromoethane (EDB) (8011)	ug/L	0.01													< 0.029	< 0.029	< 0.029	< 0.029
1,2-Dibromoethane (EDB) (8260)	ug/L	0.01						< 2.0 U	< 4.0 U	< 0.20 U	< 0.20 U	< 20 U	< 0.20 U	< 0.20 U				
1,2-Dichloroethane (EDC)	ug/L	5						< 2.0 U	< 4.0 U	< 0.20 U	< 0.20 U	< 20 U	< 0.20 U	< 0.20 U	< 1	< 1	< 1	< 1
1,2-Dichloropropane	ug/L							< 2.0 U	< 4.0 U	< 0.20 U	< 0.20 U	< 20 U	< 0.20 U	< 0.20 U	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene (DCE)	ug/L							**63**	**35**	**1.5**	< 0.20 U	< 20 U	**18**	< 0.20 U	**9**	< 1	**1**	< 1
Methyl tert-butyl ether (MTBE)	ug/L	20						< 2.0 U	< 4.0 U	< 0.20 U	< 0.20 U	< 20 U	< 0.20 U	< 0.20 U	< 1	< 1	< 1	< 1
Methylene Chloride	ug/L	5						< 10 U	< 20 U	< 1.0 U	< 1.0 U	< 100 U	< 1.0 U	< 1.0 U	< 4	< 4	< 4	< 4
Tetrachloroethene (PCE)	ug/L	5	< 1 U	**160**	< 1 U	**1100**	**2**	**290**	**950**	**15**	< 0.20 U	**4900**	**1.5**	< 0.20 U	**3**	< 1	< 1	< 1
Trichloroethene (TCE)	ug/L	5	< 1 U	**110**	< 1 U	**45**	< 1 U	**33**	**76**	**3.4**	< 0.20 U	**34**	**4.8**	< 0.20 U	**2**	< 1	< 1	< 1
Vinyl Chloride	ug/L	0.2	< 1 U	**11**	**24**	**0.6 J**	**31**	**12**	< 4.0 U	< 0.20 U	< 0.20 U	< 20 U	**7**	< 0.20 U	**2**	< 1	< 1	< 1

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

Only select analytes shown on the table. See laboratory reports for full lists.

Table 4 - Summary of Groundwater Results

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Year and Consultant			2016-08 GHD								2017 Aspect 1							
Boring/Monitoring Well ID			MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11	MW-13	AMW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-2
Sample Date			8/8/2016	8/9/2016	8/9/2016	8/9/2016	8/8/2016	8/9/2016	8/8/2016	8/8/2016	3/24/2017	2/25/2016	3/12/2015	3/19/2014	5/27/2014	12/11/2014	8/28/2014	2/25/2016
Chemical Name	Units	MTCA Method A Cleanup Level																
Benzene, Toluene, Ethylbenzene, and Total Xylenes using EPA Method 82																		
Benzene	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 1	< 0.35 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Toluene	ug/L	1000	**0.6 J**	< 1	< 1	**0.7 J**	< 1	< 1	< 2	< 1	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Ethylbenzene	ug/L	700	**9**	< 1	< 1	**150**	< 1	< 1	< 2	< 1	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**5**
Total Xylenes	ug/L	1000	**7**	< 1	< 1	**490**	< 1	< 1	< 2	< 1	< 2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**21**
Field Parameters																		
Temperature	deg C										**13.5**							
Specific Conductance	uS/cm										**292.2**							
Dissolved Oxygen	mg/L										**7.68**							
pH	pH units										**6.83**							
Oxidation Reduction Potential	mV										**102.3**							
Turbidity	NTU										**94.1**							
Select Metals using EPA Method 6000/7000 Series																		
Arsenic (Dissolved)	ug/L	5																
Arsenic (Total)	ug/L	5																
Lead (Dissolved)	ug/L	15																
Lead (Total)	ug/L	15	**1**	**0.74 J**	**1.6**	**0.78 J**	< 1.0	< 1.0	**0.29 J**	**1.3**		**0.25 J**	**0.29 J**	**0.2**	**0.1**	**0.84 J**	**0.4 J**	**0.63 J**
Polycyclic Aromatic Hyrodrcarbons (PAHs) using EPA Method 8270D/SIM																		
Naphthalene (8260 SIM)	ug/L	160	**7**	< 0.060	< 0.060	**62**	< 0.060	< 0.061	< 0.060	< 0.060								
Naphthalene (8260)	ug/L	160	**7**	< 5	< 5	**78**	< 5	< 5	< 10	< 5	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Naphthalene (8270 SIM)	ug/L	160										< 0.031 U	< 0.031 U	< 0.031 U	< 0.030 U	< 0.03 U	< 0.028 U	**1.1**
Total Petroleum Hydrocarbons using Northwest Methods NWTPH-Dx and N																		
Gasoline Range Organics	ug/L	800|1000	**3400**	**83 J**	**52 J**	**14000**	**120 J**	< 250	**760**	< 250	< 780 X	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	**790**
Diesel Range Organics	ug/L	500	**270**	< 100	< 100	**530**	< 100	< 100	< 100	< 100	**7000**	< 28 U	< 28 U	< 29 U	< 28 U	< 29 U	< 28 U	**280**
Motor Oil Range Organics	ug/L	500	< 250	< 260	< 250	< 250	< 250	< 260	< 250	< 250	**400 X**	< 66 U	< 66 U	< 68 U	< 66 U	< 67 U	< 66 U	< 66 U
Select Volatile Organic Compounds (VOCs) using EPA Method 8260B																		
1,1,1-Trichloroethane	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 1	< 1 U							
1,2-Dibromoethane (EDB) (8011)	ug/L	0.01	< 0.029	< 0.029	< 0.029	< 0.029	< 0.029	< 0.029	< 0.580	< 0.029								
1,2-Dibromoethane (EDB) (8260)	ug/L	0.01									< 1 U							
1,2-Dichloroethane (EDC)	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 1	< 1 U							
1,2-Dichloropropane	ug/L		< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 1	< 1 U							
cis-1,2-Dichloroethene (DCE)	ug/L		< 1	< 1	**13**	**1**	**83**	**3**	**14**	**44**	< 1 U	**14**	**15**	**21**	**19**	**20**	**12**	< 0.5 U
Methyl tert-butyl ether (MTBE)	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 1	< 1 U							
Methylene Chloride	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 8	< 4	< 5 U							
Tetrachloroethene (PCE)	ug/L	5	< 1	< 1	**2**	< 1	**130**	< 1	**900**	**0.9 J**	**1500**	**4**	**5**	**7**	**5**	**4**	**6**	< 0.5 U
Trichloroethene (TCE)	ug/L	5	< 1	< 1	**5**	< 1	**49**	< 1	**34**	< 1	**1.8**	**4**	**5**	**6**	**4**	**5**	**6**	< 0.5 U
Vinyl Chloride	ug/L	0.2	< 1	< 1	**3**	< 1	**8**	**20**	< 2	**37**	< 0.2 U	**0.8 J**	< 0.5 U	**1**	**2**	**1 J**	**0.9 J**	< 0.5 U

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

Only select analytes shown on the table. See laboratory reports for full lists.

Table 4 - Summary of Groundwater Results

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Year and Consultant																
Boring/Monitoring Well ID			MW-2	MW-2	MW-2	MW-2	MW-2	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4	MW-4
Sample Date			3/12/2015	3/18/2014	5/27/2014	12/11/2014	8/28/2014	2/25/2016	3/13/2015	3/19/2014	5/27/2014	12/11/2014	8/29/2014	2/25/2016	3/13/2015	3/18/2014	5/27/2014
Chemical Name	Units	MTCA Method A Cleanup Level															
Benzene, Toluene, Ethylbenzene, and Total Xylenes using EPA Method 82																	
Benzene	ug/L	5	< 0.5 U	**0.9**	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Toluene	ug/L	1000	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Ethylbenzene	ug/L	700	< 0.5 U	**3**	< 0.5 U	< 0.5 U	< 0.5 U	**72**	**160**	**100**	**180**	**150**	**34**	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Total Xylenes	ug/L	1000	< 0.5 U	**2**	< 0.5 U	< 0.5 U	< 0.5 U	**190**	**360**	**410**	**460**	**510**	**34**	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Field Parameters																	
Temperature	deg C																
Specific Conductance	uS/cm																
Dissolved Oxygen	mg/L																
pH	pH units																
Oxidation Reduction Potential	mV																
Turbidity	NTU																
Select Metals using EPA Method 6000/7000 Series																	
Arsenic (Dissolved)	ug/L	5															
Arsenic (Total)	ug/L	5															
Lead (Dissolved)	ug/L	15															
Lead (Total)	ug/L	15	**0.59 J**	**0.9**	**0.42**	**0.93 J**	**0.44 J**	**0.45 J**	**6.7**	**1.2**	**0.65**	**0.45 J**	**0.2 J**	< 0.13 U	< 0.082 U	**0.14**	< 0.085 U
Polycyclic Aromatic Hyrodrcarbons (PAHs) using EPA Method 8270D/SIM																	
Naphthalene (8260 SIM)	ug/L	160															
Naphthalene (8260)	ug/L	160	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**24**	**54**	**49**	**54**	**69**	**9**	< 1 U	< 1 U	< 1 U	< 1 U
Naphthalene (8270 SIM)	ug/L	160	**0.13**	< 0.031 U	**0.12 J**	< 0.03 U	**0.19**	**22**	**45**	**38**	**43**	**53**	**7.8**	< 0.031 U	< 0.031 U	< 0.031 U	< 0.030 U
Total Petroleum Hydrocarbons using Northwest Methods NWTPH-Dx and N																	
Gasoline Range Organics	ug/L	800|1000	**360**	**870**	**370**	**420**	**440**	**6900**	**7700**	**6300**	**8700**	**7800**	**2800**	< 50 U	< 50 U	< 50 U	< 50 U
Diesel Range Organics	ug/L	500	**330**	**180**	**300**	**170**	**270**	**410**	**310**	**180**	**210**	**150**	**170**	< 28 U	< 28 U	< 29 U	< 28 U
Motor Oil Range Organics	ug/L	500	< 67 U	< 68 U	< 66 U	< 66 U	< 66 U	< 66 U	< 67 U	< 68 U	< 66 U	< 67 U	< 66 U	< 66 U	< 66 U	< 68 U	< 66 U
Select Volatile Organic Compounds (VOCs) using EPA Method 8260B																	
1,1,1-Trichloroethane	ug/L	200															
1,2-Dibromoethane (EDB) (8011)	ug/L	0.01															
1,2-Dibromoethane (EDB) (8260)	ug/L	0.01															
1,2-Dichloroethane (EDC)	ug/L	5															
1,2-Dichloropropane	ug/L																
cis-1,2-Dichloroethene (DCE)	ug/L		< 0.5 U	< 0.8 U	< 0.5 U	< 0.5 U	< 0.5 U	**1 J**	**3**	**4**	**4**	**2**	**2**	< 0.5 U	< 0.5 U	< 0.8 U	< 0.5 U
Methyl tert-butyl ether (MTBE)	ug/L	20															
Methylene Chloride	ug/L	5															
Tetrachloroethene (PCE)	ug/L	5	< 0.5 U	< 0.8 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.8 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.8 U	< 0.5 U
Trichloroethene (TCE)	ug/L	5	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U
Vinyl Chloride	ug/L	0.2	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	**1**	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

Only select analytes shown on the table. See laboratory reports for full lists.

Table 4 - Summary of Groundwater Results

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

		Year and Consultant	CRA GW														
		Boring/Monitoring Well ID	MW-4	MW-4	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-7
		Sample Date	12/10/2014	8/28/2014	2/26/2016	3/13/2015	3/19/2014	5/28/2014	12/11/2014	8/28/2014	2/26/2016	3/13/2015	3/18/2014	5/28/2014	12/10/2014	8/29/2014	2/26/2016
Chemical Name	Units	MTCA Method A Cleanup Level															
Benzene, Toluene, Ethylbenzene, and Total Xylenes using EPA Method 82																	
Benzene	ug/L	5	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**4**	**1**	< 0.5 U	< 0.5 U	< 0.5 U
Toluene	ug/L	1000	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**0.9 J**	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Ethylbenzene	ug/L	700	< 0.5 U	< 0.5 U	**18**	**5**	**34**	**8**	**0.8 J**	**34**	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Total Xylenes	ug/L	1000	< 0.5 U	< 0.5 U	**44**	**5**	**150**	**26**	**5**	**65**	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Field Parameters																	
Temperature	deg C																
Specific Conductance	uS/cm																
Dissolved Oxygen	mg/L																
pH	pH units																
Oxidation Reduction Potential	mV																
Turbidity	NTU																
Select Metals using EPA Method 6000/7000 Series																	
Arsenic (Dissolved)	ug/L	5															
Arsenic (Total)	ug/L	5															
Lead (Dissolved)	ug/L	15															
Lead (Total)	ug/L	15	**0.15 J**	**0.14 J**	**0.28 J**	**0.1 J**	**0.17**	**0.16**	**1.3**	**0.49 J**	**0.89 J**	**2.4**	**0.97**	**30.5**	**20.5**	**24.4**	**5.9**
Polycyclic Aromatic Hyrodrcarbons (PAHs) using EPA Method 8270D/SIM																	
Naphthalene (8260 SIM)	ug/L	160															
Naphthalene (8260)	ug/L	160	< 1 U	< 1 U	**4 J**	**2 J**	**26**	**9**	**1 J**	**36**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Naphthalene (8270 SIM)	ug/L	160	< 0.03 U	< 0.028 U	**3.4**	**1.5**	**13**	**6.8**	**0.34**	**46**	< 0.032 U	< 0.031 U	< 0.031 U	< 0.030 U	< 0.03 U	< 0.028 U	< 0.033 U
Total Petroleum Hydrocarbons using Northwest Methods NWTPH-Dx and N																	
Gasoline Range Organics	ug/L	800|1000	< 50 U	< 50 U	**1500**	**670**	**1700**	**570**	**260**	**3900**	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U
Diesel Range Organics	ug/L	500	< 29 U	< 28 U	**180**	**170**	**110**	**100**	< 29 U	**360**	< 28 U	< 28 U	< 29 U	< 28 U	< 28 U	**59 J**	< 29 U
Motor Oil Range Organics	ug/L	500	< 67 U	< 66 U	< 67 U	< 66 U	< 68 U	< 66 U	< 67 U	< 66 U	< 66 U	< 66 U	< 68 U	< 66 U	< 66 U	**120 J**	< 67 U
Select Volatile Organic Compounds (VOCs) using EPA Method 8260B																	
1,1,1-Trichloroethane	ug/L	200															
1,2-Dibromoethane (EDB) (8011)	ug/L	0.01															
1,2-Dibromoethane (EDB) (8260)	ug/L	0.01															
1,2-Dichloroethane (EDC)	ug/L	5															
1,2-Dichloropropane	ug/L																
cis-1,2-Dichloroethene (DCE)	ug/L		< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.8 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.8 U	< 0.5 U	< 0.5 U	< 0.5 U	**14**
Methyl tert-butyl ether (MTBE)	ug/L	20															
Methylene Chloride	ug/L	5															
Tetrachloroethene (PCE)	ug/L	5	< 0.5 U	< 0.5 U	< 0.5 U	**0.5 J**	< 0.8 U	**0.5**	**0.6 J**	< 0.5 U	< 0.5 U	< 0.5 U	< 0.8 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Trichloroethene (TCE)	ug/L	5	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	**2**
Vinyl Chloride	ug/L	0.2	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	**3**

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

Only select analytes shown on the table. See laboratory reports for full lists.

Table 4 - Summary of Groundwater Results

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Year and Consultant																
Boring/Monitoring Well ID			MW-7	MW-7	MW-7	MW-7	MW-7	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-9	MW-9	MW-9	MW-9
Sample Date			3/13/2015	3/18/2014	5/28/2014	12/10/2014	8/29/2014	2/26/2016	3/12/2015	3/19/2014	5/28/2014	12/10/2014	8/28/2014	2/25/2016	3/12/2015	3/18/2014	5/27/2014
Chemical Name	Units	MTCA Method A Cleanup Level															
Benzene, Toluene, Ethylbenzene, and Total Xylenes using EPA Method 82																	
Benzene	ug/L	5	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Toluene	ug/L	1000	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	**0.8 J**	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Ethylbenzene	ug/L	700	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**36**	**92**	**33**	**50**	**94**	**170**	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Total Xylenes	ug/L	1000	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**120**	**390**	**370**	**270**	**350**	**590**	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Field Parameters																	
Temperature	deg C																
Specific Conductance	uS/cm																
Dissolved Oxygen	mg/L																
pH	pH units																
Oxidation Reduction Potential	mV																
Turbidity	NTU																
Select Metals using EPA Method 6000/7000 Series																	
Arsenic (Dissolved)	ug/L	5															
Arsenic (Total)	ug/L	5															
Lead (Dissolved)	ug/L	15															
Lead (Total)	ug/L	15	**11.8**	**79.3**	**9.7**	**35.6**	**40.9**	**4.3**	**3.5**	**12.6**	**3.9**	**4.4**	**1.6**	< 0.13 U	**0.16 J**	**0.087**	**0.092**
Polycyclic Aromatic Hyrodrcarbons (PAHs) using EPA Method 8270D/SIM																	
Naphthalene (8260 SIM)	ug/L	160															
Naphthalene (8260)	ug/L	160	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**18**	**83**	**57**	**39**	**65**	**70**	< 1 U	< 1 U	< 1 U	< 1 U
Naphthalene (8270 SIM)	ug/L	160	< 0.031 U	< 0.031 U	< 0.030 U	< 0.03 U	< 0.028 U	**16**	**40**	**47**	**30**	**49**	**68**	< 0.032 U	< 0.031 U	< 0.031 U	< 0.030 U
Total Petroleum Hydrocarbons using Northwest Methods NWTPH-Dx and N																	
Gasoline Range Organics	ug/L	800|1000	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	**7900**	**9300**	**8400**	**5600**	**9000**	**11000**	< 50 U	**60 J**	**96**	**64**
Diesel Range Organics	ug/L	500	< 28 U	< 29 U	< 29 U	< 28 U	< 28 U	**910**	**790**	**2400**	**860**	**1600**	**500**	< 28 U	**86 J**	**37**	**50**
Motor Oil Range Organics	ug/L	500	< 66 U	< 68 U	< 67 U	< 66 U	< 66 U	**200 J**	< 66 U	< 68 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 68 U	< 67 U
Select Volatile Organic Compounds (VOCs) using EPA Method 8260B																	
1,1,1-Trichloroethane	ug/L	200															
1,2-Dibromoethane (EDB) (8011)	ug/L	0.01															
1,2-Dibromoethane (EDB) (8260)	ug/L	0.01															
1,2-Dichloroethane (EDC)	ug/L	5															
1,2-Dichloropropane	ug/L																
cis-1,2-Dichloroethene (DCE)	ug/L		**11**	**13**	**12**	**7**	**1 J**	**0.6 J**	**1 J**	**2**	**2**	**2 J**	**3**	**43**	**150**	**110**	**140**
Methyl tert-butyl ether (MTBE)	ug/L	20															
Methylene Chloride	ug/L	5															
Tetrachloroethene (PCE)	ug/L	5	**1**	< 0.8 U	< 0.5 U	< 0.5 U	< 0.5 U	**0.8 J**	< 1 U	**1**	**1**	< 1 U	< 0.5 U	**96**	**140**	**180**	**140**
Trichloroethene (TCE)	ug/L	5	**5**	**2**	**3**	**2**	< 0.5 U	**0.6 J**	**1 J**	< 1 U	**0.7**	< 1 U	< 0.5 U	**38**	**120**	**100**	**120**
Vinyl Chloride	ug/L	0.2	**3**	**3**	**3**	**3**	**2**	< 0.5 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 0.5 U	**5**	**16**	**13**	**14**

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

Only select analytes shown on the table. See laboratory reports for full lists.

Table 4 - Summary of Groundwater Results

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Year and Consultant																
Boring/Monitoring Well ID			MW-9	MW-9	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-11	MW-11	MW-11	MW-11	MW-13	MW-13	MW-13
Sample Date			12/10/2014	8/28/2014	2/26/2016	3/12/2015	3/18/2014	5/27/2014	12/10/2014	8/29/2014	2/25/2016	3/12/2015	12/10/2014	8/28/2014	2/25/2016	3/12/2015	12/10/2014
Chemical Name	Units	MTCA Method A Cleanup Level															
Benzene, Toluene, Ethylbenzene, and Total Xylenes using EPA Method 82																	
Benzene	ug/L	5	< 0.5 U	< 0.5 U	**1**	**0.5 J**	**2**	< 0.5 U	**1**	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Toluene	ug/L	1000	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**0.7**	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Ethylbenzene	ug/L	700	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Total Xylenes	ug/L	1000	< 0.5 U	< 0.5 U	**2**	**0.6 J**	**6**	< 0.5 U	**2**	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Field Parameters																	
Temperature	deg C																
Specific Conductance	uS/cm																
Dissolved Oxygen	mg/L																
pH	pH units																
Oxidation Reduction Potential	mV																
Turbidity	NTU																
Select Metals using EPA Method 6000/7000 Series																	
Arsenic (Dissolved)	ug/L	5															
Arsenic (Total)	ug/L	5															
Lead (Dissolved)	ug/L	15															
Lead (Total)	ug/L	15	< 0.082 U	**0.12 J**	< 0.13 U	< 0.082 U	< 0.085 U	**0.11**	**0.23 J**	**0.43 J**	**0.28 J**	**10**	**0.2 J**	**0.22 J**	**0.7 J**	**0.68 J**	**0.81 J**
Polycyclic Aromatic Hyrodrcarbons (PAHs) using EPA Method 8270D/SIM																	
Naphthalene (8260 SIM)	ug/L	160															
Naphthalene (8260)	ug/L	160	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Naphthalene (8270 SIM)	ug/L	160	< 0.03 U	**0.046 J**	**0.19**	**0.075**	**0.46**	**0.04**	**0.16**	**0.053 J**	< 0.031 U	< 0.031 U	**0.031 J**	**0.041 J**	< 0.031 U	< 0.031 U	< 0.03 U
Total Petroleum Hydrocarbons using Northwest Methods NWTPH-Dx and N																	
Gasoline Range Organics	ug/L	800|1000	**81 J**	< 50 U	**300**	**99 J**	**520**	< 50 U	**140 J**	< 50 U	**740**	**480**	**560**	**580**	< 50 U	< 50 U	< 50 U
Diesel Range Organics	ug/L	500	**56 J**	**44**	**110**	**100**	**190**	**75**	**140**	**90 J**	< 29 U	< 29 U	< 28 U	< 29 U	< 29 U	< 28 U	< 28 U
Motor Oil Range Organics	ug/L	500	< 66 U	< 67 U	< 67 U	< 67 U	< 68 U	< 67 U	< 65 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 65 U
Select Volatile Organic Compounds (VOCs) using EPA Method 8260B																	
1,1,1-Trichloroethane	ug/L	200															
1,2-Dibromoethane (EDB) (8011)	ug/L	0.01															
1,2-Dibromoethane (EDB) (8260)	ug/L	0.01															
1,2-Dichloroethane (EDC)	ug/L	5															
1,2-Dichloropropane	ug/L																
cis-1,2-Dichloroethene (DCE)	ug/L		**120**	**89**	**1**	**9**	**0.9**	**12**	**1 J**	**0.6 J**	**13**	**17**	**15**	**15**	**50**	**35**	**39**
Methyl tert-butyl ether (MTBE)	ug/L	20															
Methylene Chloride	ug/L	5															
Tetrachloroethene (PCE)	ug/L	5	**140**	**71**	< 0.5 U	< 0.5 U	< 0.8 U	< 0.5 U	< 0.5 U	< 0.5 U	**850**	**1200**	**1200**	**1200**	**19**	< 5 U	**1**
Trichloroethene (TCE)	ug/L	5	**87**	**41**	< 0.5 U	< 0.5 U	< 1 U	**0.6**	< 0.5 U	< 0.5 U	**30**	**41**	**37**	**38**	**5**	< 0.5 U	< 0.5 U
Vinyl Chloride	ug/L	0.2	**13**	**8**	**10**	**38**	**12**	**56**	**10**	**17**	< 1 U	**0.7 J**	**0.6 J**	**0.6 J**	**18**	**26**	**26**

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

Only select analytes shown on the table. See laboratory reports for full lists.

Table 4 - Summary of Groundwater Results

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

		Year and Consultant	
		Boring/Monitoring Well ID	MW-13
		Sample Date	8/28/2014
Chemical Name	Units	MTCA Method A Cleanup Level	
Benzene, Toluene, Ethylbenzene, and Total Xylenes using EPA Method 82			
Benzene	ug/L	5	< 0.5 U
Toluene	ug/L	1000	< 0.5 U
Ethylbenzene	ug/L	700	< 0.5 U
Total Xylenes	ug/L	1000	< 0.5 U
Field Parameters			
Temperature	deg C		
Specific Conductance	uS/cm		
Dissolved Oxygen	mg/L		
pH	pH units		
Oxidation Reduction Potential	mV		
Turbidity	NTU		
Select Metals using EPA Method 6000/7000 Series			
Arsenic (Dissolved)	ug/L	5	
Arsenic (Total)	ug/L	5	
Lead (Dissolved)	ug/L	15	
Lead (Total)	ug/L	15	**1.7**
Polycyclic Aromatic Hyrodrcarbons (PAHs) using EPA Method 8270D/SIM			
Naphthalene (8260 SIM)	ug/L	160	
Naphthalene (8260)	ug/L	160	< 1 U
Naphthalene (8270 SIM)	ug/L	160	< 0.028 U
Total Petroleum Hydrocarbons using Northwest Methods NWTPH-Dx and N			
Gasoline Range Organics	ug/L	800|1000	< 50 U
Diesel Range Organics	ug/L	500	**41 J**
Motor Oil Range Organics	ug/L	500	< 66 U
Select Volatile Organic Compounds (VOCs) using EPA Method 8260B			
1,1,1-Trichloroethane	ug/L	200	
1,2-Dibromoethane (EDB) (8011)	ug/L	0.01	
1,2-Dibromoethane (EDB) (8260)	ug/L	0.01	
1,2-Dichloroethane (EDC)	ug/L	5	
1,2-Dichloropropane	ug/L		
cis-1,2-Dichloroethene (DCE)	ug/L		**57**
Methyl tert-butyl ether (MTBE)	ug/L	20	
Methylene Chloride	ug/L	5	
Tetrachloroethene (PCE)	ug/L	5	< 0.5 U
Trichloroethene (TCE)	ug/L	5	< 0.5 U
Vinyl Chloride	ug/L	0.2	**27**

Notes

Bold - detected

Blue - exceeded MTCA A

U = Not Detected

Only select analytes shown on the table. See laboratory reports for full lists.

Table 5 - Summary of Monitoring Well Construction Information

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Well Location on the Property	Monitoring Well ID	Consultant	Type of Monitoring Well	Installation Date	Bottom of Well (feet bgs)	Screened Interval (feet bgs)	Sand Pack Interval (feet bgs)	Ground Elevation (feet NAVD88)	TOC Elevation (feet NAVD88)
McClellan Parcels	AMW-1	Aspect	Permanent	02/18/17	13.5	8.5-13.5	6.5-15	77.81	77.55
	KEE-B-2	KEE	Temporary	05/24/10	16	6-16	3.0-16	N/A	N/A
	KEE-B-3			05/24/10	16	6-16	3.0-16	N/A	N/A
MLK, McClellan and 29th ROWs	HC-MW-1	Hart Crowser	Permanent	05/16/16	17	7-17	5.0-20	67.54	67.23
	HC-MW-2			05/16/16	17	7-17	5.0-20	75.07	74.82
	HC-MW-3			09/26/16	16	6-16	4.0-20	78.50	78.19
	HC-MW-4			09/28/16	20	10-20	8.0-20	87.94	87.74
	HC-MW-5			09/29/16	17	7-17	5.0-20	72.79	72.54
	HC-MW-6			09/29/16	19	9-19	7.0-20	63.22	62.92
	HC-MW-7			09/30/16	18	8-18	6.0-20	63.88	63.59
Former Phillips 66 Gas Station Property	MW-1	g-logics	Permanent	08/09/05	23	13-23	11-23.5	63.04	62.6
	MW-2			08/09/05	23	13-23	11.0-23	61.36	60.78
	MW-3			08/09/05	20	10-20	6.75-20	62.18	61.87
	MW-4			06/22/06	20	15-20	13-20	63.18	62.98
	MW-5			06/22/06	20	10-20	5-20	61.98	61.86
	MW-6	Stantec		07/12/11	20	10-20	8-20	58.6	58.28
	MW-7			07/13/11	20	10-20	8-20	57.43	57.13
	MW-8			07/12/11	20	10-20	8-20	62.21	61.82
	MW-9			07/12/11	25	10-25	8-25	63.24	62.83
	MW-10			07/13/11	20	10-20	8-20	59.42	59.23
	MW-11	CRA		Unknown	Unknown	Unknown	Unknown	68.67	68.17
	MW-12			Unknown	Unknown	Unknown	Unknown	62.21	61.51
	MW-13			Unknown	Unknown	Unknown	Unknown	66.09	65.54

Table 6 - Summary of Depth to Water Measurements and Groundwater Elevations

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

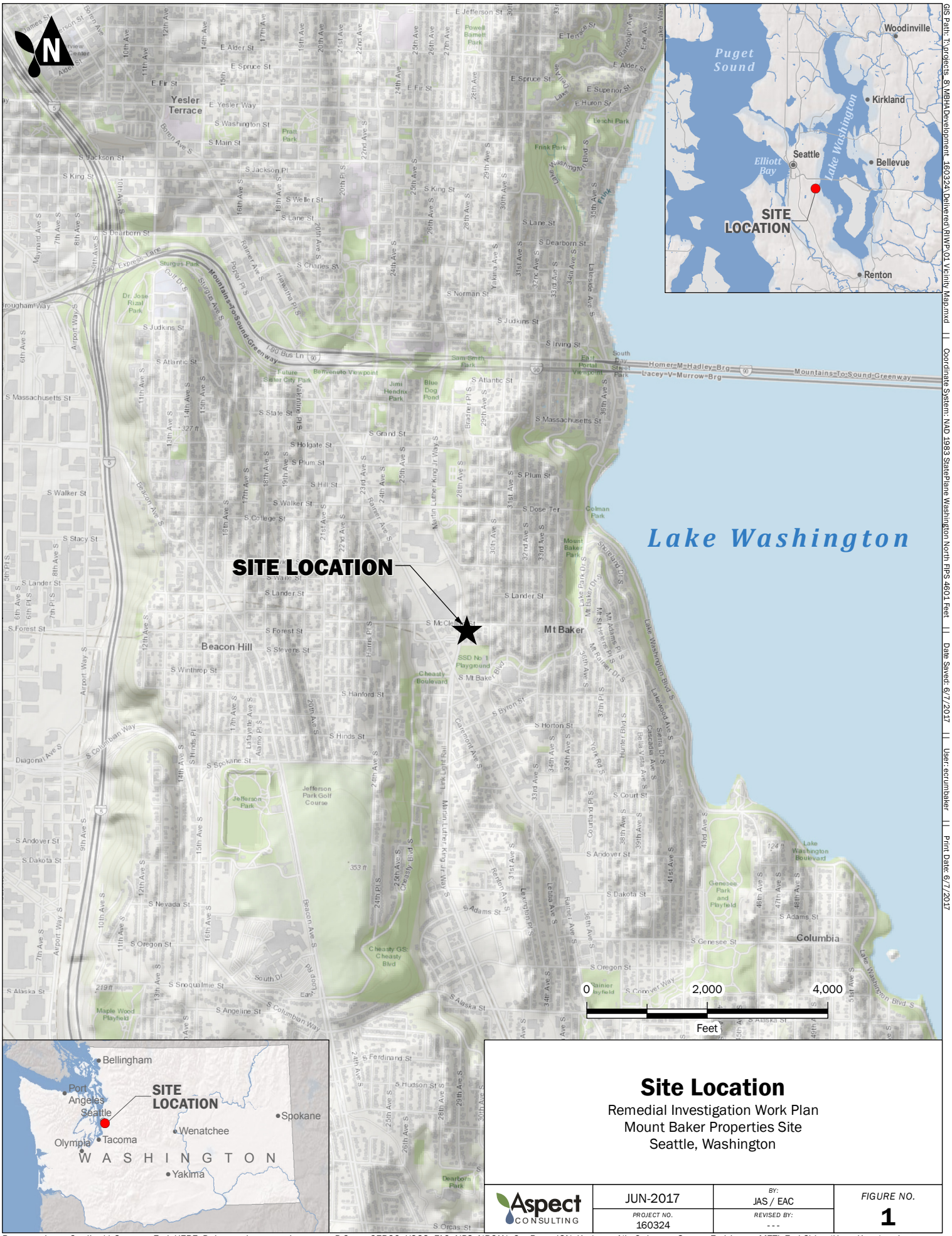
Monitoring Well ID	Date	Depth to Water (feet bTOC)	Groundwater Elevation (feet NAVD88)
AMW-1	03/24/17	8.08	69.47
	05/12/17	8.98	68.57
HC-MW-1	09/30/16	9.86	57.37
	05/12/17	8.16	59.07
HC-MW-2	09/29/16	9.33	65.49
	05/12/17	8.10	66.72
HC-MW-3	09/30/16	7.61	70.58
	05/12/17	6.31	71.88
HC-MW-4	10/03/16	11.73	76.01
	05/12/17	9.82	77.92
HC-MW-5	09/30/16	7.60	64.94
	05/12/17	6.13	66.41
HC-MW-6	10/03/16	8.32	54.60
	05/12/17	7.01	55.91
HC-MW-7	10/03/16	7.39	56.20
	05/12/17	6.46	57.13
MW-1	11/12/09	11.79	50.81
	03/19/14	8.69	53.91
	05/27/14	9.98	52.62
	08/28/14	11.87	50.73
	12/11/14	10.97	51.63
	03/12/15	10.31	52.29
	02/25/16	9.56	53.04
	05/25/16	11.27	51.33
	08/08/16	12.53	50.07
	05/12/17	9.90	52.70
MW-2	11/12/09	12.35	48.43
	03/18/14	10.31	50.47
	05/27/14	10.25	50.53
	08/28/14	12.11	48.67
	12/11/14	11.05	49.73
	03/12/15	10.31	50.47
	02/25/16	9.19	51.59
	05/25/16	10.68	50.10
	08/08/16	12.12	48.66
	05/12/17	9.94	50.84
MW-3	11/12/09	11.59	50.28
	03/19/14	9.20	52.67
	05/27/14	10.58	51.29
	08/29/14	11.81	50.06
	12/11/14	9.91	51.96
	03/13/15	10.64	51.23
	02/25/16	9.33	52.54
	05/26/16	11.23	50.64
	08/08/16	12.37	49.50
	05/12/17	10.20	51.67
MW-4	11/12/09	11.98	51.00
	03/18/14	9.29	53.69
	05/27/14	10.89	52.09
	08/28/14	12.27	50.71
	12/10/14	11.17	51.81
	03/13/15	10.80	52.18
	02/25/16	9.23	53.75
	05/25/16	10.83	52.15
	08/09/16	12.42	50.56
	05/12/17	10.26	52.72
MW-5	11/12/09	12.10	49.76
	03/19/14	9.21	52.65
	05/28/14	10.62	51.24
	08/28/14	12.01	49.85
	12/11/14	9.61	52.25
	03/13/15	10.69	51.17
	02/26/16	9.01	52.85
	05/26/16	11.05	50.81
	08/08/16	12.43	49.43
	05/12/17	10.15	51.71
MW-6	03/18/14	11.38	46.90
	05/28/14	11.87	46.41
	08/29/14	11.86	46.42
	12/10/14	11.72	46.56
	03/13/15	11.41	46.87
	02/26/16	11.49	46.79
	05/26/16	11.88	46.40
	08/09/16	12.09	46.19
	05/12/17	11.59	46.69

Table 6 - Summary of Depth to Water Measurements and Groundwater Elevations

Project No. 160324, McClellan St. and Martin Luther King Way S., Seattle, WA

Monitoring Well ID	Date	Depth to Water (feet bTOC)	Groundwater Elevation (feet NAVD88)
MW-7	03/18/14	10.39	46.74
	05/28/14	10.78	46.35
	08/29/14	10.90	46.23
	12/10/14	10.56	46.57
	03/13/15	10.78	46.35
	02/26/16	10.43	46.70
	05/26/16	10.73	46.40
	08/09/16	10.73	46.40
	05/12/17	10.54	46.59
MW-8	03/19/14	8.73	53.09
	05/28/14	10.41	51.41
	08/28/14	11.95	49.87
	12/10/14	9.66	52.16
	03/12/15	10.56	51.26
	02/26/16	8.71	53.11
	05/26/16	11.25	50.57
	08/09/16	12.31	49.51
	05/12/17	9.88	51.94
MW-9	03/18/14	12.07	50.76
	05/27/14	12.97	49.86
	08/28/14	14.73	48.10
	12/10/14	12.12	50.71
	03/12/15	12.72	50.11
	02/25/16	11.96	50.87
	05/25/16	13.61	49.22
	08/08/16	14.91	47.92
	05/12/17	12.30	50.53
MW-10	03/18/14	11.29	47.94
	05/27/14	10.14	49.09
	08/29/14	11.63	47.60
	12/10/14	9.45	49.78
	03/12/15	10.29	48.94
	02/26/16	9.33	49.90
	05/26/16	10.92	48.31
	08/09/16	11.86	47.37
	05/12/17	9.89	49.34
MW-11	08/28/14	11.23	56.94
	12/10/14	9.66	58.51
	03/12/15	10.63	57.54
	02/25/16	9.89	58.28
	05/25/16	10.95	57.22
	08/08/16	11.35	56.82
	05/12/17	10.37	57.80
MW-12	03/12/15	10.43	51.08
	05/21/15	10.83	50.68
	08/10/15	12.39	49.12
	12/21/15	7.93	53.58
	02/25/16	8.95	52.56
	05/25/16	11.09	50.42
	08/08/16	12.23	49.28
	05/12/17	10.04	51.47
MW-13	08/28/14	10.10	55.44
	12/10/14	8.78	56.76
	03/12/15	9.42	56.12
	02/25/16	8.78	56.76
	05/25/16	9.95	55.59
	08/08/16	10.37	55.17
	05/12/17	9.49	56.05

FIGURES



Site Location

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect CONSULTING	JUN-2017	BY: JAS / EAC	FIGURE NO. 1
	PROJECT NO. 160324	REVISED BY: ---	

GIS Path: T:\projects_8\MBHADevelopment\160324\Delivered\RIWP\01_Vicinity_Map.mxd || Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet || Date Saved: 6/7/2017 || User: eorumbaker || Print Date: 6/7/2017

PARCEL ID: 0003600052

SICK'S STADIUM LANDFILL SITE

PARCEL ID: 0003600001

PARCEL ID: 7954000005

MOUNT BAKER VILLAGE APARTMENTS SITE

29TH AVE S

PARCEL ID: 7954000005

CONCRETE SLAB-ON-GRADE (APPROXIMATELY 3 INCHES THICK)

Approximate Location of Heating Oil UST

Approximate Location of 55-Gallon Waste Drum Containing Spent PCE

CONCRETE SLAB-ON-GRADE (APPROXIMATELY 2 FEET THICK)

Approximate Location of Dry Cleaning Equipment

MT. BAKER CLEANERS

2802 — PARCEL ID: 0003600030

2806 — PARCEL ID: 0003600032

2810 — PARCEL ID: 0003600008

2864 — PARCEL ID: 0003600031

CONCRETE SLAB-ON-GRADE (APPROXIMATELY 1 - 1.5 FEET THICK)

WOOD PANELED FLOOR (NO CONCRETE)

MARTIN LUTHER KING JR WAY S

S MC CLELLAN ST

Fence

FORMER PHILLIPS 66 AND CHEVRON GAS STATION

2800 — PARCEL ID: 0003600055

EXISTING BP 76 STATION AND EMPIRE WAY MOBILE SITE — PARCEL ID: 0003600065

PARCEL ID: 0003600063

PARCEL ID: 6725700052

PARCEL ID: 6725700051

PARCEL ID: 6725700045

PARCEL ID: 6725700060

PARCEL ID: 6725700035

PARCEL ID: 6725700065

PARCEL ID: 6725700030

PARCEL ID: 0003600074

PARCEL ID: 6725700070

PARCEL ID: 6725700075

A — A'

B — B'

C — C'

Subject Property
Tax Parcel (Adjusted)
Historic Site Areas

Sanitary System
Catch Basin
Manhole
Sanitary Sewer Pipe

Stormwater System
Catch Basin
Manhole
Stormwater Pipe
Cross Section

Note: Utility location provided by City of Seattle. Locations are approximate.

N

0 20 40
Feet

Site Plan

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect CONSULTING	JUL-2017	BY: JAS / EAC	FIGURE NO. 2
	PROJECT NO. 160324	REVISED BY: ---	

MARTIN LUTHER KING JR WAY S

29TH AVE S

S MC CLELLAN ST

MOUNT BAKER VILLAGE APARTMENTS SITE

SICK'S STADIUM LANDFILL SITE

EXISTING BP 76 STATION AND EMPIRE WAY MOBILE SITE

MT. BAKER CLEANERS

FORMER PHILLIPS 66 AND CHEVRON GAS STATION

Fence

HC-MW-07 57.13

HC-MW-04 77.92

HC-MW-06 55.91

AMW-01 68.57

HC-MW-03 71.88

HC-MW-05 66.41

HC-MW-01 59.07

HC-MW-02 66.72

MW-11 57.8

MW-13 56.05

MW-04 52.72

MW-03 51.67

MW-05 51.71

MW-12 51.47

MW-01 52.7

MW-08 51.94

MW-02 50.84

MW-09 50.53

MW-06 46.69

MW-07 46.59

70

75

65

60

55

50

N

0 20 40

Feet

Well ID

MW-07 46.59

Groundwater Elevation (feet) Measured May 12, 2017

Monitoring Well

Groundwater Flow Direction

Groundwater Contour

Note: Monitoring wells were surveyed in March 2017 by Core Design Inc. Elevations are based on elevation datum NAVD88.

Groundwater Elevations and Flow Direction

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect CONSULTING	OCT-2017	BY: JAS / EAC	FIGURE NO. 3
	PROJECT NO. 160324	REVISED BY: DAC	

NW CORNER 2
NW-UST-3
GL-01
P-05
B-12
DP-04
DP-05
P-12
MW-13
GL-02
B-07
OWS-B-4.5
P-14
P-13
SUMP-B-4
B-13
MW-04
P-15
DP-03
P-04
N HOIST BOTTOM
B-14
DP-06
P-16
B-06
GL-03
DP-02
P-09
B-01
MW-03
P-01
P-02
NORTH PUMP-2
S HOIST BOTTOM
IP-05
IP-01
EPI-N-2
MW-05
P-08
MW-12
GL-04
P-06
B-05
MW-08
B-02
MW-01
DP-01
SOUTH PUMP-2
IP-04
P-11
P-07
P-03
IP-02
B-15
DP-07
MW-02
IP-03
B-03
B-10
B-11
P-10
UST1-B-8
GL-05
B-08
B-04
GL-06
MW-09
PARCEL ID: 7954000005
29TH AVE S
PARCEL ID: 7954000005
ATC-B-01
SV-05
ATC-B-04
SV-02
SV-01
HC-MW-04
SV-03
ATC-B-03
K-SB-03
SV-04
ATC-B-05
ATC-B-02
K-SB-02
AB-04
ATC-B-0
SW-B-07
SE-B-06
KEE-B-03
AB-03
PARCEL ID: 0003600008 2810
PARCEL ID: 0003600031 2864
HC-MW-07
C
PBS-SB-01
PARCEL ID: 0003600030 2802
PARCEL ID: 0003600032 2806
HC-SB-01
AB-06
AB-02
K-SB-01
AB-01
KEE-B-02
PBS-SB-03
AMW-01
PARCEL ID: 0003600052
PBS-SB-02
HC-MW-06
KEE-B-01
HC-MW-03
HC-SB-02
HC-MW-05
S MC CLELLAN ST
B
B'
HC-MW-01
HC-MW-02
MARTIN LUTHER KING JR WAY S
2800
PARCEL ID: 0003600055
MW-11
PARCEL ID: 0003600065
PARCEL ID: 6725700052
PARCEL ID: 6725700051
29TH AVE S
MW-06
B-09
PARCEL ID: 0003600063
PARCEL ID: 6725700060
PARCEL ID: 0003600062
MW-07
A'
C'
MW-10
PARCEL ID: 6725700065
PARCEL ID:
N
0
25
50
Feet

Color Indicates Consultant

- ATC
- Aspect
- AEG
- CRA
- G-Logic
- GHD
- GeoEngineers
- Hart Crowser
- Kane Environmental, Inc
- Kee, LLC
- PBS
- Stantec

Symbol Indicates Exploration Type

- Monitoring Well
- Auger Boring
- Geoprobe
- Injection Well
- Soil Boring
- Soil Vapor
- Soil Sample

- Subject Property
- Tax Parcel (Adjusted)
- Cross Section

Existing Explorations and Historic Site Conditions

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect CONSULTING	JUL-2017	BY: JAS / EAC	FIGURE NO. 4
	PROJECT NO. 160324	REVISED BY: DAC	

S MC CLELLAN ST

MARTIN LUTHER KING JR WAY S

Curb

Curb

Curb

Fence

Fence

Fence

Fence

Fence

Fence

Fence

Fence

Gasoline and Waste Oil USTs Excavation Area (1989)

Product Piping Excavation Area (2005)

Oil/Water Separator Excavation Area (2005)

Hydraulic Hoist and Sump Excavation Area (2005)

Hydraulic Hoist Excavation Area

Former Pump Islands

Former Pump Islands

Heating Oil UST Excavation Area (2005)

FORMER PHILLIPS 66
AND
CHEVRON GAS STATION

N

0 10 20
Feet

Excavation to remove approximately 200 feet of abandoned product piping. According to the G-Logics report, approximately 15 tons of soil was excavated and stockpiled from this area, however, the end use disposal or recycling of the soil is unknown.

Extent of previous excavations to remove gas station equipment. Soil excavated was combined with concrete and asphalt rubble and used as backfill in the excavations.

Historic Site Areas

Summary of Excavations Conducted at the Former Phillips66 Gas Station

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect CONSULTING	JUN-2017	BY: JAS / EAC	FIGURE NO. 5
	PROJECT NO. 160324	REVISED BY: DAC	

MARTIN LUTHER KING JR WAY S

29TH AVE S

SICK'S STADIUM LANDFILL SITE

MOUNT BAKER VILLAGE APARTMENTS SITE

MT. BAKER CLEANERS

EXISTING BP 76 STATION AND EMPIRE WAY MOBILE SITE

FORMER PHILLIPS 66 AND CHEVRON GAS STATION

S MC CLELLAN ST

ATC-B-3
K-SB-3
ATC-B-4
HC-MW-4
ATC-B-1
ATC-B-2
ATC-B-5
K-SB-2
AB-4
SW-B-7
SE-B-6
ATC-B-6
HC-MW-7
KEE-B-3
AB-3
HC-SB-1
AB-2
AB-1
AB-6
K-SB-1
KEE-B-2
AMW-1
HC-MW-6
HC-MW-3
KEE-B-1
HC-SB-2
HC-MW-5
HC-MW-1
HC-MW-2
Fence
DP-5
DP-4
DP-6
DP-3
DP-2
B-5
DP-1
DP-7
0
20
40
Feet

- Chlorinated solvents not detected.
- Chlorinated solvents detected at concentrations less than the MTCA Method A cleanup levels.
- Chlorinated solvents detected at concentrations greater than the MTCA Method A cleanup levels.

- Monitoring Well
- Auger Boring
- Soil Boring
- Subject Property
- Tax Parcel (Adjusted)

Chlorinated Solvent Concentrations in Soil

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect CONSULTING	OCT-2017	BY: JAS / EAC	FIGURE NO. 6
	PROJECT NO. 160324	REVISED BY: ---	

MARTIN LUTHER KING JR WAY S

29TH AVE S

S MC CLELLAN ST

MOUNT BAKER VILLAGE APARTMENTS SITE

SICK'S STADIUM LANDFILL SITE

MT. BAKER CLEANERS

EXISTING BP 76 STATION AND EMPIRE WAY MOBILE SITE

FORMER PHILLIPS 66 AND CHEVRON GAS STATION

Fence

HC-MW-1
HC-MW-2
HC-MW-3
HC-MW-4
HC-MW-5
HC-MW-6
HC-MW-7
MW-6
MW-7
MW-10
MW-8
MW-9
ATC-B-1
ATC-B-2
SE-B-6
SW-B-7
AB-3
AB-1
HC-SB-1
AMW-1
PBS-SB-1
PBS-SB-2
PBS-SB-3
HC-SB-2
B-5
B-3
GL-3
GL-4
GL-5
GL-6
SUMP-B-4
NORTH PUMP-2
SOUTH PUMP-2
N HOIST BOTTOM
S HOIST BOTTOM

N

0 20 40
Feet

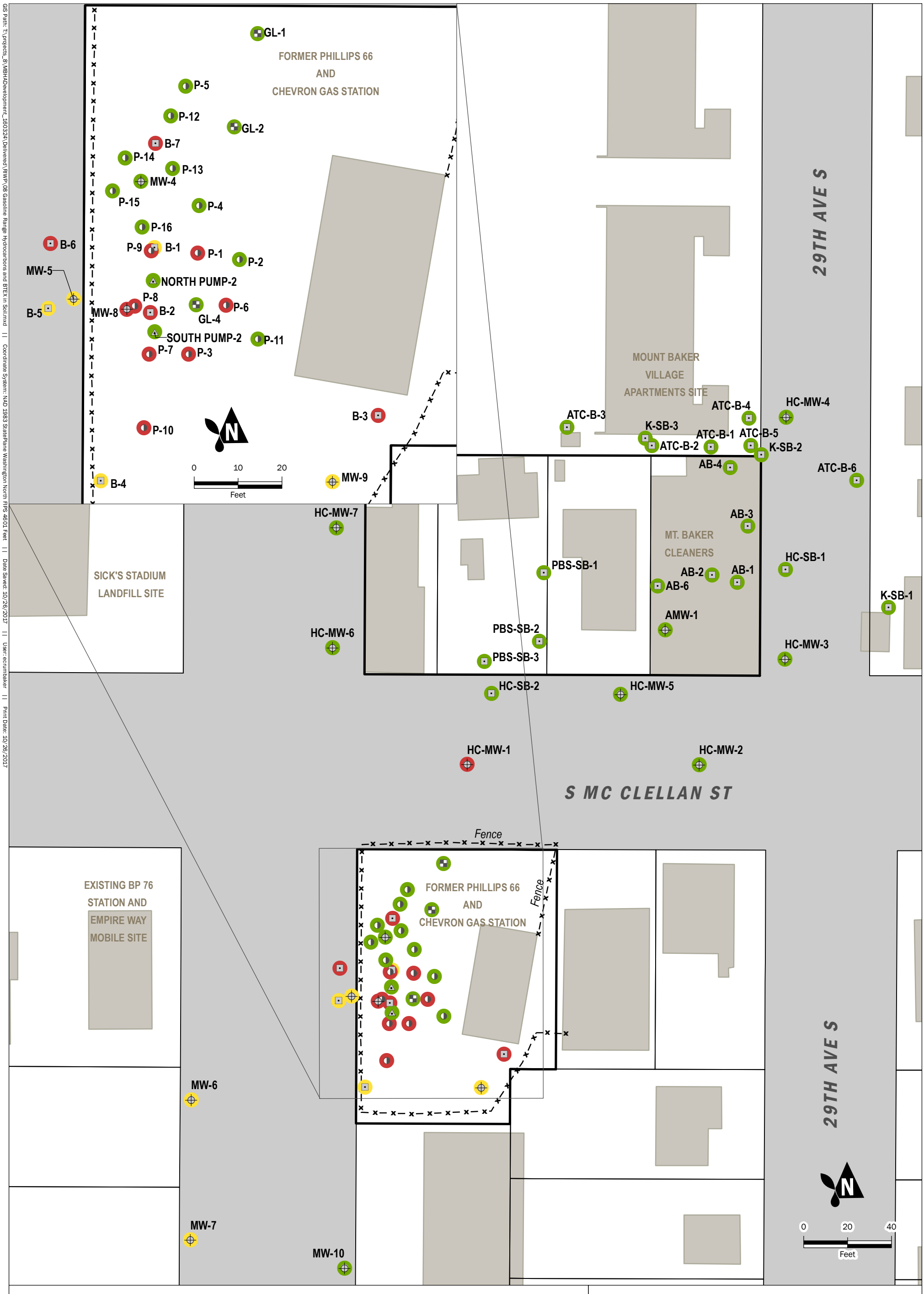
- Diesel-range petroleum hydrocarbon not detected.
- Diesel-range petroleum hydrocarbon detected at concentrations less than the MTCA Method A cleanup levels.
- Diesel-range petroleum hydrocarbon detected at concentrations greater than the MTCA Method A cleanup levels.

- Monitoring Well
- Auger Boring
- Soil Boring
- Soil Sample
- Subject Property
- Tax Parcel (Adjusted)

Diesel-range Petroleum Hydrocarbon Concentrations in Soil

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect Consulting	OCT-2017	BY: JAS / EAC	FIGURE NO. 7
	PROJECT NO. 160324	REVISED BY: ---	



- Gasoline-range petroleum hydrocarbon and BTEX not detected.
- Gasoline-range petroleum hydrocarbon or BTEX detected at concentrations less than the MTCA Method A cleanup levels.
- Gasoline-range petroleum hydrocarbon or BTEX detected at concentrations greater than the MTCA Method A cleanup levels.

- Monitoring Well
- Auger Boring
- Geoprobe
- Soil Boring
- Soil Sample
- Subject Property
- Tax Parcel (Adjusted)

B = Benzene
T = Toluene
E = Ethylbenzene
X = Total Xylenes

Gasoline-range Petroleum Hydrocarbon and BTEX Concentrations in Soil

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect CONSULTING	OCT-2017	BY: JAS / EAC	FIGURE NO. 8
	PROJECT NO. 160324	REVISED BY: ---	

MARTIN LUTHER KING JR WAY S

29TH AVE S

S MC CLELLAN ST

SICK'S STADIUM LANDFILL SITE

MOUNT BAKER VILLAGE APARTMENTS SITE

MT. BAKER CLEANERS

EXISTING BP 76 STATION AND EMPIRE WAY MOBILE SITE

FORMER PHILLIPS 66 AND CHEVRON GAS STATION

Fence

ATC-B-02
PCE: 11.9

ATC-B-01
PCE: 90.4
TCE: 1.45

ATC-B-3

K-SB-3

ATC-B-5

HC-MW-4

ATC-B-6

KEE-B-03
DCE: 49
PCE: 2100
TCE: 57

KEE-B-02
PCE: 3700
TCE: 22

AMW-01
PCE: 1500
TCE: 1.8

PBS-SB-01
DCE: 350
PCE: 2200
TCE: 250
VC: 6.3

PBS-SB-03
DCE: 32
PCE: 330
TCE: 28

HC-MW-06
DCE: 18
PCE: 1.5
TCE: 4.8
VC: 7

HC-MW-7

K-SB-1

HC-MW-03
DCE: 1.5
PCE: 15
TCE: 3.4

HC-MW-01
DCE: 63
PCE: 290
TCE: 33
VC: 12

HC-MW-05
PCE: 4900
TCE: 34

HC-MW-02
DCE: 35
PCE: 950
TCE: 76

MW-13
DCE: 57
PCE: 19
TCE: 5
VC: 37

MW-11
DCE: 17
PCE: 1200
TCE: 45
VC: 0.7 J

MW-03
DCE: 4
VC: 1

MW-4

MW-08
DCE: 3
PCE: 1
TCE: 1 J

MW-05
PCE: 0.6 J

B-5

MW-01
DCE: 21
PCE: 7
TCE: 6
VC: 2

MW-2

MW-6

MW-09
DCE: 150
PCE: 180
TCE: 120
VC: 16

MW-07
DCE: 14
PCE: 2
TCE: 5
VC: 3

MW-10
DCE: 12
TCE: 0.6
VC: 56

N

0 20 40
Feet

- Chlorinated solvents not detected.
- Chlorinated solvents detected at concentrations less than the MTCA Method A cleanup levels.
- Chlorinated solvents detected at concentrations greater than the MTCA Method A cleanup levels.

- Monitoring Well
- Soil Boring
- Subject Property
- Tax Parcel (Adjusted)

Notes:
- units are in µg/L
- DCE either was not detected or was detected at concentrations less than clean up levels in each of the monitoring wells.
- Chemical concentrations in groundwater are reflective of the most recent sampling event for each monitoring well. See Table 2 for sample dates.

Chlorinated Solvent Concentrations in Groundwater

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect Consulting	OCT-2017	BY: JAS / EAC	FIGURE NO. 9
	PROJECT NO. 160324	REVISED BY: ---	

MARTIN LUTHER KING JR WAY S

29TH AVE S

MOUNT BAKER VILLAGE APARTMENTS SITE

SICK'S STADIUM LANDFILL SITE

MT. BAKER CLEANERS

EXISTING BP 76 STATION AND EMPIRE WAY MOBILE SITE

FORMER PHILLIPS 66 AND CHEVRON GAS STATION

S MC CLELLAN ST

Fence

ATC-B-3
ATC-B-1
HC-MW-4
HC-MW-7
HC-MW-6
AMW-1
HC-MW-3
HC-MW-5
HC-MW-1
HC-MW-2
MW-11
MW-13
MW-4
MW-3
MW-5
MW-8
MW-1
B-5
B-3
MW-2
MW-9
MW-6
MW-7
MW-10

N

0 20 40
Feet

- Diesel-range petroleum hydrocarbon not detected.
- Diesel-range petroleum hydrocarbon detected at concentrations less than the MTCA Method A cleanup levels.
- Diesel-range petroleum hydrocarbon detected at concentrations greater than the MTCA Method A cleanup levels.

- Monitoring Well
- Soil Boring
- Subject Property
- Tax Parcel (Adjusted)

Note: Chemical concentrations in groundwater are reflective of the most recent sampling event for each monitoring well. See Table 2 for sample dates.

Diesel-range Petroleum Hydrocarbon Concentrations in Groundwater

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect CONSULTING	OCT-2017	BY: JAS / EAC	FIGURE NO. 10
	PROJECT NO. 160324	REVISED BY: ---	

MARTIN LUTHER KING JR WAY S

29TH AVE S

MOUNT BAKER VILLAGE APARTMENTS SITE

ATC-B-3

ATC-B-1

HC-MW-4

HC-MW-7

MT. BAKER CLEANERS

SICK'S STADIUM LANDFILL SITE

AMW-1

HC-MW-6

HC-MW-3

HC-MW-5

HC-MW-1

HC-MW-2

S MC CLELLAN ST

Fence

MW-11

MW-13

B-7

MW-4

B-6

MW-3

B-1

B-5

MW-5

B-2

MW-1

MW-8

EXISTING BP 76 STATION AND EMPIRE WAY MOBILE SITE

MW-2

B-3

FORMER PHILLIPS 66 AND CHEVRON GAS STATION

MW-9

B-4

MW-6

MW-7

MW-10

N

0 20 40

Feet

Gasoline-range petroleum hydrocarbon not detected.

Gasoline-range petroleum hydrocarbon detected at concentrations less than the MTCA Method A cleanup levels.

Gasoline-range petroleum hydrocarbon detected at concentrations greater than the MTCA Method A cleanup levels.

Monitoring Well

Soil Boring

Subject Property

Tax Parcel (Adjusted)

B = Benzene
T = Toluene
E = Ethylbenzene
X = Total Xylenes

Notes: 1) Chemical concentrations in groundwater are reflective of the most recent sampling event for each monitoring well. See Table 2 for sample dates.

2) The chemical analytical laboratory stated that gasoline detected in groundwater samples obtained from HC-MW-1, HC-MW-2, HC-MW-5 and AMW-1 are attributable to carryover from the high PCE concentration and is not indicative of gasoline in groundwater.

Gasoline-range Petroleum Hydrocarbon Concentrations in Groundwater

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect CONSULTING

OCT-2017	BY: JAS / EAC	FIGURE NO. 11
PROJECT NO. 160324	REVISED BY: DAC	

A Northeast

A' Southwest

29th Avenue South | McClellan Parcels | South McClellan Street | Former Service Station | Martin Luther King Jr. Way South

Intersection with Cross Section B-B'

Intersection with Cross Section C-C'

HC-MW-4 (Offset 12' NW) | K-SB-2 (Offset 17' NW) | SE-B-6 (Offset 15' NW) | AB-4 (Offset 25' NW) | SW-B-7 (Offset 22' NW) | AB-3 (Offset 3' NW) | HC-SB-1 (Offset 22' SE) | AB-1 (Offset 7' SE) | AB-2 (Offset 4' NW) | HC-MW-3 (Offset 45' SE) | KEE-B-2 (Offset 22' NW) | AB-6 (Offset 22' NW) | AB-5 (Offset 8' NW) | KEE-B-1 (Offset 3' NW) | HC-MW-5 (Offset 9' NW) | MW-1 | MW-9 (Offset 33' SE) | MW-2 (Offset 15' NW) | MW-10 (Offset 31' SE) | MW-7 (Offset 24' NW)

Fill

Native Soils

Vertical Exaggeration 5x

Elevation in Feet

100 90 80 70 60 50 40 30 20

0 50 100 150 200 250 300 350 400 450 500 550 600

Distance in Feet

Fill soil generally consists of brown sand with varying degrees of silt, gravel and, occasionally brick and concrete fragments.

Native soil generally consists of silt with varying degrees of sand and, occasionally, thin interbedded sand lenses.

Note: Soil descriptions are based on various boring logs from several different consultants dating back to 2005 and were generalized for this cross section. The fill and native soil contact for each boring was estimated based on these general descriptions.

Legend

Approximate Vertical Extent of Utility Lines and Utility Trench Fill Soil

Depth to Groundwater at Time of Drilling (9/30/2016)

Estimated Fill/Native Soils Contact

K-SB-2 (Offset 17' NW)

- Boring ID
- Analytical Sample Location
- Petroleum Compounds (Upper Half) / PCE (Lower Half)
- Sand Pack Interval
- Screened Interval

Analytical Results

- One or more of contaminants of concern detected at a concentration greater than the MTCA Method A cleanup level.
- One or more of contaminants of concern detected at a concentration less than the MTCA Method A cleanup level.
- Contaminants of concern not detected.
- Contaminant not analyzed.

Note: Petroleum compounds include diesel and gasoline range petroleum hydrocarbons, benzene and total xylenes.

Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 10'
Vertical Exaggeration 5x

0 50 100 Feet

Cross Section A-A'

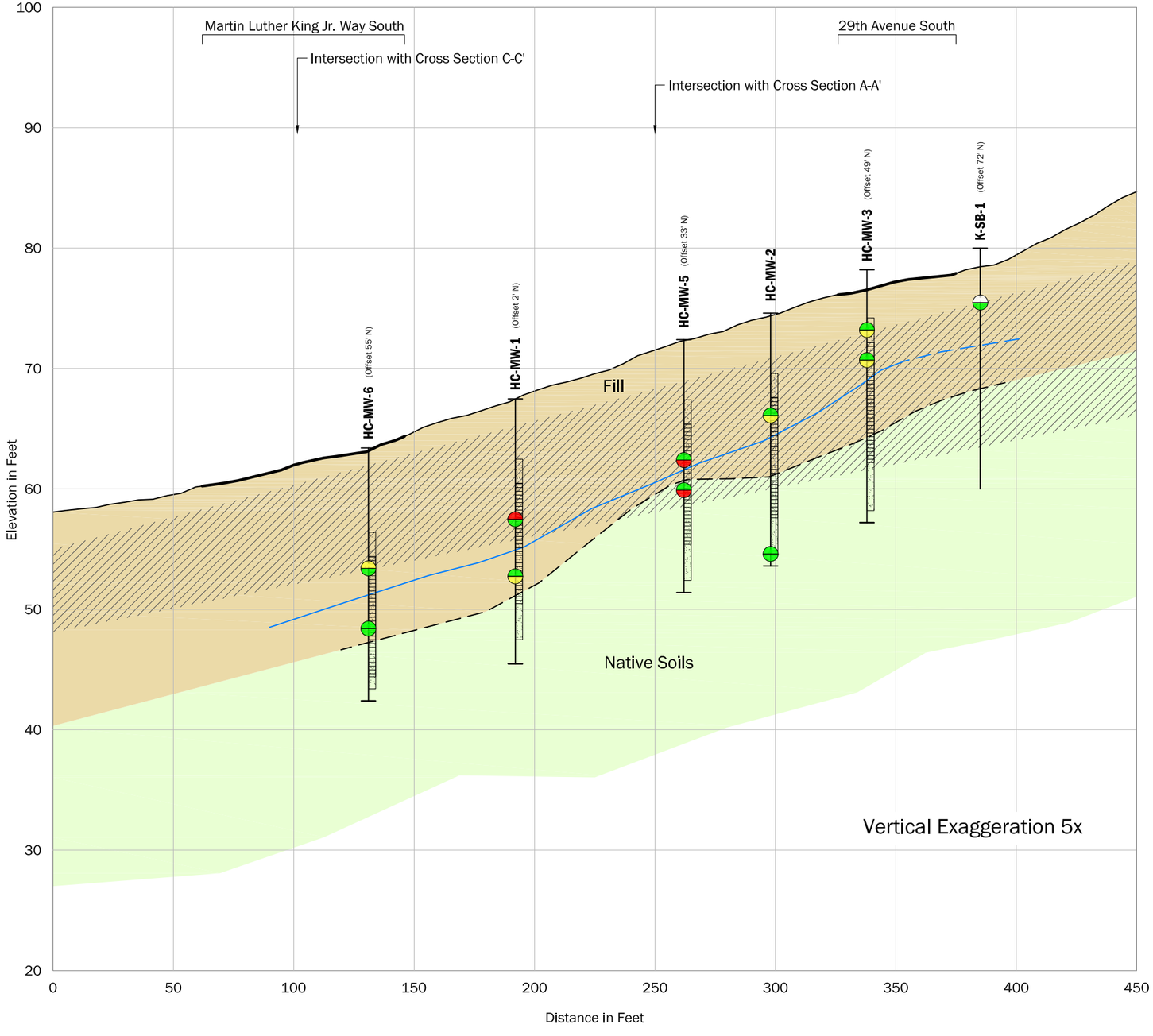
Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect Consulting	Jul-2017	BY: JAS/SCC	FIGURE NO. 12
	PROJECT NO. 160324	REVISED BY: SCC	

CAD Path: Q:\MBHA Development\160324 Development\2017-07 RI Work Plan\160324-AA.dwg Section A-A' || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Jul 21, 2017 3:12pm || User: cvanslyke

B West

B' East



Fill soil generally consists of brown sand with varying degrees of silt, gravel and, occasionally brick and concrete fragments.

Native soil generally consists of silt with varying degrees of sand and, occasionally, thin interbedded sand lenses.

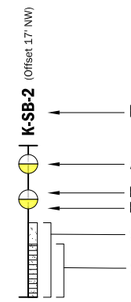
Note: Soil descriptions are based on various boring logs from several different consultants dating back to 2005 and were generalized for this cross section. The fill and native soil contact for each boring was estimated based on these general descriptions.

Legend

Approximate Vertical Extent of Utility Lines and Utility Trench Fill Soil

Depth to Groundwater at Time of Drilling (9/30/2016)

Estimated Fill/Native Soils Contact



Analytical Results

One or more of contaminants of concern detected at a concentration greater than the MTCA Method A cleanup level.

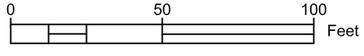
One or more of contaminants of concern detected at a concentration less than the MTCA Method A cleanup level.

Contaminants of concern not detected.

Contaminant not analyzed.

Note: Petroleum compounds include diesel and gasoline range petroleum hydrocarbons, benzene and total xylenes.

Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 10'
Vertical Exaggeration 5x



Cross Section B-B'

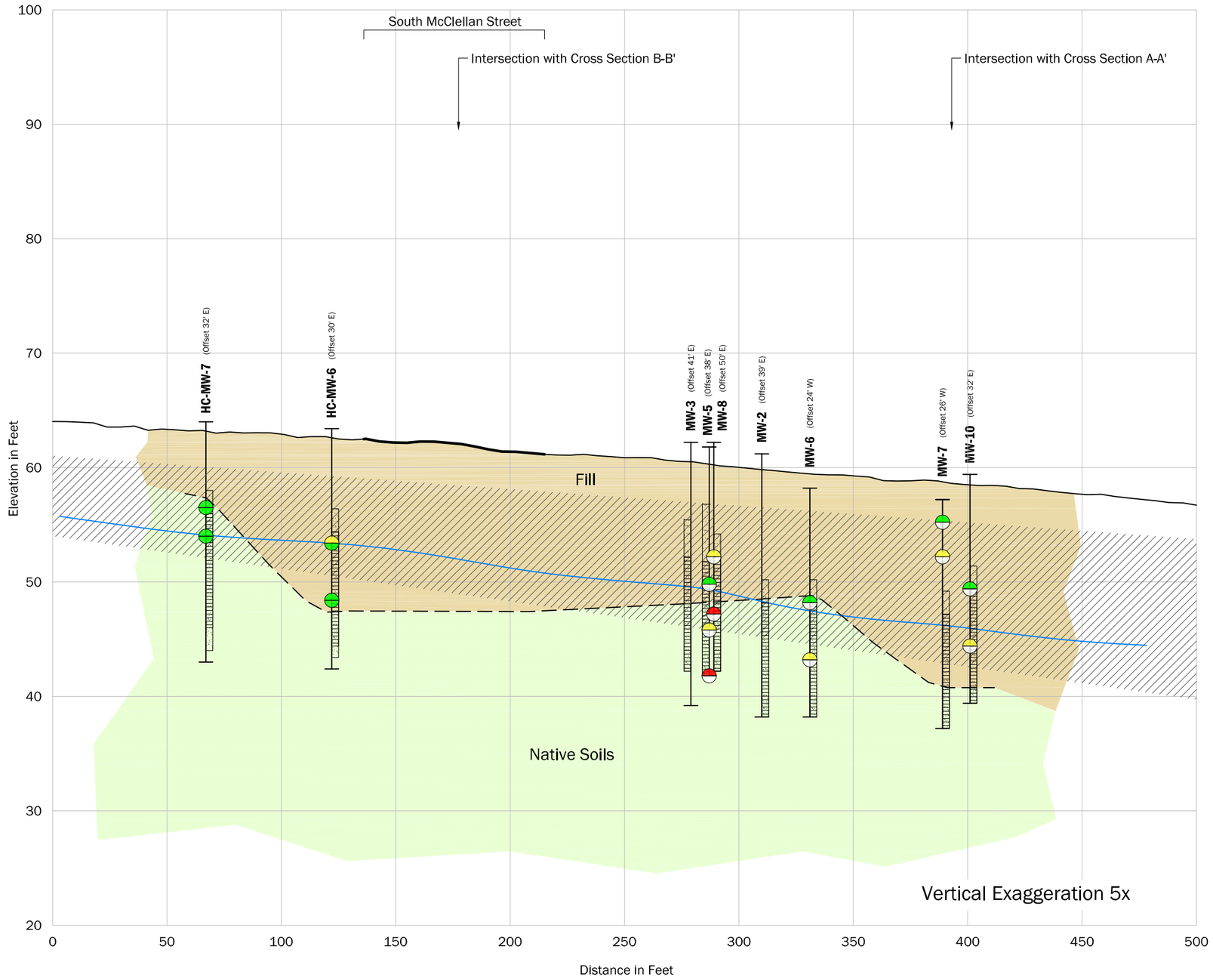
Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect Consulting	Jun-2017	BY: JAS/SCC	FIGURE NO. 13
	PROJECT NO. 160324	REVISED BY: SCC	

CAD Path: Q:\MBHA Development\160324 Development\2017-06 RI Work Plan\160324-BB.dwg Section B-B' || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Jun 12, 2017 4:39pm || User: scudd

C
North

C'
South



Fill soil generally consists of brown sand with varying degrees of silt, gravel and, occasionally brick and concrete fragments.

Native soil generally consists of silt with varying degrees of sand and, occasionally, thin interbedded sand lenses.

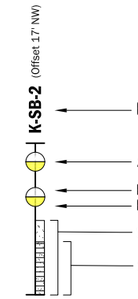
Note: Soil descriptions are based on various boring logs from several different consultants dating back to 2005 and were generalized for this cross section. The fill and native soil contact for each boring was estimated based on these general descriptions.

Legend

Approximate Vertical Extent of Utility Lines and Utility Trench Fill Soil

Depth to Groundwater at Time of Drilling
(MW-2 thru MW-10 on 8/8/2016)
(HC-MW-6 and 7 on 9/30/2016)

Estimated Fill/Native Soils Contact



Analytical Results

One or more of contaminants of concern detected at a concentration greater than the MTCA Method A cleanup level.

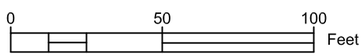
One or more of contaminants of concern detected at a concentration less than the MTCA Method A cleanup level.

Contaminants of concern not detected.

Contaminant not analyzed.

Note: Petroleum compounds include diesel and gasoline range petroleum hydrocarbons, benzene and total xylenes.

Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 10'
Vertical Exaggeration 5x



Cross Section C-C'

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect CONSULTING	Jun-2017	BY: JAS/SCC	FIGURE NO. 14
	PROJECT NO. 160324	REVISED BY: SCC	

CAD Path: Q:\MBHA Development\160324 Development\2017-06 RI Work Plan\160324-CC.dwg Section C-C' || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Jun 12, 2017 4:38pm || User: scudd

MARTIN LUTHER KING JR WAY S

29TH AVE S

S MC CLELLAN ST

MOUNT BAKER VILLAGE APARTMENTS SITE

SICK'S STADIUM LANDFILL SITE

EXISTING BP 76 STATION AND EMPIRE WAY MOBILE SITE

FORMER PHILLIPS 66 AND CHEVRON GAS STATION

MT. BAKER CLEANERS

Fence

AB-22 AB-21 AB-23 AB-25

ADP-20 ADP-32 ADP-26 ADP-31 ADP-18 ADP-19 ADP-30 ADP-27 ADP-28 ADP-29 ADP-24

AB-17

KEE-B-3 KEE-B-2

ATC-B-3 ATC-B-2 ATC-B-1 ATC-B-5 ATC-B-6

K-SB-3 K-SB-1

PBS-SB-1 PBS-SB-3

AMW-1 AMW-02 AMW-03 AMW-04 AMW-05 AMW-06 AMW-07 AMW-08 AMW-09 AMW-10 AMW-11 AMW-12 AMW-13 AMW-14 AMW-15 AMW-16

HC-MW-1 HC-MW-2 HC-MW-3 HC-MW-4 HC-MW-5 HC-MW-6 HC-MW-7

MW-1 MW-2 MW-3 MW-4 MW-5 MW-6 MW-7 MW-8 MW-9 MW-10 MW-11 MW-13

B-5

Approximate Location of Heating Oil UST

Approximate Location of 55-Gallon Waste Drum Containing Spent PCE

Approximate Location of Dry Cleaning Equipment

0 25 50

Feet

- Proposed Location of New Monitoring Well
- Proposed Location of Direct-Push Boring
- Proposed Location of Hollow Stem Boring
- Utility Structure
- Utility Line
- Chlorinated solvents not detected in groundwater.
- Chlorinated solvents detected at concentrations less than the MTCA Method A cleanup levels in groundwater.
- Chlorinated solvents detected at concentrations greater than the MTCA Method A cleanup levels in groundwater. Diesel-range hydrocarbons were also detected in AMW-1 at a concentration greater than the MTCA Method A cleanup level.
- Monitoring Well
- Soil Boring
- Subject Property
- Tax Parcel (Adjusted)
- Historic Site Areas

Proposed Locations of Additional Borings and Monitoring Wells

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect CONSULTING	OCT-2017	BY: JAS / EAC	FIGURE NO. 15
	PROJECT NO. 160324	REVISED BY: DAC	

MOUNT BAKER VILLAGE APARTMENTS SITE

29TH AVE S

K-SB-2

Approximate Location of Heating Oil UST

AB-4

SW-B-7

SE-B-6

ADP-18

ADP-19

CONCRETE SLAB-ON-GRADE (APPROXIMATELY 3 INCHES THICK)

Approximate Area of Dry Cleaning Operations Between Approximately 1940 and Early 1990s

KEE-B-3

AB-3

Approximate Location of 55-Gallon Waste Drum Containing Spent PCE

ADP-30

CONCRETE SLAB-ON-GRADE (APPROXIMATELY 2 FEET THICK)

MT. BAKER CLEANERS

CONCRETE SLAB-ON-GRADE (APPROXIMATELY 1 - 1.5 FEET THICK)

ADP-27

Approximate Location of Dry Cleaning Equipment

AB-2

AB-1

AB-6

WOOD PANELED FLOOR (NO CONCRETE)

KEE-B-2

ADP-28

AMW-1

ADP-29

KEE-B-1

S MC CLELLAN ST

N

0 5 10

Feet

Proposed Location of Direct-Push Boring

Monitoring Well

Auger Boring

Soil Boring

Contaminants of concern detected at concentrations less than the MTCA Method A cleanup levels.

Contaminants of concern detected at concentrations greater than the MTCA Method A cleanup levels and PCE was detected at concentrations less than the dangerous waste threshold.

Subject Property

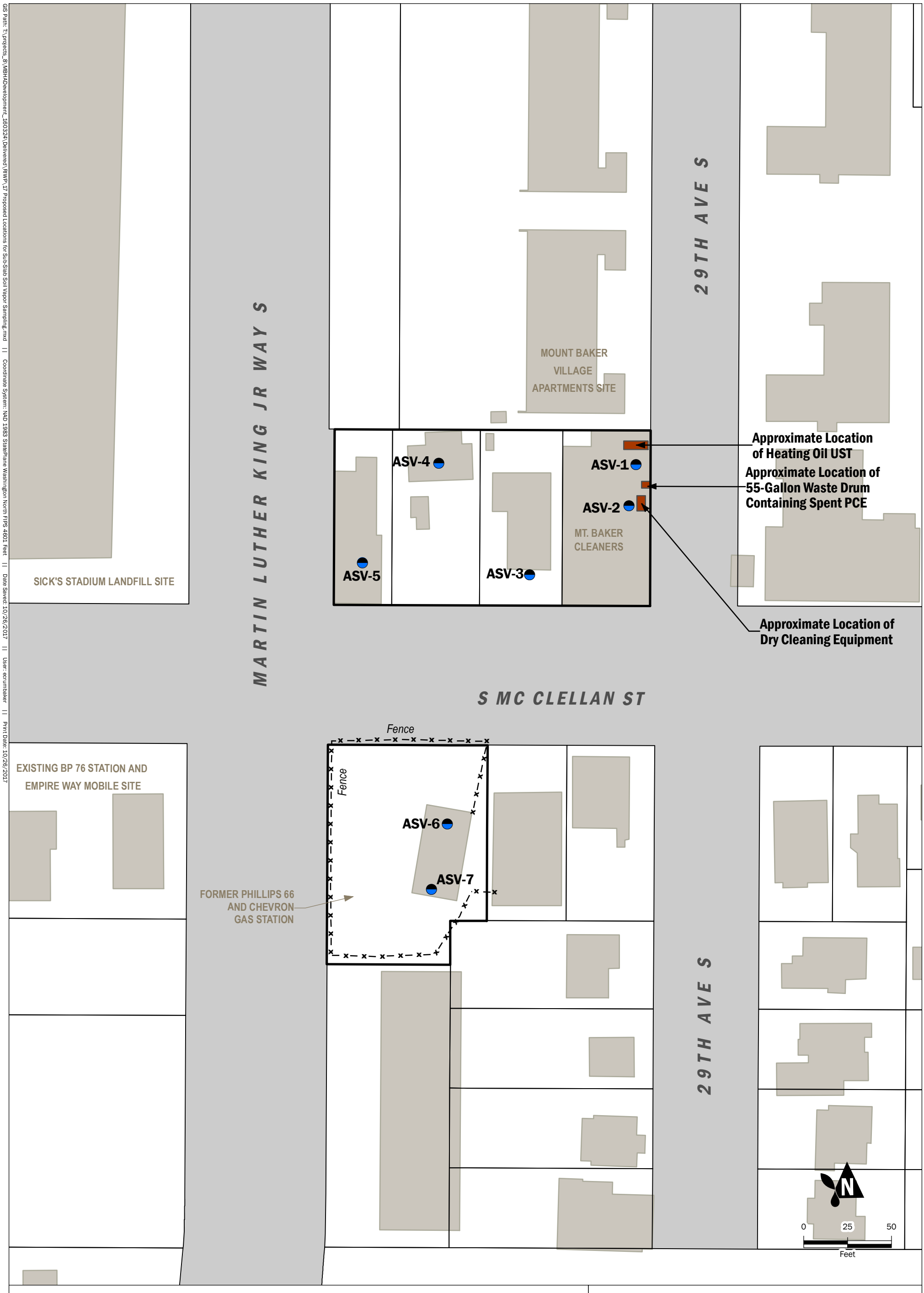
Tax Parcel (Adjusted)

Historic Site Areas

Proposed Soil Sample Locations for the Contained-In Determination

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect CONSULTING	OCT-2017	BY: JAS / EAC	FIGURE NO. 16
	PROJECT NO. 160324	REVISED BY: ---	



Proposed location of sub-slab soil vapor sample to evaluate the potential for vapor intrusion into existing buildings.

Historic Site Areas

Subject Property

Tax Parcel (Adjusted)

Proposed Locations for Sub-Slab Soil Vapor Sampling

Remedial Investigation Work Plan
Mount Baker Properties Site
Seattle, Washington

Aspect CONSULTING	OCT-2017	BY: JAS / EAC	FIGURE NO. 17
	PROJECT NO. 160324	REVISED BY: DAC	

GIS Path: T:\projects_8\MBHADevelopment_160324\Delivered\RWP\17 Proposed Locations for Sub-Slab Soil Vapor Sampling.mxd || Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet || Date Saved: 10/26/2017 || User: ecrumbaker || Print Date: 10/26/2017

APPENDIX A

Boring Logs for Previous Investigations

APPENDIX A

Boring Logs from Previous Explorations

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

BORING LOG #: B-1 ; Page 1 of 1

Cardno ATC Project Name: Mt Baker Vllge Aprtmnts

Cardno ATC Project #: 282 EM 00124

Location: 2569 29th Ave S
Seattle, WA

Drilling Information

Drilling Contractor:	**ESN**
Drilling Method:	Direct Push
Borehole Diameter:	2-inch
Sampler Type:	Macrocore

Event Information

Logged by:	SP	Well/Boring Designation:	B-1
Boring Depth:	15	Surface Elevation:	
GW Encountered	10	Start Date:	01/08/16
Static GW Level:		End Date:	01/08/16
Notes:			

Depth (ft)	Recovery	Sample Interval	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description	Well Construction
						Surface: Grass	
1					SC	CLAYEY SAND: medium brown fine sand with 30%	
						low plasticity clay; 10% medium sand; weak	Backfilled with bentonite chips
2						induration; damp; no product odor	
3							
4				0.0			
5						no recovery between 5 and 8 feet	
6							
7							
8				0.0		light brown with 40% fine sand; 25% medium sand;	
9						35% clay; weak induration; wet; no product odor	
10						saturated below 10 feet	
11							
12							
13							
14					SM	SILTY SAND: light brown fine sand with 30% medium	
				0.0		sand; 25% silt; saturated; moderate induration; no	
15						product odor	
						Boring terminated at 15 feet below ground surface	
16							
17							
18							
19							
20							

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

BORING LOG #: B- 2; Page 1 of 1

Cardno ATC Project Name: Mt Baker Vllge Aprtmnts

Cardno ATC Project #: 282 EM 00124

Location: 2569 29th Ave S
Seattle, WA

Drilling Information

Drilling Contractor:	**ESN**
Drilling Method:	Direct Push
Borehole Diameter:	2-inch
Sampler Type:	Macrocore

Event Information

Logged by:	SP	Well/Boring Designation:	B-2
Boring Depth:	15	Surface Elevation:	
GW Encountered	10	Start Date:	01/08/16
Static GW Level:		End Date:	01/08/16
Notes:			

Depth (ft)	Recovery	Sample Interval	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description	Well Construction
						Surface: Grass	
1					SC	CLAYEY SAND: light brown fine sand with 15% medium	
						sand; 25% low plasticity clay; weak induration; damp; no	Backfilled with bentonite chips
2						product odor	
3							
4				0.0			
5					SM	SILTY SAND: medium brown medium sand with 20%	
						fine sand; 30% silt; strong induration; dry; no product odor	
6							
7							
8							
9				0.0			
▽ 10						50% medium sand; 30% fine sand; 20% silt; weak	
						induration; saturated; no product odor below 10 feet	
11							
12							
13					ML	SILT with SAND: light brown silt; 15% fine sand; dry;	
14				0.0		strong induration; no product odor	
15						Boring terminated at 15 feet below ground surface	
16							
17							
18							
19							
20							

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

BORING LOG #: B-3 ; Page 1 of 1

Cardno ATC Project Name: Mt Baker Vllge Aprtmnts

Cardno ATC Project #: 282 EM 00124

Location: 2569 29th Ave S
Seattle, WA

Drilling Information

Drilling Contractor:	**ESN**
Drilling Method:	Direct Push
Borehole Diameter:	2-inch
Sampler Type:	Macrocore

Event Information

Logged by:	SP	Well/Boring Designation:	B-3
Boring Depth:	15	Surface Elevation:	
GW Encountered	10	Start Date:	01/08/16
Static GW Level:		End Date:	01/08/16
Notes:			

Depth (ft)	Recovery	Sample Interval	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description	Well Construction
						Surface: Grass	
1					SM	SILTY SAND with GRAVEL: medium brown fine sand	
						with 10% medium sand; 20% silt; 10% low plasticity	Backfilled with bentonite chips
2						clay; 20% coarse gravel; strong induration; damp to	
						dry; no product odor	
3							
4				0.0			
5							
6							
▽ 7						saturated below 7 feet	
8							
9				0.0			
					ML	SILT with SAND: light brown silt with 15% fine sand; strong	
10						induration; dry; no product odor	
11							
12							
13							
14				0.0			
15						Boring terminated at 15 feet below ground surface	
16							
17							
18							
19							
20							

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

BORING LOG #: B-4 ; Page 1 of 1

Cardno ATC Project Name: Mt Baker Vllge Aprtmnts

Cardno ATC Project #: 282 EM 00124

Location: 2569 29th Ave S
Seattle, WA

Drilling Information

Drilling Contractor:	**ESN**
Drilling Method:	Direct Push
Borehole Diameter:	2-inch
Sampler Type:	Macrocore

Event Information

Logged by:	SP	Well/Boring Designation:	B-4
Boring Depth:	10	Surface Elevation:	
GW Encountered	No	Start Date:	01/08/16
Static GW Level:		End Date:	01/08/16
Notes:			

Depth (ft)	Recovery	Sample Interval	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description	Well Construction
						Surface: Grass	
1					SM	SILTY SAND: light brown fine sand with 35% silt;	
						moderate induration; dry; no product odor	Backfilled with bentonite chips
2							
3							
4				0.0			
5							
6							
7							
8							
9				0.0			
10					CL	CLAY: dark grey low plasticity clay with 30% silt	
						strong induration; dry; no product odor	
11						Boring terminated at 10 feet below ground surface due to	
						drilling refusal	
12							
13							
14							
15							
16							
17							
18							
19							
20							

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

BORING LOG #: B-5 ; Page 1 of 1

Cardno ATC Project Name: Mt Baker Vllge Aprtmnts

Cardno ATC Project #: 282 EM 00124

Location: 2569 29th Ave S
Seattle, WA

Drilling Information

Drilling Contractor:	**ESN**
Drilling Method:	Direct Push
Borehole Diameter:	2-inch
Sampler Type:	Macrocore

Event Information

Logged by:	SP	Well/Boring Designation:	B-5
Boring Depth:	10	Surface Elevation:	
GW Encountered	8	Start Date:	01/08/16
Static GW Level:		End Date:	01/08/16
Notes:			

Depth (ft)	Recovery	Sample Interval	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description	Well Construction
						Surface: Grass	
1					SM	SILTY SAND with CLAY: medium brown fine sand	
						with 25% silt; 20% low plasticity clay; damp to wet;	Backfilled with bentonite chips
2						weak induration; no product odor	
3							
4				0.0			
					ML	SILT with SAND: light brown silt with 25% fine sand;	
5						dry; strong induration; no product odor	
6							
7							
▽ 8					SM	SILTY SAND: dark brown medium sand with 20% fine	
9						sand; 20% silt; weak induration; saturated; no product	
				0.0		odor	
10						Boring terminated at 10 feet below ground surface	
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

BORING LOG #: B-6 ; Page 1 of 1

Cardno ATC Project Name: Mt Baker Vllge Aprtmnts

Cardno ATC Project #: 282 EM 00124

Location: 2569 29th Ave S
Seattle, WA

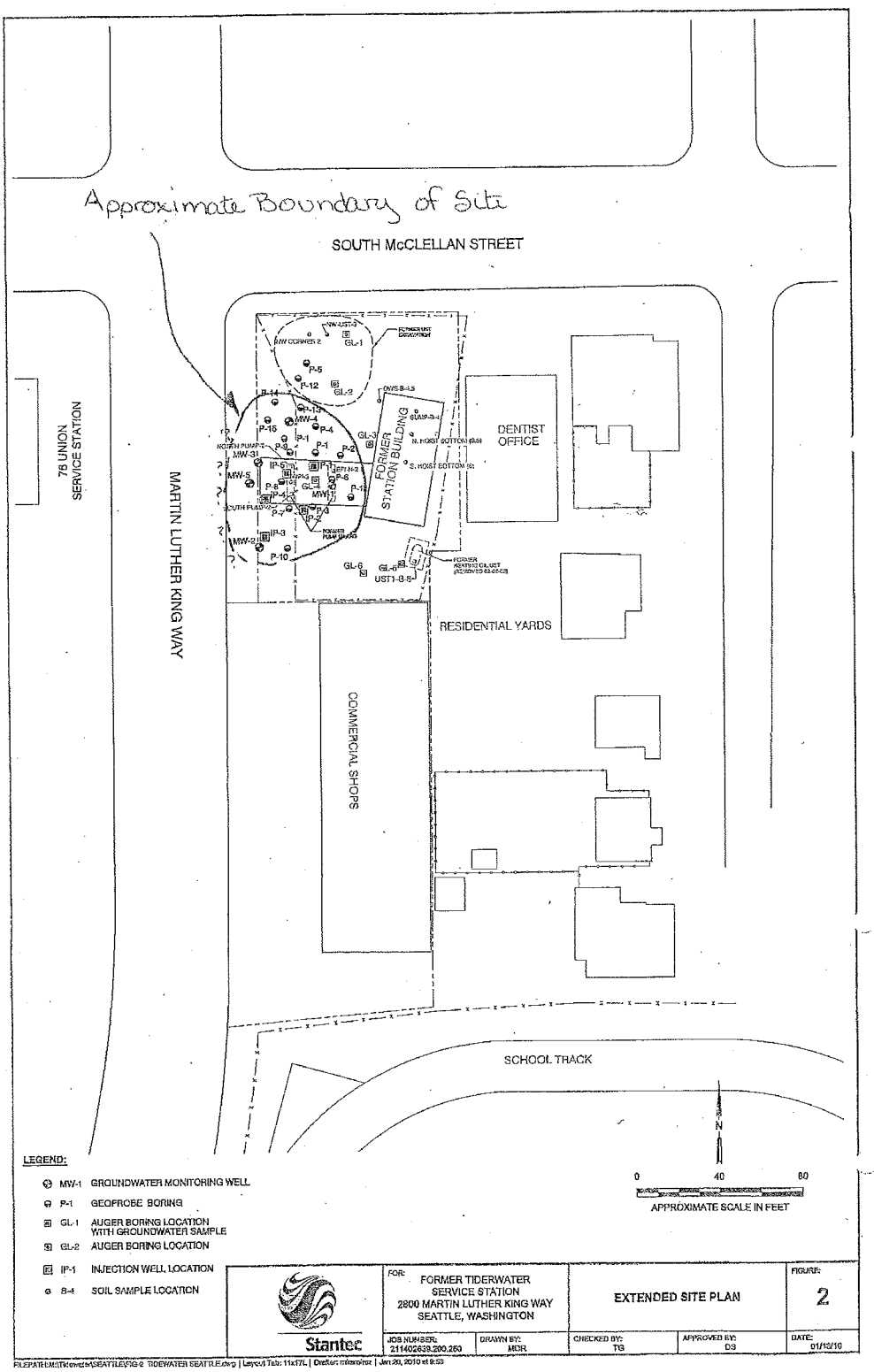
Drilling Information

Drilling Contractor:	**ESN**
Drilling Method:	Direct Push
Borehole Diameter:	2-inch
Sampler Type:	Macrocore

Event Information

Logged by:	SP	Well/Boring Designation:	B-6
Boring Depth:	10	Surface Elevation:	
GW Encountered	5	Start Date:	01/08/16
Static GW Level:		End Date:	01/08/16
Notes:			

Depth (ft)	Recovery	Sample Interval	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description	Well Construction
						Surface: Grass	
1					SM	SILTY SAND: light brown medium sand with 25%	
						fine sand; 30% silt; wet; strong induration; no	Backfilled with bentonite chips
2						product odor	
3							
4				0.0			
▽ 5					GP	GRAVEL: grey coarse gravel with 30% medium sand	
6						5% silt; weak induration; saturated; no product odor	
7							
8					ML	SILT with SAND: dark brown silt with 30% fine sand;	
9				0.0		strong induration; dry; no product odor	
10						Boring terminated at 9.5 feet below ground surface due	
						to drilling refusal	
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							


Approximate Boundary of Site
SOUTH McCLELLAN STREET
MARTIN LUTHER KING WAY
76 UNION SERVICE STATION
FORMER STATION BUILDING
DENTIST OFFICE
RESIDENTIAL YARDS
COMMERCIAL SHOPS
SCHOOL TRACK
LEGEND:
MW-1 GROUNDWATER MONITORING WELL
P-1 GEOPROBE BORING
GL-1 AUGER BORING LOCATION WITH GROUNDWATER SAMPLE
GL-2 AUGER BORING LOCATION
IP-1 INJECTION WELL LOCATION
B-4 SOIL SAMPLE LOCATION
0 40 80
APPROXIMATE SCALE IN FEET
Stantec
FOR: FORMER TIDERWATER SERVICE STATION 2800 MARTIN LUTHER KING WAY SEATTLE, WASHINGTON
EXTENDED SITE PLAN
FIGURE: 2
JOB NUMBER: 211402639.200.250
DRAWN BY: MDR
CHECKED BY: TG
APPROVED BY: DS
DATE: 01/13/10

APPENDIX C
SOIL BORING AND MONITORING WELL COMPLETION LOGS

PROJECT: **Tidewater Seattle**
LOCATION: **2800 Martin Luther King Way, Seattle, WA**
PROJECT NUMBER: **211602274**

WELL / PROBEHOLE / BOREHOLE NO: **B-1** PAGE 1 OF 1

DRILLING / INSTALLATION:
STARTED **4/18/11** COMPLETED: **4/19/11**
DRILLING COMPANY: **Cascade Drilling**
DRILLING EQUIPMENT: **Geoprobe 8040**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **PID**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **11.5**
STATIC DTW (ft): **11.0**
WELL CASING DIA. (in): **--**
LOGGED BY: **RM**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): **18.0**
BOREHOLE DEPTH (ft): **18.0**
BOREHOLE DIA. (in): **3**
CHECKED BY: **DS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Weathered Ashpalt/Gravel Road Base							Native Slough
		ML	**SANDY SILT** ; ML; gray; low plasticity; firm; moist; no odor; iron oxide staining; few small subrounded gravels		1100 NS			0.0		
5		SP	**SAND WITH SILT** ; SP; greenish brown; medium dense; moist; no odor; trace fine to small subrounded gravels; non-cohesive		1145 B-1 @ 5'			7.0	5	
					945 NS			0.0		
10					945 B-1 @ 10'			0.0	10	Bentonite Chips
			Same as above; light brown; wet							
		CL	**SANDY CLAY** ; CL; brown; low plasticity; firm; moist; slight odor; some small rounded gravels; gray mottling							
15					955 B-1 @ 15'			91.0	15	
		ML	**SILT WITH SAND** ; ML; dark brown; low plasticity; firm; wet; no odor; some small rounded gravels; many fine plant roots							
			Same as above; increase in sand; decrease in plant roots		1000 B-1 @ 18'			1.0		
			Borehole terminated at 18 feet.							

GEO FORM 304 B-1 THROUGH B-7.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 11/3/11

PROJECT: **Tidewater Seattle**
LOCATION: **2800 Martin Luther King Way, Seattle, WA**
PROJECT NUMBER: **211602274**

WELL / PROBEHOLE / BOREHOLE NO: **B-2** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **4/18/11** COMPLETED: **4/19/11**
DRILLING COMPANY: **Cascade Drilling**
DRILLING EQUIPMENT: **Geoprobe 8040**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **PID**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **12.0**
STATIC DTW (ft): **10.25**
WELL CASING DIA. (in): **--**
LOGGED BY: **RM**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): **18.0**
BOREHOLE DEPTH (ft): **18.0**
BOREHOLE DIA. (in): **3**
CHECKED BY: **DS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Gravel Road Base							Native Slough
		ML	**SILT WITH FINE SAND** ; ML; brown; low plasticity; firm; moist; no odor; Trace small subrounded gravel; some asphalt debris at 1 ft bgs		1040 NS			0.0		
			Same as above; no gravels; light gray; iron oxide staining; firm							
5			**SANDY SILT** ; no odor; some construction debris		1045 B-2 @ 5'			0.0	5	
					1050 NS			0.0		
			6" gravel lens							Bentonite Chips
10		SP	**SAND WITH SILT** ; SP; brown; medium dense; moist; no odor; no gravels; non cohesive						10	
					920 B-2 @ 11'			0.0		
			Same as above; decrease in silt							
			Same as above; wet							
15					925 B-2 @ 15'			1,100	15	
			Same as above; some small subrounded gravels							
			SAND WITH CLAY ; moist; slight odor							
		ML	**SILT WITH SAND** ; ML; very dark brown; low plasticity; firm; moist; no odor; no gravels		935 B-2 @18'			24		
			Borehole terminated at 18 feet.							

GEO FORM 304 B-1 THROUGH B-7.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 11/3/11

PROJECT: **Tidewater Seattle**
LOCATION: **2800 Martin Luther King Way, Seattle, WA**
PROJECT NUMBER: **211602274**

WELL / PROBEHOLE / BOREHOLE NO: **B-3** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **4/18/11** COMPLETED: **4/19/11**
DRILLING COMPANY: **Cascade Drilling**
DRILLING EQUIPMENT: **Geoprobe 8040**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **PID**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **16.5**
STATIC DTW (ft): **11.75**
WELL CASING DIA. (in): **--**
LOGGED BY: **RM**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): **20.0**
BOREHOLE DEPTH (ft): **20.0**
BOREHOLE DIA. (in): **3**
CHECKED BY: **DS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Gravel Road Base/Construction Debris							Native Slough
		ML	**SILT WITH SAND** ; ML; dark brown; low plasticity; soft; moist; no odor; some small subrounded gravels; construction debris at 1.75 ft bgs		1510 NS			0.0		
			Same as above; light brown; increase in sand; stiff; some fine plant roots							
			Some construction debris at 3.75 ft bgs							
5					1510 B-3 @ 5'			0.0	5	
			Some construction debris at 6 ft bgs							
			Some construction debris at 7 ft bgs							
		SP	**SAND** ; SP; gray; medium dense; moist; slight odor; no gravels; non-cohesive; trace fines							
10					835 B-3 @ 10'			37.0	10	Bentonite Chips
			Same as above; trace fine plant roots							
			Same as above; very dark brown; HC staining							
15					845 B-3 @ 15'			110	15	
			SAND WITH CLAY ; wet; iron oxide staining							
			Same as above; olive green with gray mottling							
			Same as above; decrease in odor; dense							
20			Borehole terminated at 20 feet.		900 B-3- @ 20'			2.0	20	

GEO FORM 304 B-1 THROUGH B-7.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 11/3/11

PROJECT: **Tidewater Seattle**
LOCATION: **2800 Martin Luther King Way, Seattle, WA**
PROJECT NUMBER: **211602274**

WELL / PROBEHOLE / BOREHOLE NO: **B-4** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **4/18/11** COMPLETED: **4/19/11**
DRILLING COMPANY: **Cascade Drilling**
DRILLING EQUIPMENT: **Geoprobe 8040**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **PID**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **12.0**
STATIC DTW (ft): **11.75**
WELL CASING DIA. (in): **--**
LOGGED BY: **RM**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): **17.0**
BOREHOLE DEPTH (ft): **17.0**
BOREHOLE DIA. (in): **3**
CHECKED BY: **DS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Apshalt/Road Base							Native Slough
		ML	**SILT WITH TRACE SAND** ; ML; brown; low plasticity; firm; moist; no odor; no gravels							
			SILT WITH CLAY ; dark brown		1510 NS			0.0		
			Same as above; decrease in clay; some fine subangular gravels; moist; trace plant roots							
5					1510 B-4 @ 5'			0.0	5	
			Asphalt/construction debris from 6 to 7 ft bgs							
		ML	**SILT WITH CLAY** ; ML; dark brown; firm							
			Same as above; very dark brown							Bentonite Chips
10					810 B-4 @ 10'			0.0	10	
		GP	**GRAVEL WITH SAND** ; GP; wet; no odor; subangular medium to coarse gravel; trace fines							
15					815 B-4 @ 15'			0.0	15	
		SP	**SAND** ; SP; gray; dense; wet; no odor; no gravels; non-cohesive; some plant roots							
		CL	**CLAY WITH SAND** ; CL; brown; low plasticity; wet; no odor; no gravels; some plant roots		825 B-4 @ 17'			0.0		
		SP	**SAND** ; SP; gray; dense; wet; no odor; no gravels; non-cohesive; some plant roots							
			Borehole terminated at 17 feet.							

GEO FORM 304 B-1 THROUGH B-7.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 11/3/11

PROJECT: **Tidewater Seattle**
LOCATION: **2800 Martin Luther King Way, Seattle, WA**
PROJECT NUMBER: **211602274**

WELL / PROBEHOLE / BOREHOLE NO: **B-5** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **4/18/11** COMPLETED: **4/19/11**
DRILLING COMPANY: **Cascade Drilling**
DRILLING EQUIPMENT: **Geoprobe 8040**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **PID**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **13.0**
STATIC DTW (ft): **11.50**
WELL CASING DIA. (in): **--**
LOGGED BY: **RM**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): **18.0**
BOREHOLE DEPTH (ft): **18.0**
BOREHOLE DIA. (in): **3**
CHECKED BY: **DS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Asphalt/Road Base							Native Slough
		ML	**SANDY SILT** ; ML; grayish brown; low plasticity; soft; moist; no odor; trace small subrounded gravels		1210 NS			0.0		
5		SP	**SAND WITH SILT** ; SP; gray; medium dense; moist; no odor; trace fine subrounded gravels; non-cohesive		1210 B-5 @ 5'			0.0	5	
			Sa,e as above; trace iron oxide staining		1210 NS			0.0		
10			**SANDY SILT** ; light brown; low plasticity; firm; moist; no odor; no gravels		1010 B-5 @ 10'			0.0	10	Bentonite Chips
			Same as above; wet							
15		SP	**SAND WITH SILT** ; SP; light gray; medium dense; wet; no odor; few small subrounded gravels; wood debris		1020 B-5 @ 15'			0.0	15	
		ML	**SILT** ; ML; very dark brown; low plasticity; firm; wet; no odor; few small subrounded gravels; wood debris							
		SP	**SAND** ; SP; gray; dense; wet; no odor; trace small gravels; non-cohesive		1030 B-5 @18			0.0		
			Borehole terminated at 18 feet.							

GEO FORM 304 B-1 THROUGH B-7.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 11/3/11

PROJECT: **Tidewater Seattle**
LOCATION: **2800 Martin Luther King Way, Seattle, WA**
PROJECT NUMBER: **211602274**

WELL / PROBEHOLE / BOREHOLE NO: **B-6** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **4/18/11** COMPLETED: **4/19/11**
DRILLING COMPANY: **Cascade Drilling**
DRILLING EQUIPMENT: **Geoprobe 8040**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **PID**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **12.0**
STATIC DTW (ft): **10.75**
WELL CASING DIA. (in): **--**
LOGGED BY: **RM**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): **17.0**
BOREHOLE DEPTH (ft): **17.0**
BOREHOLE DIA. (in): **3**
CHECKED BY: **DS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Asphalt/Road Base							Native Slough
		ML	**SANDY SILT** ; ML; light brown; low plasticity; firm; moist; no odor; trace small subrounded gravels		1730 NS			0.0		
		SP	**SAND WITH SILT** ; SP; grayish brown; medium dense; moist; no odor; trace small to fine subrounded gravels							
5			Same as above; increase in gravels		1730 B-6 @ 5'			0.0	5	
					1730 NS			0.0		
			Brown							Bentonite Chips
10			Very moist		1100 B-6 @10'			6.0	10	
			Wet; slight HC odor							
			Gray; iron oxide staining; HC odor							
15					1110 B-6 @ 15'			1,880	15	
			Increase in silt							
			SILT ; dark brown; low plasticity; wet; no odor; no gravels; wood debris		1120 B-6 @ 17'			7.6		
			Borehole terminated at 17 feet.							

GEO FORM 304 B-1 THROUGH B-7.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 11/3/11

PROJECT: **Tidewater Seattle**
LOCATION: **2800 Martin Luther King Way, Seattle, WA**
PROJECT NUMBER: **211602274**

WELL / PROBEHOLE / BOREHOLE NO: **B-7** PAGE 1 OF 1

DRILLING / INSTALLATION:
STARTED **4/18/11** COMPLETED: **4/19/11**
DRILLING COMPANY: **Cascade Drilling**
DRILLING EQUIPMENT: **Geoprobe 8040**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **PID**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **12.5**
STATIC DTW (ft): **10.75**
WELL CASING DIA. (in): **--**
LOGGED BY: **RM**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): **17.0**
BOREHOLE DEPTH (ft): **17.0**
BOREHOLE DIA. (in): **3**
CHECKED BY: **DS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Concrest/Gravel Road Base							Native Slough
		ML	**SANDY SILT** ; ML; brown; low plasticity; firm; moist; no odor; trace fine subrounded gravels		1640 NS			0.0		
			Grayish brown; trace iron oxide staining							
		SP	**SAND WITH SILT** ; SP; brown; medium dense; moist; no odor; iron oxide staining; gray mottling; trace small subrounded gravels; non-cohesive							
5					1640 B-7 @ 5'			0.0	5	
			Decrease in silt; very moist							
					1640 NS			0.0		
			Brown							Bentonite Chips
10					1140 B-7 @ 10'			0.0	10	
			Wet; increase in gravels							
			Increase in silt							
15					1150 B-7 @ 15'			0.0	15	
		ML	**SILT** ; ML; very dark brown; low plasticity; wet; no odor; no gravels; wood debris		1200 B-7 @ 17'			13.0		
			Borehole terminated at 17 feet.							

GEO FORM 304 B-1 THROUGH B-7.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 11/3/11

PROJECT: **Tidewater Seattle**
LOCATION: **2800 MLK Way South, Seattle, WA**
PROJECT NUMBER: **211602274**

WELL / PROBEHOLE / BOREHOLE NO: **MW-10** PAGE 1 OF 1

DRILLING / INSTALLATION:
STARTED **7/11/11** COMPLETED: **7/13/11**
DRILLING COMPANY: **Cascade Drilling**
DRILLING EQUIPMENT: **Air Knife/CME 65**
DRILLING METHOD: **HSA (Limited access rig)**
SAMPLING EQUIPMENT: **Split spoon/PID**

NORTHING (ft):
LAT: **47° 34' 39.8"**
GROUND ELEV (ft): **59.28**
INITIAL DTW (ft): **16.0**
STATIC DTW (ft): **11.50**
WELL CASING DIA. (in): **2**
LOGGED BY: **RM**

EASTING (ft):
LONG: **122° 17' 45.8"**
TOC ELEV (ft): **58.96**
WELL DEPTH (ft): **20.0**
BOREHOLE DEPTH (ft): **20.0**
BOREHOLE DIA. (in): **8.25**
CHECKED BY: **JD**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
1450 (7/11/11)			12" Concrete/road base							Concrete
		ML	**SANDY SILT** ; ML; gray; low plasticity; firm; moist; iron oxide staining; trace small subrounded gravels; no odor				N/A (air knife to 8' bgs)			
1515 (7/11/11)			**SILT WITH CLAY** ; greenish gray; medium plasticity; trace brown mottles; increase in iron oxide staining		1515 MW-10-5'			6.3	5	Bentonite; 2" dia. sch. 40 PVC (blank)
			Gray; hard to very stiff; increase in sand				11 16 15			
855 (7/13/11)					855 MW-10-10'			14.0	10	
							18 45 25			Sand
905 (7/13/11)					905 MW-10-15'			12.6	15	2" dia. sch. 40 PVC (0.020" slot)
			Wet							
		SP	**SAND** ; SP; gray; medium-grained; dense; wet; no gravels; no odor				16 35 36			
916 (7/13/11)			Borehole terminated at 20 feet.		916 MW-10-20'			8.0	20	

GEO FORM 304 MW-6 THROUGH MW-10.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 9/9/11

PROJECT: **Tidewater Seattle**
LOCATION: **2800 MLK Way South, Seattle, WA**
PROJECT NUMBER: **211602274**

WELL / PROBEHOLE / BOREHOLE NO: **MW-6** PAGE 1 OF 1

DRILLING / INSTALLATION:
STARTED **7/12/11** COMPLETED: **7/12/11**
DRILLING COMPANY: **Cascade Drilling**
DRILLING EQUIPMENT: **Air Knife/CME 75**
DRILLING METHOD: **HSA**
SAMPLING EQUIPMENT: **Split spoon/PID**

NORTHING (ft):
LAT: **47° 34' 40.5"**
GROUND ELEV (ft): **58.44**
INITIAL DTW (ft): **12.0**
STATIC DTW (ft): **12.15**
WELL CASING DIA. (in): **2**
LOGGED BY: **RM**

EASTING (ft):
LONG: **122° 17' 46.8"**
TOC ELEV (ft): **58.03**
WELL DEPTH (ft): **20.0**
BOREHOLE DEPTH (ft): **20.0**
BOREHOLE DIA. (in): **8.25**
CHECKED BY: **JD**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
830 (7/12/11)			12" Concrete/road base							Concrete
		ML	**SILT WITH FINE SAND** ; ML; gray; low plasticity; firm; moist; no gravels; no odor							
		SP	**SILTY SAND** ; SP; brown; medium dense; moist; trace small subrounded gravels; no odor		910 MW-6-5'		N/A (air knife to 8' bgs)	16.1	5	Bentonite; 2" dia. sch. 40 PVC (blank)
910 5 (7/12/11)										
		ML	**SILT WITH SAND** ; ML; gray; medium plasticity; soft; moist; trace brown mottles; some fine rounded gravels; no odor; trace fine roots		1330 MW-6-10'		2 2 2	0.5	10	
1330 10 (7/12/11)										
			Wet; many small-medium subbrounded gravels							
			Very dark brown; many medium roots		1340 MW-6-15'		2 5 9	1.8	15	Sand; 2" dia. sch. 40 PVC (0.020" slot)
1340 15 (7/12/11)										
		CL	**CLAY** ; CL; gray; low plasticity; firm; moist; no gravels; no odor		1355 MW-6-20'		2 4 6	0.5	20	
1355 20 (7/12/11)			Borehole terminated at 20 feet.							

GEO FORM 304 MW-6 THROUGH MW-10.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 9/9/11

PROJECT: **Tidewater Seattle**
LOCATION: **2800 MLK Way South, Seattle, WA**
PROJECT NUMBER: **211602274**

WELL / PROBEHOLE / BOREHOLE NO: **MW-7** PAGE 1 OF 1

DRILLING / INSTALLATION:
STARTED **7/12/11** COMPLETED: **7/13/11**
DRILLING COMPANY: **Cascade Drilling**
DRILLING EQUIPMENT: **Air Knife/CME 65**
DRILLING METHOD: **HSA (Limited access rig)**
SAMPLING EQUIPMENT: **Split spoon/PID**

NORTHING (ft):
LAT: **47° 34' 39.9"**
GROUND ELEV (ft): **57.38**
INITIAL DTW (ft): **12.00**
STATIC DTW (ft): **11.00**
WELL CASING DIA. (in): **2**
LOGGED BY: **RM**

EASTING (ft):
LONG: **122° 17' 46.8"**
TOC ELEV (ft): **56.96**
WELL DEPTH (ft): **20.0**
BOREHOLE DEPTH (ft): **20.0**
BOREHOLE DIA. (in): **8.25**
CHECKED BY: **JD**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
1030 (7/12/11)			12" concrete/road base							Concrete
		ML	**SANDY SILT** ; ML; grayish brown; low plasticity; firm; moist; no gravels; no odor							
1110 5 (7/12/11					1110 MW-7-5'		N/A (air knife to 8' bgs)	14.6	5	Bentonite 2" dia. sch. 40 PVC (blank)
1115 10 (7/13/11)			No recovery at 10'						10	
			Wet							
			Dark brown; some small-medium subrounded gravels		1130 MW-7-15'		4 5 9	6.9	15	Sand 2" dia. sch. 40 PVC (0.020" slot)
		CH	**CLAY** ; CH; gray; high plasticity; soft; wet; no gravels; no odor; trace small roots							
1145 20 (7/13/11)			Borehole terminated at 20 feet.		1145 MW-7-20'		3 7 9	0.7	20	

GEO FORM 304 MW-6 THROUGH MW-10.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 9/9/11

PROJECT: **Tidewater Seattle**
LOCATION: **2800 MLK Way South, Seattle, WA**
PROJECT NUMBER: **211602274**

WELL / PROBEHOLE / BOREHOLE NO: **MW-8** PAGE 1 OF 1

DRILLING / INSTALLATION:
STARTED **7/11/11** COMPLETED: **7/12/11**
DRILLING COMPANY: **Cascade Drilling**
DRILLING EQUIPMENT: **Air Knife/CME 75**
DRILLING METHOD: **HSA**
SAMPLING EQUIPMENT: **Split spoon/PID**

NORTHING (ft):
LAT: **47° 34' 41"**
GROUND ELEV (ft): **62.13**
INITIAL DTW (ft): **14.0**
STATIC DTW (ft): **11.40**
WELL CASING DIA. (in): **2**
LOGGED BY: **RM**

EASTING (ft):
LONG: **122° 17' 45.5"**
TOC ELEV (ft): **61.71**
WELL DEPTH (ft): **20.0**
BOREHOLE DEPTH (ft): **20.0**
BOREHOLE DIA. (in): **8.25**
CHECKED BY: **JD**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
1300 (7/11/11)			12" Weathered asphalt/road base							Concrete
			SANDY SILT WITH GRAVEL ; brown; low plasticity; firm; moist; some small-medium subrounded gravels; no odor; trace fine roots (Fill)							
			Concrete debris				N/A (air knife to 8' bgs)			
1330 (7/11/11)			**SAND WITH SILT** ; grayish brown; medium dense; moist; iron oxide staining; few small subrounded gravels; no odor; concrete debris (Fill)		1330 MW-8-5'			0.0	5	Bentonite; 2" dia. sch. 40 PVC (blank)
			Gray; loose; no gravels				3 3 4			
1050 (7/12/11)					1050 MW-8-10'			10.5	10	
			Wet; few medium subrounded gravels				3 3 5			Sand
1100 (7/12/11)					1100 MW-8-15'			56.5	15	2" dia. sch. 40 PVC (0.020" slot)
			Greenish gray; trace fine roots				5 8 19			
1115 (7/12/11)			Borehole terminated at 20 feet.		1115 MW-8-20'			11.6	20	

GEO FORM 304 MW-6 THROUGH MW-10.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 9/9/11

PROJECT: **Tidewater Seattle**
LOCATION: **2800 MLK Way South, Seattle, WA**
PROJECT NUMBER: **211602274**

WELL / PROBEHOLE / BOREHOLE NO: **MW-9** PAGE 1 OF 1

DRILLING / INSTALLATION:
STARTED **7/11/11** COMPLETED: **7/12/11**
DRILLING COMPANY: **Cascade Drilling**
DRILLING EQUIPMENT: **Air Knife/CME 75**
DRILLING METHOD: **HSA**
SAMPLING EQUIPMENT: **Split spoon/PID**

NORTHING (ft):
LAT: **47° 34' 40.6"**
GROUND ELEV (ft): **63.07**
INITIAL DTW (ft): **NE**
STATIC DTW (ft): **14.00**
WELL CASING DIA. (in): **2**
LOGGED BY: **RM**

EASTING (ft):
LONG: **122° 17' 44.9"**
TOC ELEV (ft): **62.58**
WELL DEPTH (ft): **25.0**
BOREHOLE DEPTH (ft): **25.0**
BOREHOLE DIA. (in): **8.25**
CHECKED BY: **JD**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
1030 (7/11/11)			12" Asphalt/roadbase						
			SILT WITH SAND ; dark brown; low plasticity; soft; moist; some small subrounded gravels; no odor; concrete/brick debris at 2.5' bgs (Fill)				N/A (air knife to 5.5' bgs)		
			Construction debris with brown silt matrix - weathered concrete and bricks up to 6"x6"x3"						
1200 5 (7/11/11)			**POORLY GRADED GRAVEL WITH SILT AND SAND** ; moist; no odor; predominately fill gravel and construction debris (Fill)		1200 MW-9-5'			0.5	5
			SANDY SILT WITH GRAVEL ; dark brown; low plasticity; very stiff to hard; moist; many small subangular gravels; no odor (Fill)		830 MW-9-10'		8 24 37	15.4	10
			Few small subangular gravels; increase in moisture		845 MW-9-15'		9 14 15	4.3	15
			Gray; no gravels; increase in moisture		855 MW-9-20'		12 20 30	0.7	20
			SAND ; gray; very dense; moist; no gravels; no odor (Fill)						
905 25 (7/12/11)			Borehole terminated at 25 feet.		905 MW-9-25'		50 for 6"	0.9	25

Well Construction
- Concrete
- Bentonite
- 2" dia. sch. 40 PVC (blank)
- Sand
- 2" dia. sch. 40 PVC (0.020" slot)

GEO FORM 304 MW-6 THROUGH MW-10.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 9/9/11

GeoEngineers Inc.

JOB NO.	CLIENT	LOCATION
21768-001-03	MBHA	2800 MLK Jr Way S

LOCATION OF BORING — NORTH ARROW

DRILLING METHOD: GEOPROBE DIRECT PUSH

SAMPLING METHOD: CONTINOUS

BORING NO.: DP-1

SHEET: 1 OF 1

					DRILLING START TIME	DRILLING FINISH TIME
WATER LEVEL	9.0	ft bgs			1350	1420
TIME	1415					
DATE	9/2/15				DRILLING START DATE: 9/2	DRILLING FINISH DATE: 9/2
CASING DEPTH						

DATUM — ELEVATION

DRILLING CONTR. GASCAPS DRILLING

SURFACE CONDITIONS: Concrete

SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO. / SAMPLE DEPTH	BLOWS/FT. SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH	SOIL DESCRIPTION	COMMENTS
						0	CC	3" concrete	Sheen, Odor, PID
						1			
			1 / 2.0			2	SM	Brown silty f-m Sand w/gravel (loose, moist) (fill)	NS, NO, <1
DP	48 / 24					3			
						4			
						5			
			2 / 6.0			6		Gravel content decreases	NS, NO, <1
DP	48 / 20					7			
						8			
						9			
DP	36 / 6		3 / 10			10	SM	Gray silty f-m Sand w/gravel (very dense, wet)	NS, NO, <1
						11	TT	Refusal at 11 ft bgs	
						2			
						3			
						4			
						5			
						6			
						7			
						8			
						9			
						0			

BY FK DATE 9/2/15 CHK'D BY

GEI 25-81

GeoEngineers Inc.

JOB NO.	CLIENT	LOCATION
21768-001-03	MBHA	2800 MLK Jr Way S

LOCATION OF BORING — NORTH ARROW

DRILLING METHOD: GEOPROBE DIRECT PUSH

BORING NO. DP-2

SHEET 1 OF 1

SAMPLING METHOD: CONTINOUS

DRILLING: START TIME 1345 DATE 9/2 — FINISH TIME 1500 DATE 9/2

WATER LEVEL	Not observed			
TIME				
DATE				
CASING DEPTH				

DATUM — ELEVATION

DRILLING CONTR. CASCADE DRILLING

SURFACE CONDITIONS: Concrete

SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO. / SAMPLE DEPTH	BLOWS/FT. SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH	SOIL DESCRIPTION	COMMENTS
						0	CC	3" Concrete	Sheen Odor, PID
						1			
			1 / 2.0			2	SM	Brown Silty f-m Sand w/gravel (loose, moist)	NS, NO, <1
DP	48 / 42					3			
						4			
						5			
						6		Gravel content decreases	NS, NO, <1
DP	48 / 40		2 / 6.0			7			
						8	TT		
						9		Boring completed to 8 ft bgs	
						0			
						1			
			1			2			
						3			
						4			
						5			
						6			
						7			
						8			
						9			
						0			

BY FK DATE 9/2/15 CHK'D BY

GEI 25-81

GeoEngineers Inc.

JOB NO.	CLIENT	LOCATION
21768-001-03	MBTA	1800 MLK Jr Way S

LOCATION OF BORING — NORTH ARROW

DRILLING METHOD: GeoProbe Direct Push

SAMPLING METHOD: Continuous

BORING NO. DP-3

SHEET 1 OF 1

					DRILLING START	DRILLING FINISH
WATER LEVEL						
TIME					TIME 1320	TIME 1340
DATE					DATE 9/2	DATE 9/2
CASING DEPTH						

DATUM — ELEVATION

DRILLING CONTR. CASCADE DRILLING

SURFACE CONDITIONS: concrete

SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO. / SAMPLE DEPTH	BLOWS/FT. SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH	SOIL DESCRIPTION	COMMENTS
						0	CC	3" concrete	Sheen, Odor, PID
						1			
			1 / 2.0			2	SM	Brown Silty f-m Sand occ/gravel (loose, moist)	NS, NO, <1
DP	48 / 36					3			
			2 / 4.0			4		Same	NS, NO, <1
						5			
						6		Gravel content decreases	
DP	48 / 93					7			
			3 / 8.0			8			NS, NO, <1
						9			
						10			
DP	48 / 0					11		No Recovery	Rock in sampler shoe
			4			12			
						13			
DP	36 / 6					14		Gray Silty f-m Sand	NS, NO, <1
						15	TH	Refusal at 15 ft bgs	
						16			
						17			
						18			
						19			
						20			

BY FK DATE 9/2/15 CHK'D BY

GEI 25-81

GeoEngineers Inc.

JOB NO.	CLIENT	LOCATION
21763-001-03	MBHA	28600 MLK Jr Way S

LOCATION OF BORING — NORTH ARROW

DRILLING METHOD: GEOPROBE DIRECT PUSH

SAMPLING METHOD: CONTINUOUS

BORING NO. DP-4

SHEET 1 OF 1

					DRILLING START TIME	DRILLING FINISH TIME
WATER LEVEL	8.0	ft bgs				
TIME	1315				1255	1315
DATE	9/2/15				DATE 9/2	DATE 9/2
CASING DEPTH						

DATUM — ELEVATION

DRILLING CONTR. CASCADE DRILLING

SURFACE CONDITIONS: Asphalt

SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO. / SAMPLE DEPTH	BLOWS/FT. SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH	SOIL DESCRIPTION	COMMENTS
						0	AS	2" Asphalt	Sheen, Odor, PID
						1			
			1 / 2.0			2	SM	Brown, silty f-m sand w/ gravel (loose, moist)	
DP	48 / 27					3			NS NO. 1
						4			
						5			
			2 / 6.0			6		Gravel content decreases	NS NO. 1
DP	48 / 30					7			
						8		Refusal at 8 ft bgs	
						9			
						0			
						1			
			1			2			
						3			
						4			
						5			
						6			
						7			
						8			
						9			
						0			

BY FK DATE 9/2/15 CHK'D BY

GEI 25-81

GeoEngineers Inc.

JOB NO.	CLIENT	LOCATION
21768-001-03	MBHA	2800 MLK Jr Way S

LOCATION OF BORING

NORTH ARROW

DRILLING METHOD: GEOPROBE DIRECT PUSH

SAMPLING METHOD: CONTINOUS

BORING NO. DP-5

SHEET 1 OF 1

					DRILLING START	DRILLING FINISH
WATER LEVEL	Not observed					
TIME					TIME 1220	TIME 1250
DATE					DATE 9/2	DATE 9/2
CASING DEPTH						

DATUM

ELEVATION

DRILLING CONTR. CASCADE DRILLING

SURFACE CONDITIONS: Asphalt

SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO. / SAMPLE DEPTH	BLOWS/FT. SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH	SOIL DESCRIPTION	COMMENTS
						0	AS	2" Asphalt	Sheen, odor, NO
						1			
			1 / 2.0			2	SM	Brown silty f-m Sand w/gravel (loose, moist)	NS, NO, <1
DP	48 / 37					3			
			2 / 4.0			4			
						5			
						6		Same	NS, NO, <1
DP	48 / 6					7			
						8		Refusal at 8 ft bgs	
						9			
						10			
DP	48					11			
			1			12			
						3			
						4			
						5			
						6			
						7			
						8			
						9			
						0			

BY FK DATE 9/2/15 CHK'D BY

GEI 25-81

GeoEngineers Inc.

JOB NO.	CLIENT	LOCATION
21768-001-03	MBHA	2800 MLK Jr Way S

LOCATION OF BORING — NORTH ARROW

DRILLING METHOD: GEOPROBE DIRECT PUSH

SAMPLING METHOD: CONTINUOUS

BORING NO. DP-6

SHEET 1 OF 1

DRILLING

	START	FINISH
WATER LEVEL	Not observed	
TIME	TIME 1200	TIME 1230
DATE	DATE 9/2	DATE 9/2
CASING DEPTH		

DATUM — ELEVATION

DRILLING CONTR. CASCADE DRILLING

SURFACE CONDITIONS: Asphalt

SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO. / SAMPLE DEPTH	BLOWS/FT. SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH	SOIL DESCRIPTION	COMMENTS
						0	AS	2" Asphalt	Sheen, Odor, PID
						1			
			1 / 2.0			2	SM	Brown Silty f-m Sand w/gravel (Loose, moist) (Fill)	SS, NO. <1
DP	48 / 44					3			
						4			
						5			
			2 / 6.0			6		Same	NS, NO. <1
DP	48 / 46					7			
						8	TT	Boring completed to 8 ft bgs	
						9			
						10			
						1			
			1			2			
						3			
						4			
						5			
						6			
						7			
						8			
						9			
						0			

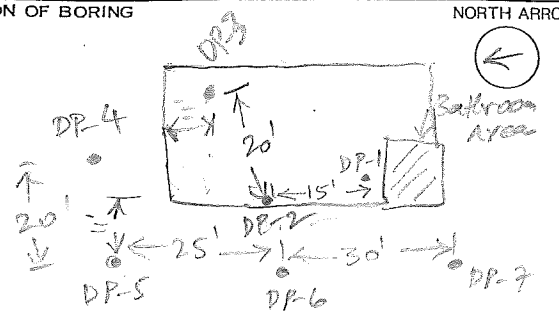
BY FK DATE 9/18/15 CHK'D BY

GEI 25-81

GeoEngineers Inc.

JOB NO.	CLIENT	LOCATION
21768-001-03	MBHA	2800 MLK Sr Way S

LOCATION OF BORING — NORTH ARROW



DATUM — ELEVATION

DRILLING METHOD:	GEOPROBE DIRECT-PUSH
SAMPLING METHOD:	CONTINUOUS

BORING NO. DP-7

SHEET 1 OF 1

					DRILLING START TIME	DRILLING FINISH TIME
WATER LEVEL	15.0					
TIME	1205				1055	1150
DATE	9/2/15				DATE 9/2	DATE 9/2
CASING DEPTH						

SURFACE CONDITIONS: Asphalt

SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO. / SAMPLE DEPTH	BLOWS/FT. SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH	SOIL DESCRIPTION	COMMENTS
						0	AS	1" asphalt	Sheen, odor, PID
						1			
									SS, NO, <1
			1 / 2.0			2	SM	Brown Silty f-m Sand w/gravel trace organics, loose, moist (fill)	
DP	48 / 46					3			
						4		Grades to	
						5			
			2 / 6.0			6		Brown Silty f-m Sand occ/gravel (med. dense, moist)	NS, NO, <1
DP	48 / 36					7			
						8			
						9			
			3 / 10			10		Same	SS, NO, <1
DP	48 / 24					1			
						12			
						3			
						14			
DP	48 / 18					15		Gray Silty f-m Sand (dense, wet) (fill)	MS, Petroleum odor, <1
						16		Boring completed to 16 ft bgs	
						7			
						8		Likely Petroleum Cont. GW affecting soil @ 15 ft bgs	
						9			
						0			

DRILLING CONTR. Cascade Drilling

BY _____ DATE _____ CHK'D BY _____

GEI 25-81

Coarse-Grained Soils - More than 50% [1] Retained on No. 200 Sieve	Gravels - More than 50% [1] of Coarse Fraction Retained on No. 4 Sieve	≦5% Fines [5]	GW	Well-graded gravel and gravel with sand, little to no fines
			GP	Poorly-graded gravel and gravel with sand, little to no fines
		≧15% Fines [5]	GM	Silty gravel and silty gravel with sand
			GC	Clayey gravel and clayey gravel with sand
	Sands - 50% [1] or More of Coarse Fraction Passes No. 4 Sieve	≦5% Fines [5]	SW	Well-graded sand and sand with gravel, little to no fines
			SP	Poorly-graded sand and sand with gravel, little to no fines
		≧15% Fines [5]	SM	Silty sand and silty sand with gravel
			SC	Clayey sand and clayey sand with gravel
Fine-Grained Soils - 50% [1] or More Passes No. 200 Sieve	Silts and Clays Liquid Limit Less than 50		ML	Silt, sandy silt, gravelly silt, silt with sand or gravel
			CL	Clay of low to medium plasticity; silty, sandy, or gravelly clay, lean clay
			OL	Organic clay or silt of low plasticity
	Silts and Clays Liquid Limit 50 or More		MH	Elastic silt, clayey silt, silt with micaceous or diatomaceous fine sand or silt
			CH	Clay of high plasticity, sandy or gravelly clay, fat clay with sand or gravel
			OH	Organic clay or silt of medium to high plasticity
Highly Organic Soils			PT	Peat, muck and other highly organic soils

Terms Describing Relative Density and Consistency

	Density	SPT [2] blows/foot
Coarse-Grained Soils	Very Loose	0 to 4
	Loose	4 to 10
	Medium Dense	10 to 30
	Dense	30 to 50
	Very Dense	>50
	Consistency	**SPT [2] blows/foot**
Fine-Grained Soils	Very Soft	0 to 2
	Soft	2 to 4
	Medium Stiff	4 to 8
	Stiff	8 to 15
	Very Stiff	15 to 30
	Hard	>30

Test Symbols

FC = Fines Content
GS = Grain Size
MC = Moisture Content
AL = Atterberg Limits
C = Consolidation
DD = Dry Density
K = Permeability
Str = Shear Strength
Env = Environmental
PiD = Photoionization Detector

Component Definitions

Descriptive Term	Size Range and Sieve Number
Boulders	Larger than 12"
Cobbles	3" to 12"
Gravel	3" to No. 4 (4.75 mm)
Coarse Gravel	3" to 3/4"
Fine Gravel	3/4" to No. 4 (4.75 mm)
Sand	No. 4 (4.75 mm) to No. 200 (0.075 mm)
Coarse Sand	No. 4 (4.75 mm) to No. 10 (2.00 mm)
Medium Sand	No. 10 (2.00 mm) to No. 40 (0.425 mm)
Fine Sand	No. 40 (0.425 mm) to No. 200 (0.075 mm)
Silt and Clay	Smaller than No. 200 (0.075 mm)

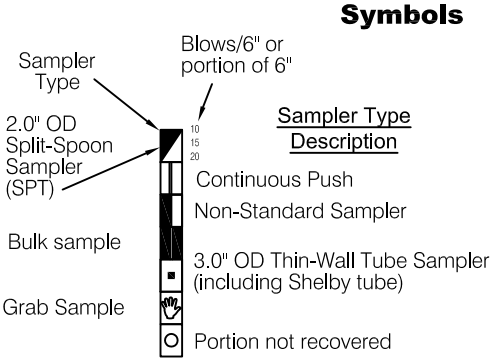
[3] Estimated Percentage

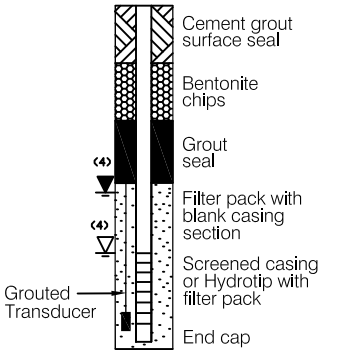
Percentage by Weight	Modifier
<5	Trace
5 to 15	Slightly (sandy, silty, clayey, gravelly)
15 to 30	Sandy, silty, clayey, gravelly)
30 to 49	Very (sandy, silty, clayey, gravelly)

Moisture Content

Dry - Absence of moisture, dusty, dry to the touch
Slightly Moist - Perceptible moisture
Moist - Damp but no visible water
Very Moist - Water visible but not free draining
Wet - Visible free water, usually from below water table

Symbols





(1) Percentage by dry weight
(2) (SPT) Standard Penetration Test (ASTM D-1586)
(3) In General Accordance with Standard Practice for Description and Identification of Soils (ASTM D-2488)
(4) Depth of groundwater — ATD = At time of drilling; Static water level (date); BGS = below ground surface
(5) Combined USCS symbols used for fines between 5% and 15% as estimated in General Accordance with Standard Practice for Description and Identification of Soils (ASTM D-2488)

Classifications of soils in this report are based on visual field and/or laboratory observations, which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field or laboratory testing unless presented herein. Visual-manual and/or laboratory classification methods of ASTM D-2487 and D-2488 were used as an identification guide for the Unified Soil Classification System.

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Exploration Log Key

DATE:
DESIGNED BY:
DRAWN BY:
REVISED BY:
PROJECT NO.
FIGURE NO. A-1

Q:_ACAD Standards\Standard Details\Exploration Log Key A1.dwg

Aspect CONSULTING	MBHA- Mt Baker Cleaners - 160324		Environmental Exploration Log	
	Project Address & Site Specific Location 2864 S. McClellan St., 6 ft S of concrete pad		*Coordinates* NA	*Exploration Number* **AB-1**
Contractor Standard Environmental Probe	*Equipment* Direct push rig	*Sampling Method* Percussion hammer	*Ground Surface (GS) Elev.* NA	
Operator Steve and Russell	*Exploration Method(s)* Direct push	*Work Start/Completion Dates* 2/18/2017	*Top of Casing Elev.* NA	*Depth to Water (Below GS)* 6.5' (ATD)

Depth (feet)	Elev. (feet)	Exploration Completion and Notes	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
							Concrete	
							FILL Medium dense, slightly moist, brown silty SAND (SM); fine to medium sand	
1					PID= 2.2			1
2		Backfilled with bentonite chips and capped with concrete	AB-1-2.0		PID= 5.7			2
3					PID= 9.0		**RECENT DEPOSITS** Medium dense, moist to wet, blue-gray, sandy SILT (ML)	3
4			AB-1-4.0		PID= 37			4
5								5
6		▽ 2/18/2017	AB-1-6.0	NWTPH-Dx, NWTPH-Gx, 8260, 8270D, MTCA 5	PID= 69			6
							Medium dense, moist to wet, blue-gray silty SAND (SM) interbedded with dense, wet, gray. sandy SILT (ML); 4 inch to 0.5 inch interbeds	
7			AB-1-7.0		PID= 22			7
8			AB-1-8.0		PID= 36			8
9								9
			AB-1-9.5		PID= 28			
10							Becomes gravelly Becomes very dense	10
11			AB-1-11.0	8260; PCE TCLP	PID= 64		Bottom of exploration at 11 ft. bgs. Note: Refusal at 11 ft bgs	11

Legend

Sample Method
- ◯ No Soil Sample Recovery
- ◧ Continuous core 1" ID

Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: KB
Approved by:

Exploration Log AB-1

Sheet 1 of 1

ASPECT STANDARD EXPLORATION LOG TEMPLATE P:\GINTWPROJECTS\MBHA MT BAKER CLEANERS 160324.GPJ March 30, 2017

Aspect CONSULTING	MBHA- Mt Baker Cleaners - 160324		Environmental Exploration Log	
	Project Address & Site Specific Location 2864 S. McClellan St., 14 ft from west wall		*Coordinates* NA	*Exploration Number* **AB-2**
Contractor Standard Environmental Probe	*Equipment* Direct push rig	*Sampling Method* Percussion hammer	*Ground Surface (GS) Elev.* NA	
Operator Steve and Russell	*Exploration Method(s)* Direct push	*Work Start/Completion Dates* 2/18/2017	*Top of Casing Elev.* NA	*Depth to Water (Below GS)* 6' (ATD)

Depth (feet)	Elev. (feet)	Exploration Completion and Notes	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
0							Concrete	0
							FILL Loose, dry, slightly gravelly silty SAND (SM); contains red brick fragments	
1					PID= 4.2			1
2							**RECENT DEPOSITS** Medium dense, moist, brown silty SAND (SM); fine, medium, and coarse sand	2
3								3
4			AB-2-4.0		PID= 16.7			4
							Medium dense, moist, brown, sandy slightly silty GRAVEL (GW-GM); fine to coarse gravel	
5					PID= 23			5
							Dense, moist, brown gravelly SILT (ML)	
6		▽ 2/22/2017	AB-2-6.0		PID= 40		Loose, wet, brown, slightly silty SAND (SW-SM)	6
7					PID= 71		Loose, moist, brown-gray, slightly gravelly silty SAND (SM) interbedded with stiff, moist, gray, sandy SILT (ML); fine, medium, and coarse sand	7
8			AB-2-8.0	8260; PCE TCLP	PID= 40			8
9		Backfilled with bentonite chips and capped with concrete			PID= 86		Stiff, moist, gray, sandy, clayey SILT (ML) interbedded with loose, wet, brown-gray silty SAND (SM); fine, medium, and coarse sand, trace fine gravel	9
10			AB-2-10.0		PID= 36			10
11					PID= 33			11
12			AB-2-12.0		PID= 43		Medium dense, wet, brown-gray silty SAND (SM); fine, medium, and coarse sand, trace fine gravel	12
13					PID= 90			13
14			AB-2-13.6	8260	PID= 45		Bottom of exploration at 13.6 ft. bgs. Note: Refusal at 13.6 ft bgs	14

Legend

Sample Method
- ◯ No Soil Sample Recovery
- ◧ Continuous core 1" ID

Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: KB
Approved by:

Exploration Log AB-2
Sheet 1 of 1

ASPECT STANDARD EXPLORATION LOG TEMPLATE P:\GINTWPROJECTS\MBHA MT BAKER CLEANERS 160324.GPJ March 30, 2017

Aspect CONSULTING	MBHA- Mt Baker Cleaners - 160324		Environmental Exploration Log	
	Project Address & Site Specific Location 2864 S. McClellan St., 4.8 ft from east wall		*Coordinates* NA	*Exploration Number* **AB-3**
Contractor Standard Environmental Probe	*Equipment* Direct push rig	*Sampling Method* Percussion hammer	*Ground Surface (GS) Elev.* NA	
Operator Steve and Russell	*Exploration Method(s)* Direct push	*Work Start/Completion Dates* 2/18/2017	*Top of Casing Elev.* NA	*Depth to Water (Below GS)* 2.5' (ATD)

Depth (feet)	Elev. (feet)	Exploration Completion and Notes	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
					PID		Concrete	
							FILL Loose, moist, brown-gray gravelly silty SAND (SM)	
1			AB-3-2.0	NWTPH-Dx, NWTPH-Gx, 8260, 8270D, MTCA 5	PID= 8		**RECENT DEPOSITS** Hard, moist, brown, sandy SILT (ML); reverse graded, fine to medium sand	1
2		▽ 2/18/2017			PID= 1.5		Loose, wet, brown, silty SAND (SM); trace gravel, fine, medium, and coarse sand	2
3			AB-3-4.0		PID= 5			3
							Stiff, gray, moist, clayey SILT (ML)	
4					PID= 3		Dense, moist, brown, silty SAND (SM); fine to medium sand	4
5		Backfilled with bentonite chips and capped with concrete	AB-3-6.0		PID= 6			5
6					PID= 4			6
7			AB-3-8.0		PID= 2			7
8					PID= 3			8
9			AB-3-9.5		PID= 7.5		Becomes gray; trace coarse sand	9
				8260; PCE TCLP	PID= 16		Bottom of exploration at 9.5 ft. bgs. Note: Refusal at 9.5 ft bgs	
10								10

Legend

Sample Method
- ◯ No Soil Sample Recovery
- ◧ Continuous core 1" ID

Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: KB
Approved by:

Exploration Log AB-3
Sheet 1 of 1

ASPECT STANDARD EXPLORATION LOG TEMPLATE P:\GINTWPROJECTS\MBHA MT BAKER CLEANERS 160324.GPJ March 30, 2017

Aspect CONSULTING	MBHA- Mt Baker Cleaners - 160324		Environmental Exploration Log	
	Project Address & Site Specific Location 2864 S. McClellan St., 13 ft from east wall; boiler room		*Coordinates* NA	*Exploration Number* **AB-4**
Contractor Standard Environmental Probe	*Equipment* Direct push rig	*Sampling Method* Percussion hammer	*Ground Surface (GS) Elev.* NA	
Operator Steve and Russell	*Exploration Method(s)* Direct push	*Work Start/Completion Dates* 3/8/2017	*Top of Casing Elev.* NA	*Depth to Water (Below GS)* No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Completion and Notes	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
							Concrete	
							RECENT DEPOSITS Hard, moist, tan, slightly clayey SILT (ML); trace gravel	
1		Capped with concrete						1
2			AB-4-2.0		PID= 0.2 Sheen= None			2
3					Sheen= None			3
4		Backfilled with bentonite chips			PID= 0.2 Sheen= None			4
5			AB-4-4.0		Sheen= None			5
6			AB-4-6.0	8260	PID= 0.3 Sheen= None		Bottom of exploration at 6 ft. bgs. Note: Refusal at 6 ft bgs	6
7								7
8								8
9								9

Legend

Sample Method: Continuous core 1.85" ID

Water Level: No Water Encountered

See Exploration Log Key for explanation of symbols

Logged by: ALC
Approved by:

Exploration Log AB-4
Sheet 1 of 1

ASPECT STANDARD EXPLORATION LOG TEMPLATE P:\GINTWPROJECTS\MBHA MT BAKER CLEANERS 160324.GPJ March 30, 2017

Aspect CONSULTING	MBHA- Mt Baker Cleaners - 160324		Environmental Exploration Log	
	Project Address & Site Specific Location 2864 S. McClellan St., 20 ft from S wall; vacant side		*Coordinates* NA	*Exploration Number* **AB-5/AMW-1**
Contractor Standard Environmental Probe	*Equipment* Direct push rig	*Sampling Method* Percussion hammer	*Ground Surface (GS) Elev.* NA	Ecology Well Tag No. BJP 800
Operator Steve and Russell	*Exploration Method(s)* Direct push	*Work Start/Completion Dates* 3/8/2017	*Top of Casing Elev.* NA	*Depth to Water (Below GS)* 10' (Static)

Depth (feet)	Elev. (feet)	Exploration Completion and Notes	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
		8" flush-mount monument and concrete surface seal	AMW-1-2.0				Concrete	
					PID= 0.3 Sheen= None		**FILL** Medium dense, moist, brown, silty SAND (SM); trace gravel	
		Hydrated bentonite chips					**TOPSOIL** Medium hard, moist, dark brown, gravelly, sandy SILT (ML); trace organics	
			AMW-1-4.0		PID= 0.2 Sheen= None		**RECENT DEPOSITS** Dense, moist, tan, slightly gravelly silty SAND (SM); orange mottling	
				8260	PID= 0.2 Sheen= None			
5					PID= 0.2 Sheen= None			5
			AMW-1-6.0		PID= 0.2 Sheen= None		Hard, moist, tan, sandy SILT (ML) interbedded with coarse, mica-rich SAND (SP)	
					PID= 0.2 Sheen= None			
			AMW-1-8.0		PID= 0.5 Sheen= None			
		Colorado Silica 10/20 sand filter pack					Hard, moist, tan to gray, slightly clayey SILT (ML) interbedded with coarse, mica-rich SAND (SP)	
			AMW-1-10.0		PID= 0.5 Sheen= None			
10		3/8/2017 At time of groundwater sampling			PID= 0.6 Sheen= None			10
			AMW-1-11.0	8260, PCE TCLP	PID= 0.8 Sheen= None		Dense, moist to wet, gray silty SAND (SM); fine sand	
		0.010" slot screen			PID= 2.9 Sheen= None			
			AMW-1-13.0		PID= 3.0 Sheen= None			
					PID= 4.3 Sheen= None			
15			AMW-1-15.0	NWTPH-Dx, NWTPH-GX, 8260, MTCA 5, PAHs 8270D, PCE TCLP	PID= 3.2 Sheen= None		Bottom of exploration at 15 ft. bgs.	15

Legend

Sample Method
- Continuous core 1.85" ID
- Continuous core 1" ID

Water Level
- Static Water Level

See Exploration Log Key for explanation of symbols

Logged by: ALC
Approved by:

Exploration Log AB-5/AMW-1
Sheet 1 of 1

ASPECT STANDARD EXPLORATION LOG TEMPLATE P:\GINTWPROJECTS\MBHA MT BAKER CLEANERS 160324.GPJ March 30, 2017

Aspect CONSULTING	MBHA- Mt Baker Cleaners - 160324		Environmental Exploration Log	
	Project Address & Site Specific Location 2864 S. McClellan St., 5 ft from W wall; vacant side		*Coordinates* NA	*Exploration Number* **AB-6**
Contractor Standard Environmental Probe	*Equipment* Direct push rig	*Sampling Method* Percussion hammer	*Ground Surface (GS) Elev.* NA	
Operator Steve and Russell	*Exploration Method(s)* Direct push	*Work Start/Completion Dates* 3/8/2017	*Top of Casing Elev.* NA	*Depth to Water (Below GS)* 6' (ATD)

Depth (feet)	Elev. (feet)	Exploration Completion and Notes	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
							Concrete	
		Capped with concrete	AB-6-2.0		PID= 0.2 Sheen= None		**FILL** Medium dense, moist, brown to tan silty SAND (SM); trace gravel	
					PID= 0.2 Sheen= None		**RECENT DEPOSITS** Medium hard, moist, tan, sandy SILT (ML)	
			AB-6-4.0		PID= 0.2 Sheen= None		Medium dense, moist, tan, slightly clayey silty SAND (SM) interbedded with occasional thin beds of gravelly medium SAND (SW); saturated soils 6'-8'	
5					PID= 0.2 Sheen= None			5
		▽ 3/8/2017	AB-6-6.0	8260	PID= 0.2 Sheen= None			
					PID= 0.2 Sheen= None			
			AB-6-8.0		PID= 0.3 Sheen= None			
					PID= 0.3 Sheen= None		Medium hard, moist, tan, sandy SILT (ML) interbedded with occasional thin beds of mica-rich coarse SAND (SP)	
10		Backfilled with bentonite chips	AB-6-10.0		PID= 0.8 Sheen= None			10
					PID= 0.5 Sheen= None		Medium dense, moist to wet silty SAND (SM) interbedded with medium hard, moist to wet, sandy SILT (ML); saturated soils 13'-15'	
			AB-6-12.0		PID= 0.5 Sheen= None			
					PID= 1.0 Sheen= None			
			AB-6-14.0	8260, PCE TCLP	PID= 2.5 Sheen= None			
15			AB-6-15.0	8260, PCE TCLP	PID= 1.4 Sheen= None		Bottom of exploration at 15 ft. bgs.	15

Legend

Sample Method
- Continuous core 1.85" ID
- Continuous core 1" ID

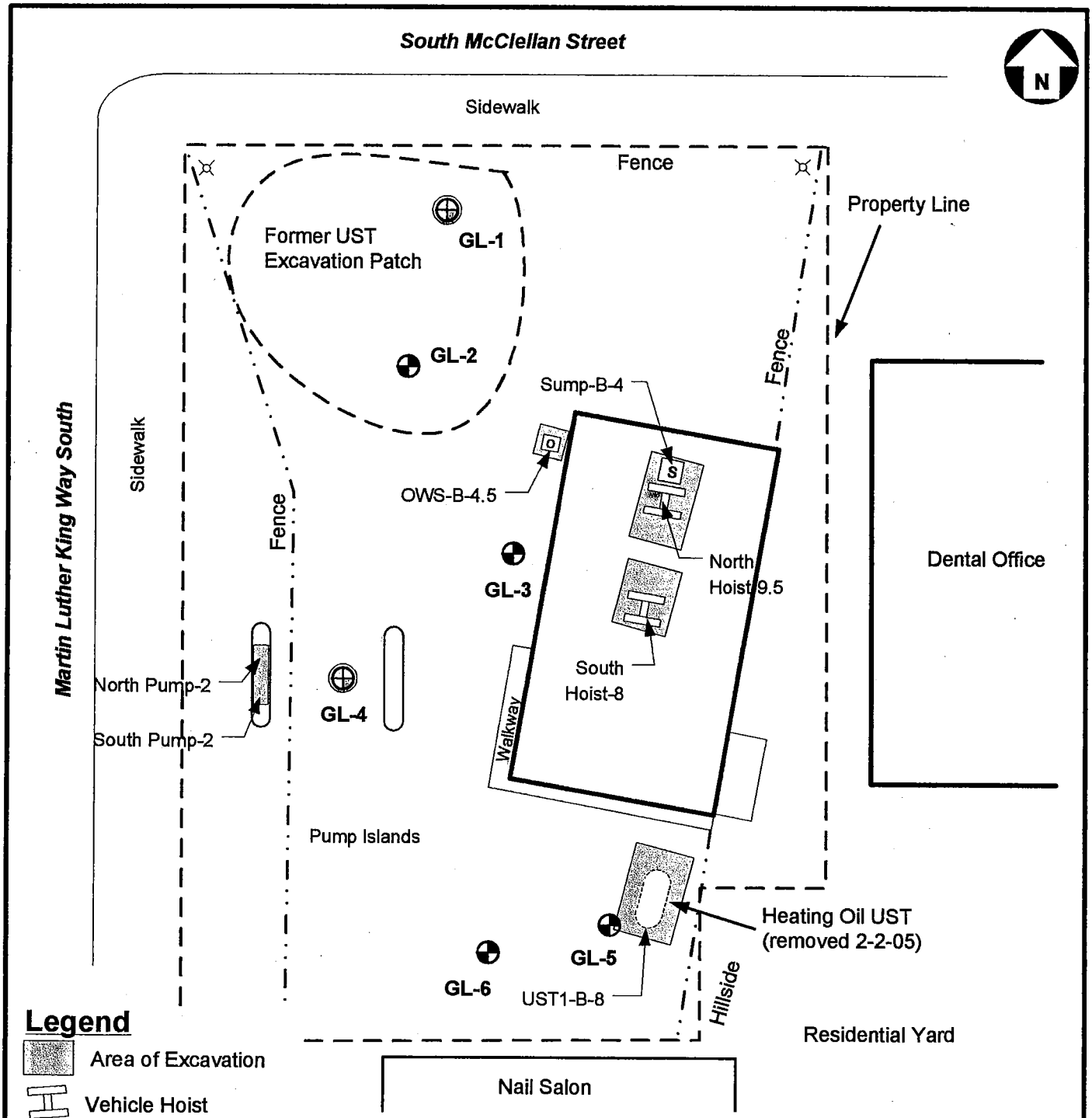
Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: ALC
Approved by:

Exploration Log AB-6
Sheet 1 of 1

ASPECT STANDARD EXPLORATION LOG TEMPLATE P:\GINTWPROJECTS\MBHA MT BAKER CLEANERS 160324.GPJ March 30, 2017



Project File: 01-0356-B-F2.vsd

g-logics

Site Plan
Former Gas Station
2800 Martin Luther King Way South
Seattle, Washington

Figure
2

01-0356-b-gl1.vsd

Depth	BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
0				Slighty silty sand in cuttings				
	8							
	11			Sand. Lt. Brown, damp, Gravelly Silty Sand (Fill)	80			
5	12		GL1-5	Medium Dense.		SW		
	4							
	11				80			
10	14		GL1-10	Sand. Gray, damp, Gravelly Sand. Medium Dense.		SM		
	4							
	8			Sand. Moist to Wet, Oxidized, gray to brown gravelly	75			
15	12		GL1-15	sand. Medium Dense				
			No Sample	Sand. Gray, wet silty gravelly sand. Very Dense (Till)	10			
20	50/6			Bottom of boring at approximately 20.5'				
25								
30								

Depth in feet

Drilling Method:	Hollow-stem auger	Date: 2-9-2005	Other Information: Groundwater sample GL-1 collected by peristaltic pump through a temporary well screen
Drilling Company:	Cascade Drilling	Weather: Sunny	
Boring Diameter:	Four inches	Page 1 of 1	
Logged By:	Rob Roberts		

g-logics

Boring Log
Former Gas Station
2800 Martin Luther King Way S.
Seattle, WA

GL-1

01-0356-b-gl2.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Sand. Lt. Brown silty sand in cuttings. Slight petroleum odor.				
11 12 9		GL2-4	Sand. Lt. Brown, damp, Gravelly Sand (Fill) Medium Dense. No Odors.	90	SW		
6 7 10		GL2-9	Same as above.	80			
3 4 4		GL2-14	Sand. Moist to Wet, dark brown silty sand (native). Loose.	60	SM		
12 20 21		GL2-19	Same as above. Dense, Wet.	50			
			Bottom of boring at approximately 19.5'				

0 5 10 15 20 25 30

Depth in feet

Drilling Method: Hollow-stem auger	Date: 2-9-2005	Other Information:
Drilling Company: Cascade Drilling	Weather: Sunny	
Boring Diameter: Four inches	Page 1 of 1	
Logged By: Rob Roberts		

g logics

Boring Log
Former Gas Station
2800 Martin Luther King Way S.
Seattle, WA

GL-2

01-0356-b-gl3.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Sand. Lt. Brown and gray sand in cuttings. No petroleum odor.				
5 5 9		GL3-6	Sand. Gray, damp, Silty gravelly Sand. Medium Dense. No Odors.	75	SM		
3 3 4		GL3-11	Same as above. Loose.	80			
			Bottom of boring at approximately 11'				

0 5 10 15 20 25 30

Depth in feet

Drilling Method: Hollow-stem auger	Date: 2-9-2005	Other Information:
Drilling Company: Cascade Drilling	Weather: Sunny	
Boring Diameter: Four inches	Page 1 of 1	
Logged By: Rob Roberts		

g-logics

Boring Log
Former Gas Station
2800 Martin Luther King Way S.
Seattle, WA

GL-3

01-0356-b-gl4.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
5 5 6		GL4-4	Sand. Lt. Brown and gray, damp, slightly gravelly, sl. silty Sand. Medium Dense.	80	SP		
3 6 12		GL4-9	Same as above.	70			
4 5 7		GL4-14	Same as above. Moist to wet. ▽	70			
6 12 19		GL4-19	Clay. Green Silty Clay. Hard.		CL		
			Bottom of boring at approximately 19'				

0 5 10 15 20 25 30

Depth in feet

Drilling Method: Hollow-stem auger	Date: 2-9-2005	Other Information:	
Drilling Company: Cascade Drilling	Weather: Sunny	Groundwater sample GL-4 collected by peristaltic pump through a temporary well screen	
Boring Diameter: Four inches	Page 1 of 1		
Logged By: Rob Roberts			

g-logics

Boring Log
Former Gas Station
2800 Martin Luther King Way S.
Seattle, WA

GL-4

01-0356-b-gl5.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Difficult drilling. Brick and concrete rubble. (Fill)				
50/2		GL5-10	Sand. Lt. Brown, damp, Gravelly Sand (Fill) with concrete and petroleum staining. Very Dense.	5	SW		
30 50/6		GL5-12.5	Same as above. Dark brown petroleum-stained sand at 12.5 feet.	25			
41 50/6		GL5-15	Same as above. More petroleum staining, strong odor. Wet at 15'. ▽	25			
21		GL5-19	Same as above.				
50/6		GL5-20	Silt. Gray, damp Silt. Hard (Till). No odor or sheen.	25	ML		
			Bottom of boring at approximately 20'				

0 5 10 15 20 25 30

Depth in feet

Drilling Method: Hollow-stem auger	Date: 2-9-2005	Other Information:
Drilling Company: Cascade Drilling	Weather: Sunny	
Boring Diameter: Four inches	Page 1 of 1	
Logged By: Rob Roberts		

g-logics

Boring Log
Former Gas Station
2800 Martin Luther King Way S.
Seattle, WA

GL-5

01-0356-b-gl6.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Dark brown Sand with 20% to 50% brick and concrete in cuttings.		SW		
50/2		No Recovery					
70/6		GL6-15	Sand. Black Sand. Very Dense. No odor, no sheen.	25			
50/2		No Recovery					
29			Sand. Wet silty clayey Sand. Very Dense.		SC		
32							
50		GL6-20	Clay. Gray silty clay. Hard.	25	CL		
			Bottom of boring at approximately 20'				

0 5 10 15 20 25 30

Depth in feet

Drilling Method: Hollow-stem auger	Date: 2-9-2005	Other information:
Drilling Company: Cascade Drilling	Weather: Sunny	
Boring Diameter: Four inches	Page 1 of 1	
Logged By: Rob Roberts		

g-logics

Boring Log
Former Gas Station
2800 Martin Luther King Way S.
Seattle, WA

GL-6

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

LEGEND

- Soil Boring Location
- Monitoring Well Location
- Site Boundary
- Tax Lot

0 30 60 120

Scale in Feet

N

Mount Baker Strip Property
2802, 2806, 2810, and 2864 S. McClellan St.

Site Plan with Monitoring Well and Soil Boring Locations

19095-04 10/16

HARTCROWSER

Figure 2

Document Path: L:\Notebooks\1909504_Mt Baker Housing Association Phase II\GIS\1909504_SP2.mxd Date: 10/26/2016 User Name: ericlindquist

Key to Exploration Logs

Sample Description

Classification of soils in this report is based on visual field and laboratory observations which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field nor laboratory testing unless presented herein. Visual-manual classification methods of ASTM D 2488 were used as an identification guide.

Soil descriptions consist of the following:
Density/consistency, moisture, color, minor constituents, MAJOR CONSTITUENT, additional remarks.

Density/Consistency

Soil density/consistency in borings is related primarily to the Standard Penetration Resistance. Soil density/consistency in test pits and probes is estimated based on visual observation and is presented parenthetically on the logs.

SAND or GRAVEL Density	Standard Penetration Resistance (N) in Blows/Foot	SILT or CLAY Consistency	Standard Penetration Resistance (N) in Blows/Foot	Approximate Shear Strength in TSF
Very loose	0 to 4	Very soft	0 to 2	<0.125
Loose	4 to 10	Soft	2 to 4	0.125 to 0.25
Medium dense	10 to 30	Medium stiff	4 to 8	0.25 to 0.5
Dense	30 to 50	Stiff	8 to 15	0.5 to 1.0
Very dense	>50	Very stiff	15 to 30	1.0 to 2.0
		Hard	>30	>2.0

Sampling Test Symbols

- 1.5" I.D. Split Spoon
- Grab (Jar)
- 3.0" I.D. Split Spoon
- Shelby Tube (Pushed)
- Bag
- Cuttings
- Core Run

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

Moisture

Dry	Little perceptible moisture
Damp	Some perceptible moisture, likely below optimum
Moist	Likely near optimum moisture content
Wet	Much perceptible moisture, likely above optimum

Minor Constituents	Estimated Percentage
Trace	<5
Slightly (clayey, silty, etc.)	5 - 12
Clayey, silty, sandy, gravelly	12 - 30
Very (clayey, silty, etc.)	30 - 50

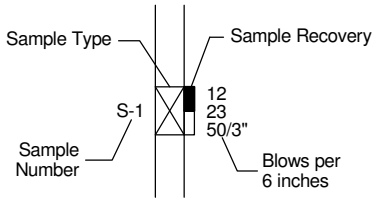
Laboratory Test Symbols

GS	Grain Size Classification
CN	Consolidation
UU	Unconsolidated Undrained Triaxial
CU	Consolidated Undrained Triaxial
CD	Consolidated Drained Triaxial
QU	Unconfined Compression
DS	Direct Shear
K	Permeability
PP	Pocket Penetrometer Approximate Compressive Strength in TSF
TV	Torvane Approximate Shear Strength in TSF
CBR	California Bearing Ratio
MD	Moisture Density Relationship
AL	Atterberg Limits
	Water Content in Percent Liquid Limit Natural Plastic Limit
PID	Photoionization Detector Reading
CA	Chemical Analysis
DT	In Situ Density in PCF
OT	Tests by Others

Groundwater Indicators

- Groundwater Level on Date or (ATD) At Time of Drilling
- Groundwater Seepage (Test Pits)

Sample Key



HARTCROWSER

19095-04 *9/16*

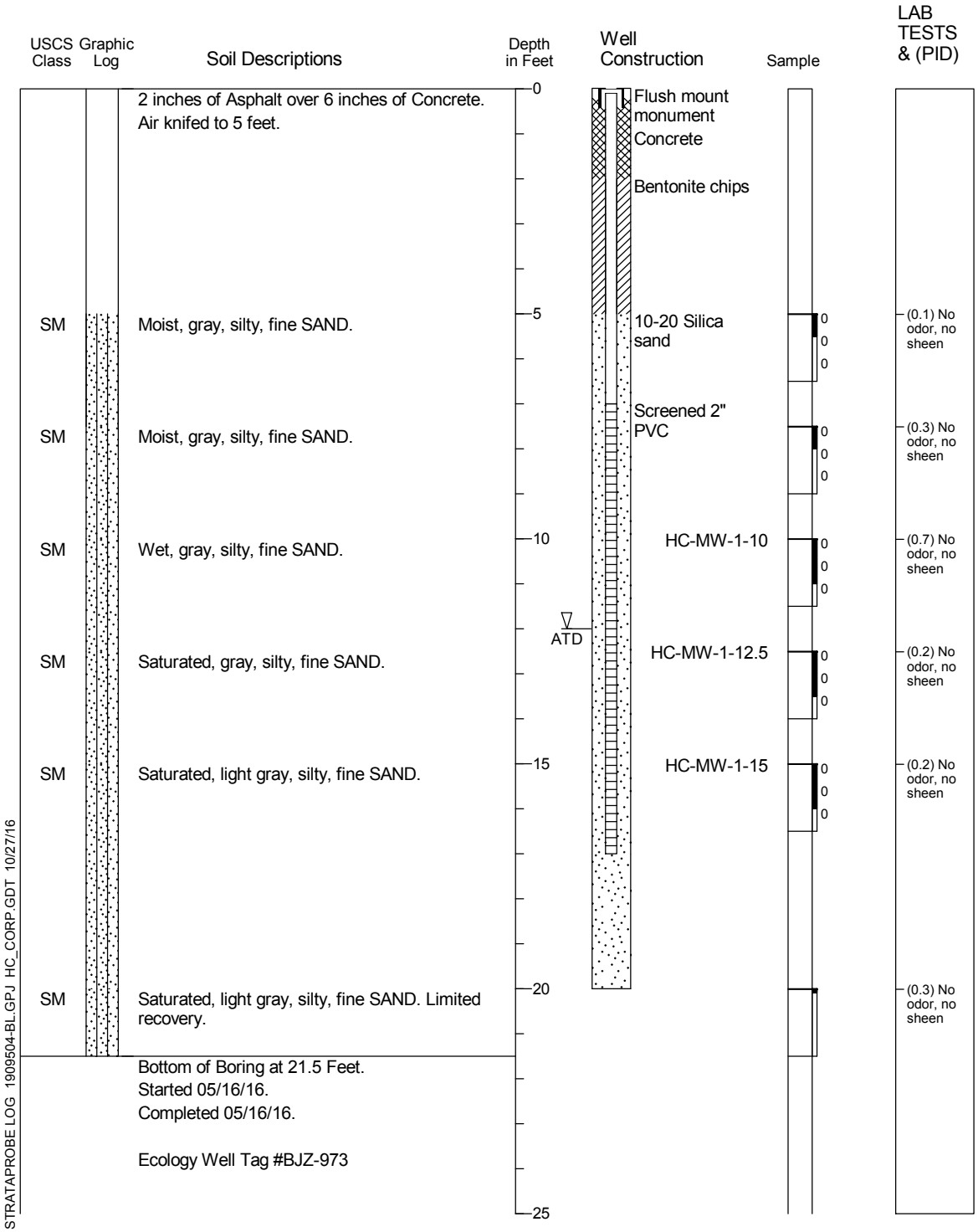
Figure A-1

KEY SHEET 1909504-BL-10-16.GPJ HC_CORP.GDT 10/18/16

Boring Log HC-MW-1

Location: 47° 34' 42.06" N 122° 17' 44.98" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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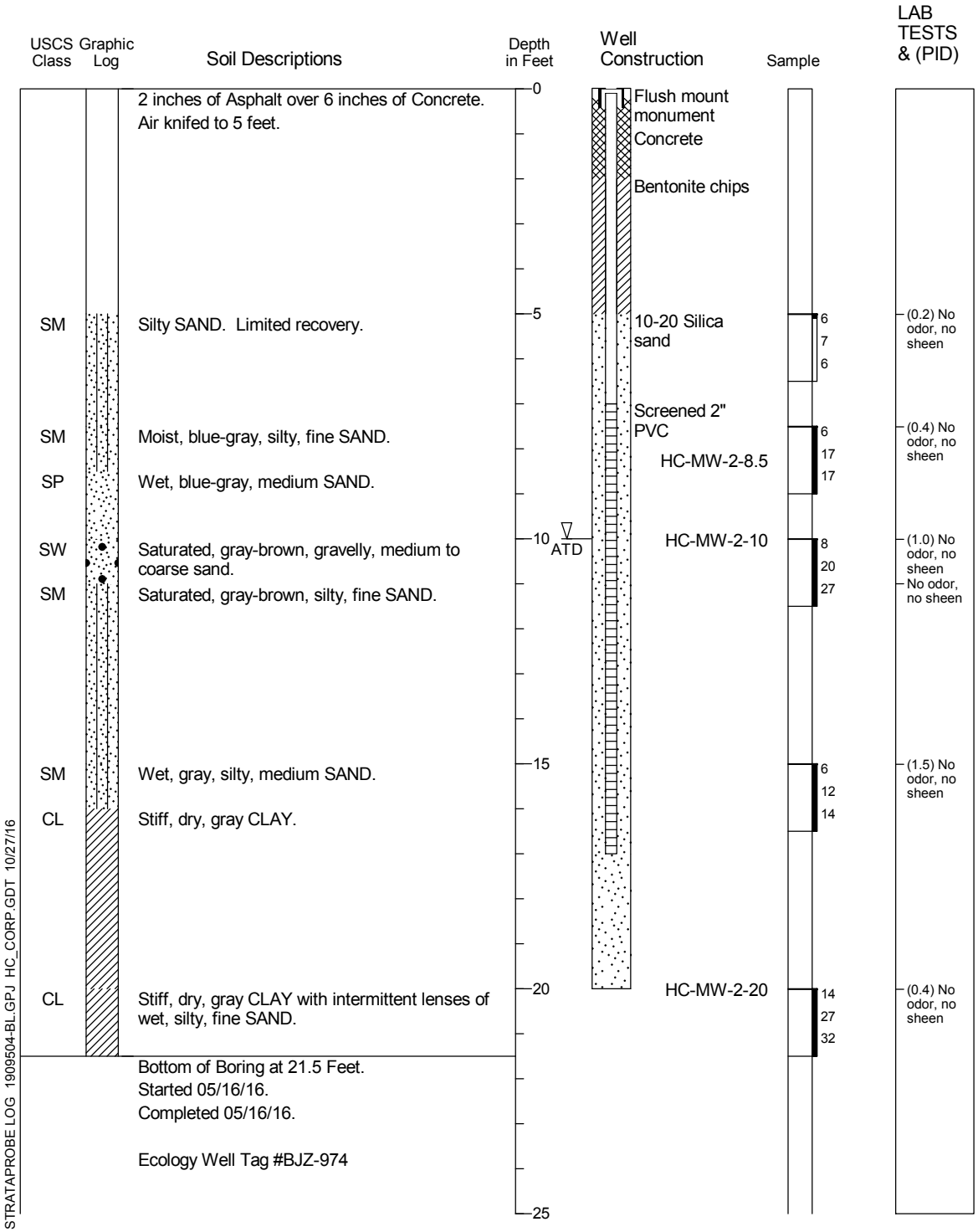
19095-04 *5/16*

Figure A-2

Boring Log HC-MW-2

Location: 47° 34' 42.07" N 122° 17' 43.44" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



STRATAPROBE LOG 1909504-BL.GPJ HC_CORP.GDT 10/27/16

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

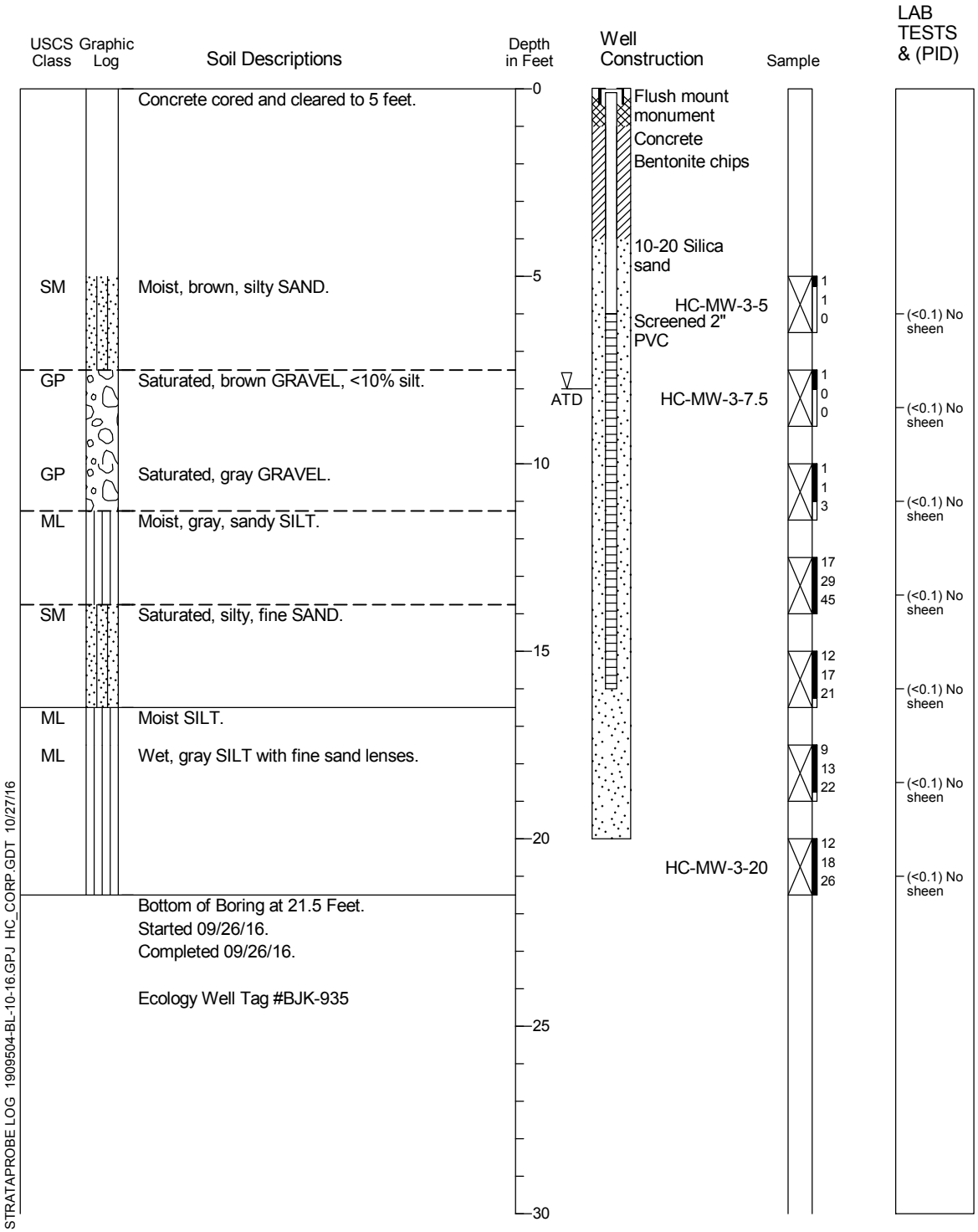
19095-04 *5/16*

Figure A-3

Boring Log HC-MW-3

Location: 47° 34' 42.54" N 122° 17' 42.88" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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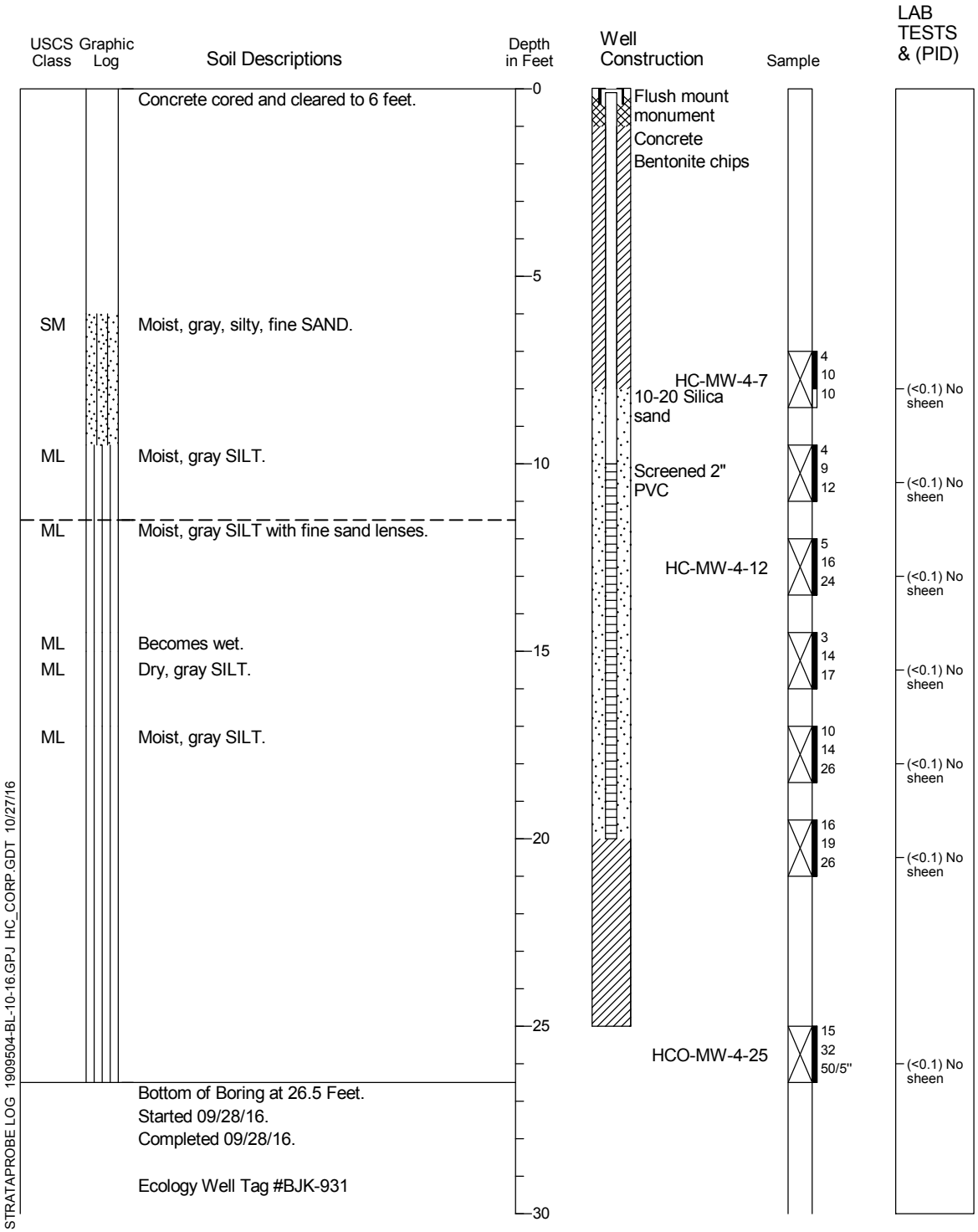
19095-04 *9/16*

Figure A-4

Boring Log HC-MW-4

Location: 47° 34' 43.63" N 122° 17' 42.87" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

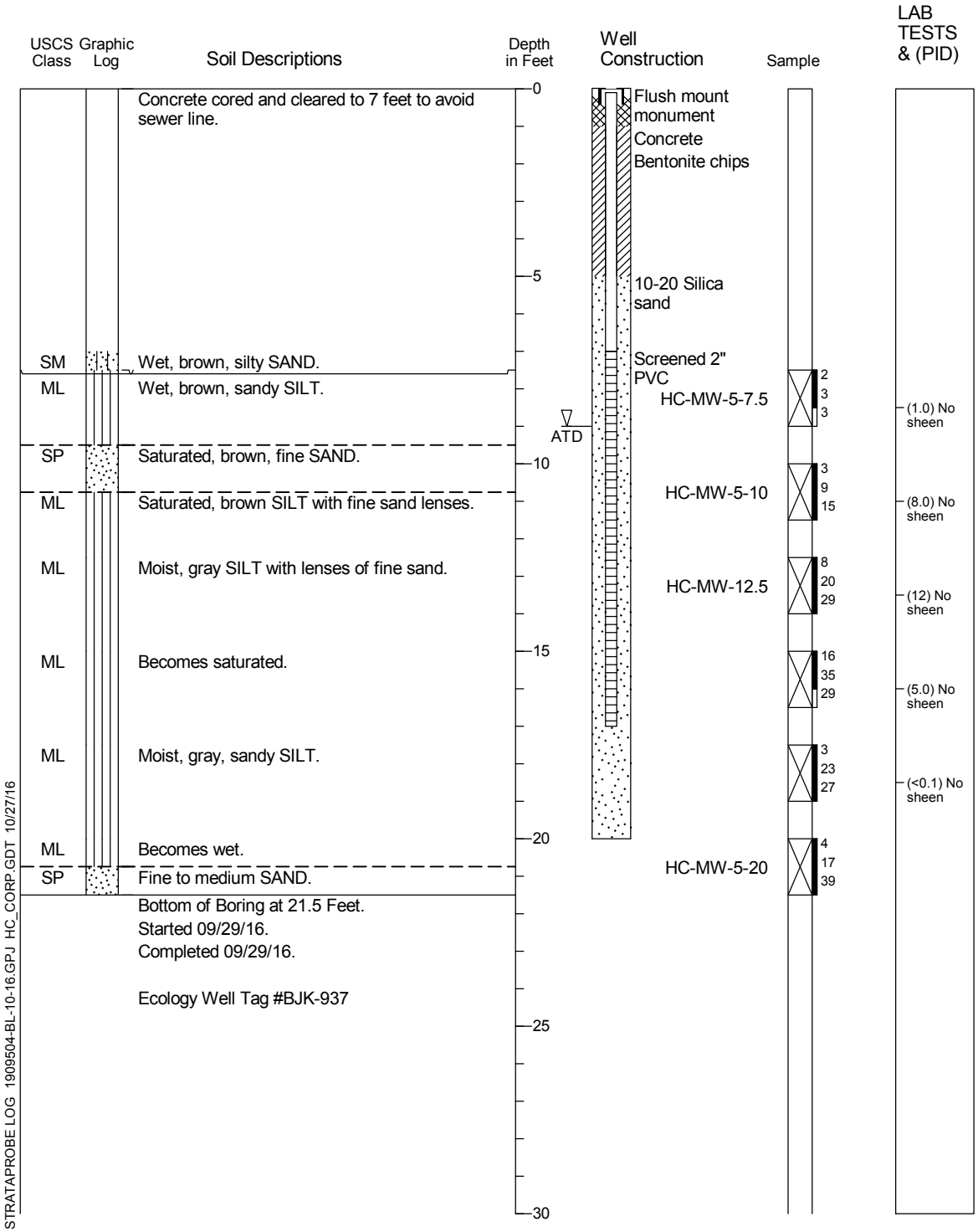
19095-04 *9/16*

Figure A-5

Boring Log HC-MW-5

Location: 47° 34' 42.38" N 122° 17' 43.98" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



STRATAPROBE LOG 1909504-BL-10-16.GPJ HC_CORP.GDT 10/27/16

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
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4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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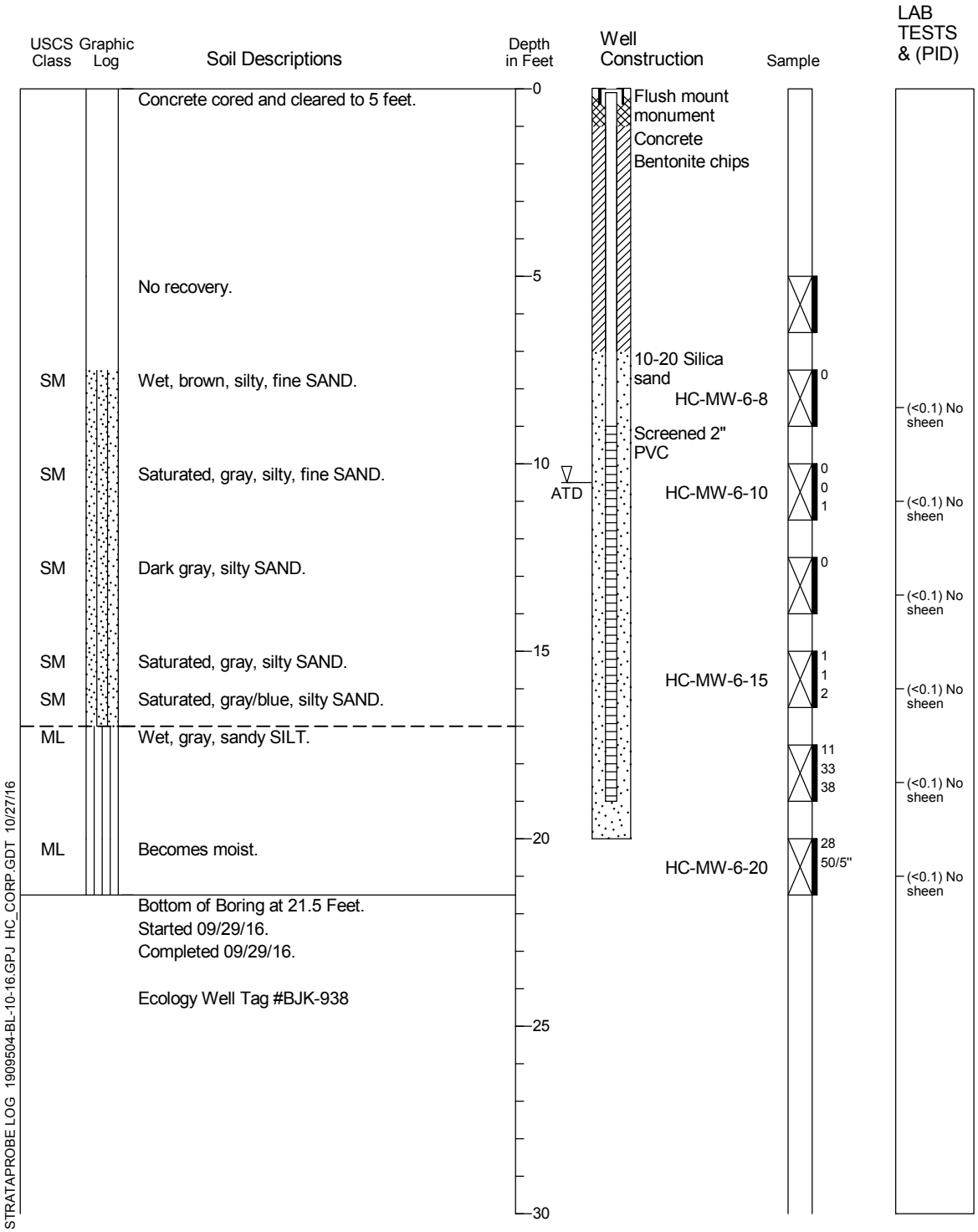
Figure A-6

Boring Log HC-MW-6

Location: 47° 34' 42.58" N 122° 17' 45.88" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



STRATAPROBE LOG 1909504-BL-10-16.GPJ HC_CORP.GDT 10/27/16

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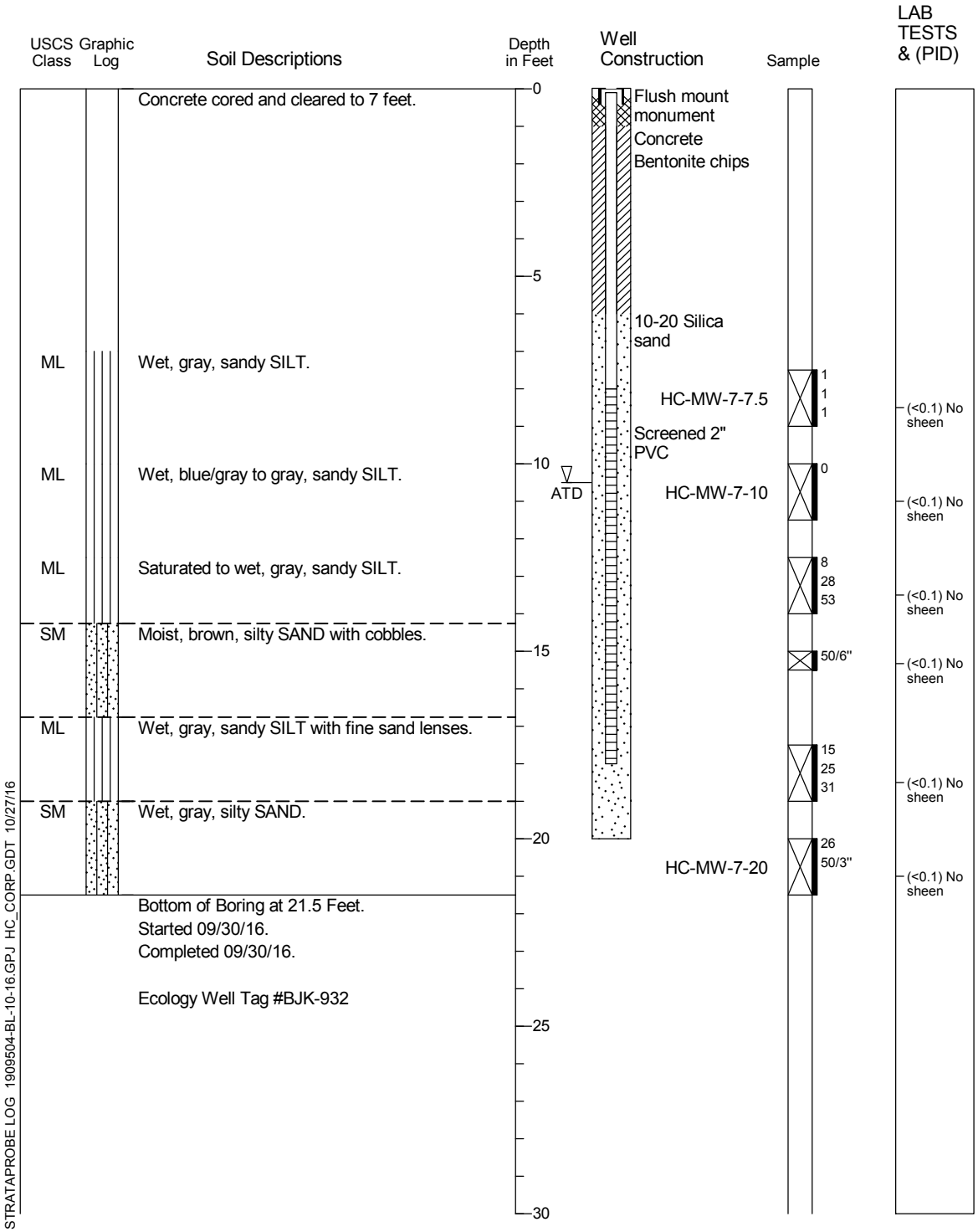
Figure A-7

Boring Log HC-MW-7

Location: 47° 34' 43.12" N 122° 17' 45.86" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



STRATAPROBE LOG 1909504-BL-10-16.GPJ HC_CORP.GDT 10/27/16

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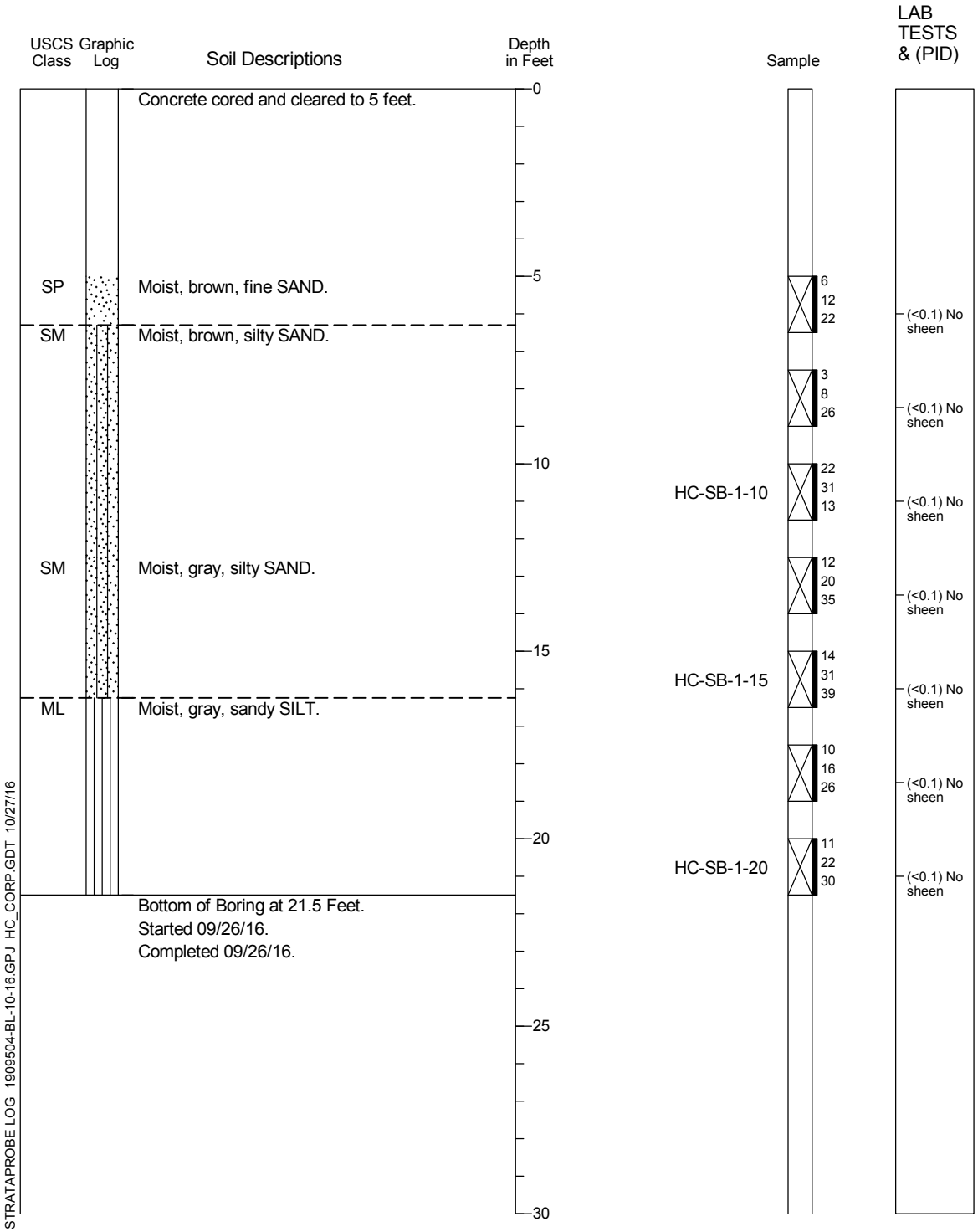
Figure A-8

Boring Log HC-SB-1

Location: 47° 34' 42.95" N 122° 17' 42.87" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



STRATAPROBE LOG 1909504-BL-10-16.GPJ HC_CORP.GDT 10/27/16

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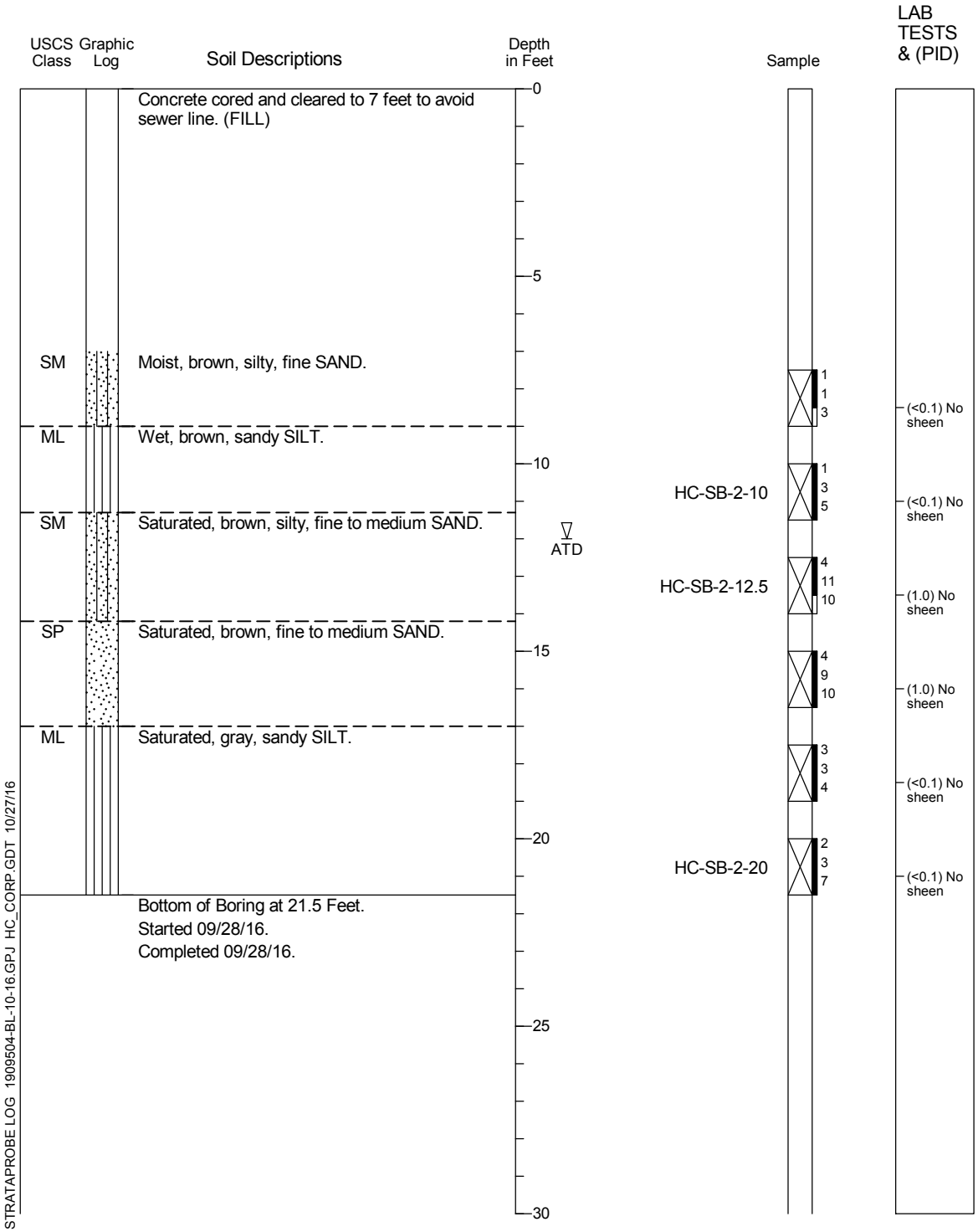
Figure A-9

Boring Log HC-SB-2

Location: 47° 34' 42.38" N 122° 17' 44.83" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



STRATAPROBE LOG 1909504-BL-10-16.GPJ HC_CORP.GDT 10/27/16

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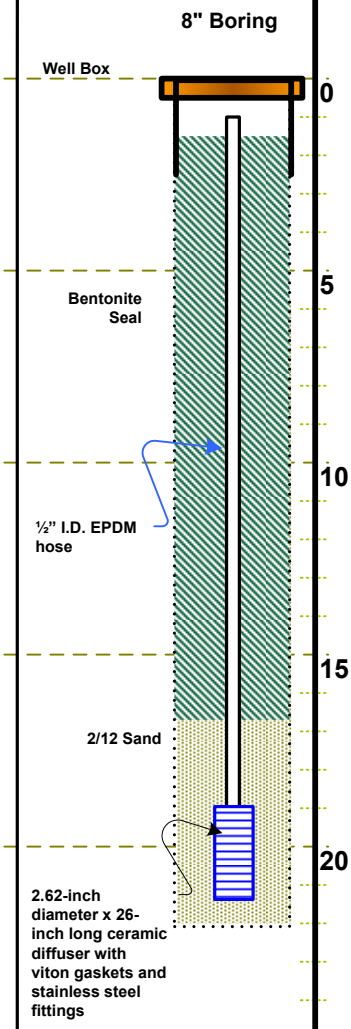
Figure A-10

01-0356-cip-1 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Soil and subsurface gravel				
			Silty Sand, poorly graded, Olive, moist, loose, medium dense, not compacted, fine to medium sand		SM		
			Groundwater encountered at ~ 13-feet As above, color change to Olive Grey at 13-14-feet				
			Sandy Silt, Grey, wet, very dense, till. E.O.B. at 22-feet		ML		



0 5 10 15 20 25 30

Depth in feet

Drilling Method:	Hollow-stem auger	**Date:** 8-19-05	**Other Information:**
Drilling Company:	Cascade Drilling	**Weather:** Sunny	
Boring Diameter:	8-inches	**Page** 1 **of** 1	
Logged By:	Harrington		

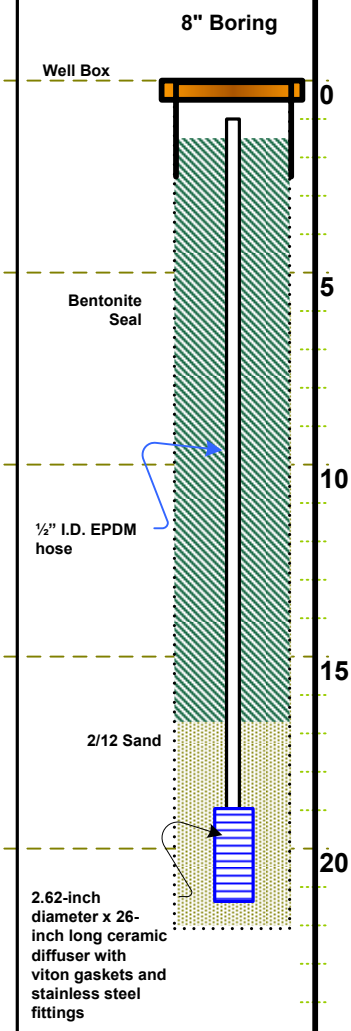
g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

IP-1

01-0356-cip-2 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Soil and subsurface gravel				
			Silty Sand, poorly graded, Olive, moist, loose, medium dense, not compacted, fine to medium sand		SM		
			As above, color change to Olive Grey at 12-13-feet Groundwater encountered at ~ 13-feet				
			Sandy Silt, Grey, wet, very dense, till. E.O.B. at 22-feet		ML		



0 5 10 15 20 25 30

Depth in feet

Drilling Method:	Hollow-stem auger	Date: 8-19-05	Other Information:
Drilling Company:	Cascade Drilling	Weather: Sunny	
Boring Diameter:	8-inches	Page 1 of 1	
Logged By:	Harrington		

g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

IP-2

01-0356-cip-3 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Asphalt and subsurface gravel				8" Boring; Well Box
			Silty Sand, poorly graded, Olive, moist, loose, medium dense, not compacted, fine to medium sand		SM		Bentonite Seal; ½" I.D. EPDM hose
			As above, color change to Olive Grey at 12-feet Groundwater encountered at ~ 13-feet				2/12 Sand
			Sandy Silt, Grey, wet, very dense, till.		ML		2.62-inch diameter x 26-inch long ceramic diffuser with viton gaskets and stainless steel fittings
			E.O.B. at 22-feet				

0 5 10 15 20 25 30

Depth in feet

Drilling Method:	Hollow-stem auger	**Date:** 8-19-05	**Other Information:**
Drilling Company:	Cascade Drilling	**Weather:** Sunny	
Boring Diameter:	8-inches	**Page** 1 **of** 1	
Logged By:	Harrington		

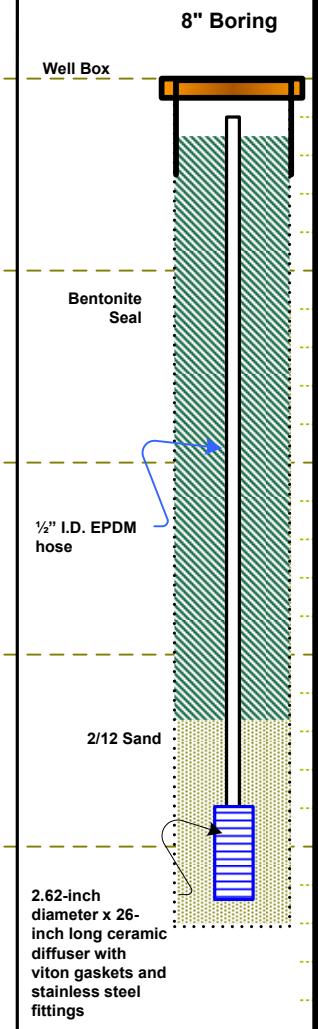
g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

IP-3

01-0356-cip-4 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Concrete and subsurface gravel				
			Silty Sand, poorly graded, Olive, moist, loose, medium dense, not compacted, fine to medium sand		SM		
			Groundwater and odor encountered at ~ 13-feet As above, color change to Olive Grey at 13-feet				
			Sandy Silt, Grey, wet, very dense, till. E.O.B. at 22-feet		ML		



0 5 10 15 20 25 30

Depth in feet

Drilling Method:	Hollow-stem auger	**Date:** 8-19-05	**Other Information:**
Drilling Company:	Cascade Drilling	**Weather:** Sunny	
Boring Diameter:	8-inches	**Page** 1 **of** 1	
Logged By:	Harrington		

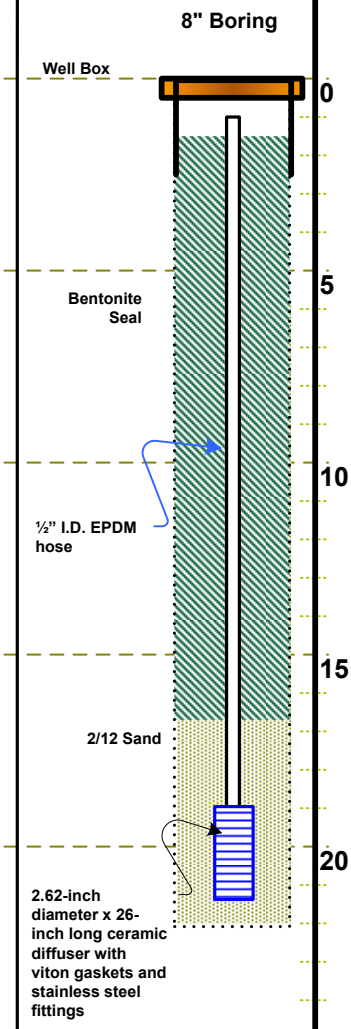
g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

IP-4

01-0356-cip-5 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Asphalt and subsurface gravel				
			Silty Sand, poorly graded, Olive, moist, loose, medium dense, not compacted, fine to medium sand		SM		
			Groundwater encountered at ~ 13-feet				
			As above, color change to Olive Grey at 17-19-feet				
			Sandy Silt, Grey, wet, very dense, till. E.O.B. at 22-feet		ML		



0 5 10 15 20 25 30

Depth in feet

Drilling Method:	Hollow-stem auger	Date: 8-19-05	Other Information:
Drilling Company:	Cascade Drilling	Weather: Sunny	
Boring Diameter:	8-inches	Page 1 of 1	
Logged By:	Harrington		

g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

IP-5

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

LEGEND

- Soil Boring Location
- Monitoring Well Location
- Site Boundary
- Tax Lot

0 30 60 120

Scale in Feet

N

Mount Baker Strip Property
2802, 2806, 2810, and 2864 S. McClellan St.

Site Plan with Monitoring Well and Soil Boring Locations

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Figure 2

Document Path: L:\Notebooks\1909504_Mt Baker Housing Association Phase II\GIS\1909504_SP2.mxd Date: 10/26/2016 User Name: ericlindquist

Key to Exploration Logs

Sample Description

Classification of soils in this report is based on visual field and laboratory observations which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field nor laboratory testing unless presented herein. Visual-manual classification methods of ASTM D 2488 were used as an identification guide.

Soil descriptions consist of the following:
Density/consistency, moisture, color, minor constituents, MAJOR CONSTITUENT, additional remarks.

Density/Consistency

Soil density/consistency in borings is related primarily to the Standard Penetration Resistance. Soil density/consistency in test pits and probes is estimated based on visual observation and is presented parenthetically on the logs.

SAND or GRAVEL Density	Standard Penetration Resistance (N) in Blows/Foot	SILT or CLAY Consistency	Standard Penetration Resistance (N) in Blows/Foot	Approximate Shear Strength in TSF
Very loose	0 to 4	Very soft	0 to 2	<0.125
Loose	4 to 10	Soft	2 to 4	0.125 to 0.25
Medium dense	10 to 30	Medium stiff	4 to 8	0.25 to 0.5
Dense	30 to 50	Stiff	8 to 15	0.5 to 1.0
Very dense	>50	Very stiff	15 to 30	1.0 to 2.0
		Hard	>30	>2.0

Sampling Test Symbols

- 1.5" I.D. Split Spoon
- Grab (Jar)
- 3.0" I.D. Split Spoon
- Shelby Tube (Pushed)
- Bag
- Cuttings
- Core Run

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

Moisture

Dry	Little perceptible moisture
Damp	Some perceptible moisture, likely below optimum
Moist	Likely near optimum moisture content
Wet	Much perceptible moisture, likely above optimum

Minor Constituents	Estimated Percentage
Trace	<5
Slightly (clayey, silty, etc.)	5 - 12
Clayey, silty, sandy, gravelly	12 - 30
Very (clayey, silty, etc.)	30 - 50

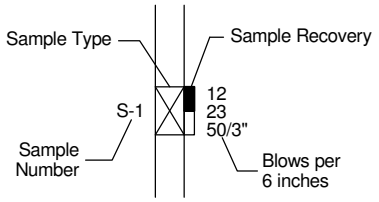
Laboratory Test Symbols

GS	Grain Size Classification
CN	Consolidation
UU	Unconsolidated Undrained Triaxial
CU	Consolidated Undrained Triaxial
CD	Consolidated Drained Triaxial
QU	Unconfined Compression
DS	Direct Shear
K	Permeability
PP	Pocket Penetrometer Approximate Compressive Strength in TSF
TV	Torvane Approximate Shear Strength in TSF
CBR	California Bearing Ratio
MD	Moisture Density Relationship
AL	Atterberg Limits
	Water Content in Percent Liquid Limit Natural Plastic Limit
PID	Photoionization Detector Reading
CA	Chemical Analysis
DT	In Situ Density in PCF
OT	Tests by Others

Groundwater Indicators

- Groundwater Level on Date or (ATD) At Time of Drilling
- Groundwater Seepage (Test Pits)

Sample Key



HARTCROWSER

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Figure A-1

KEY SHEET 1909504-BL-10-16.GPJ HC_CORP.GDT 10/18/16

Boring Log HC-MW-1

Location: 47° 34' 42.06" N 122° 17' 44.98" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby

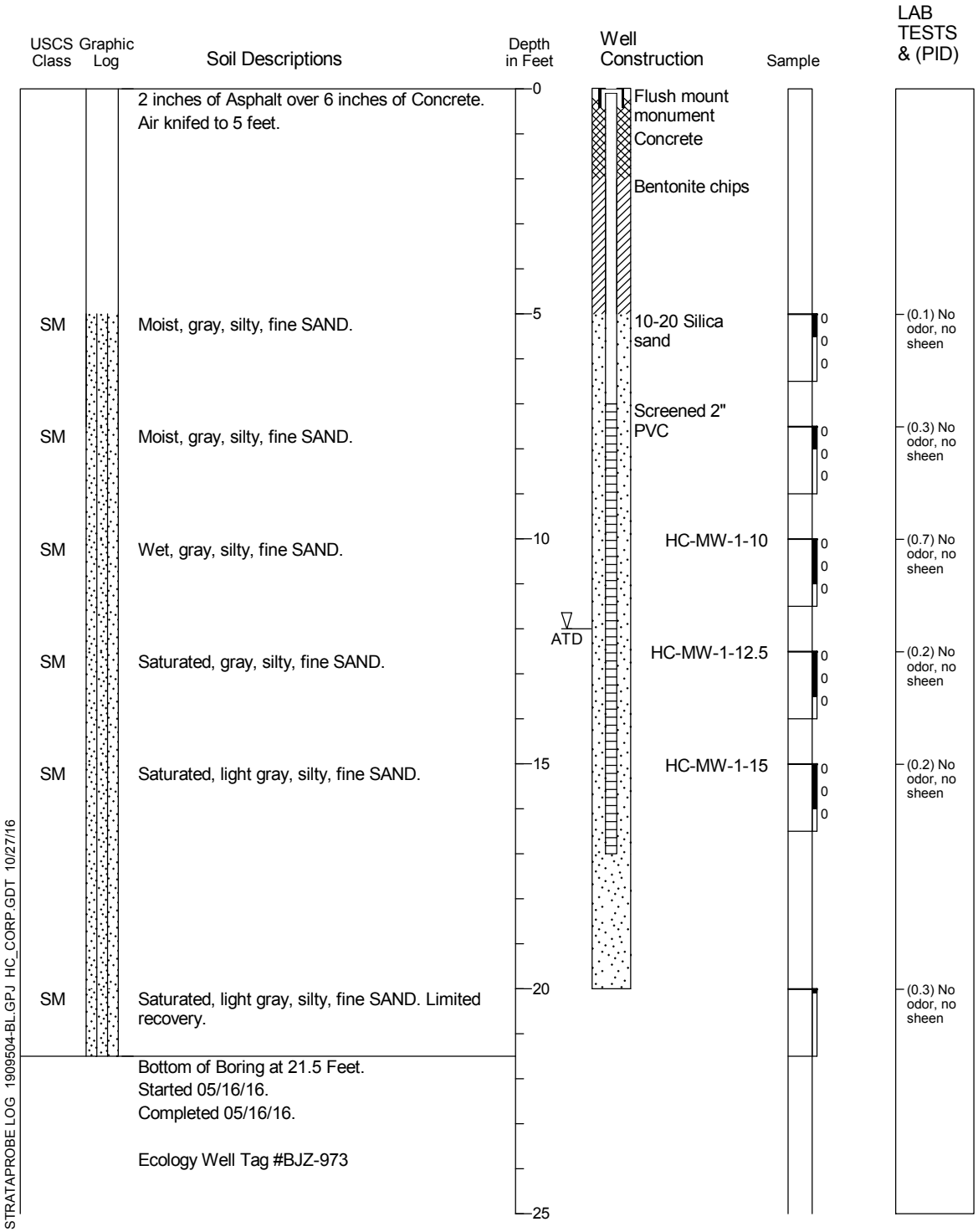

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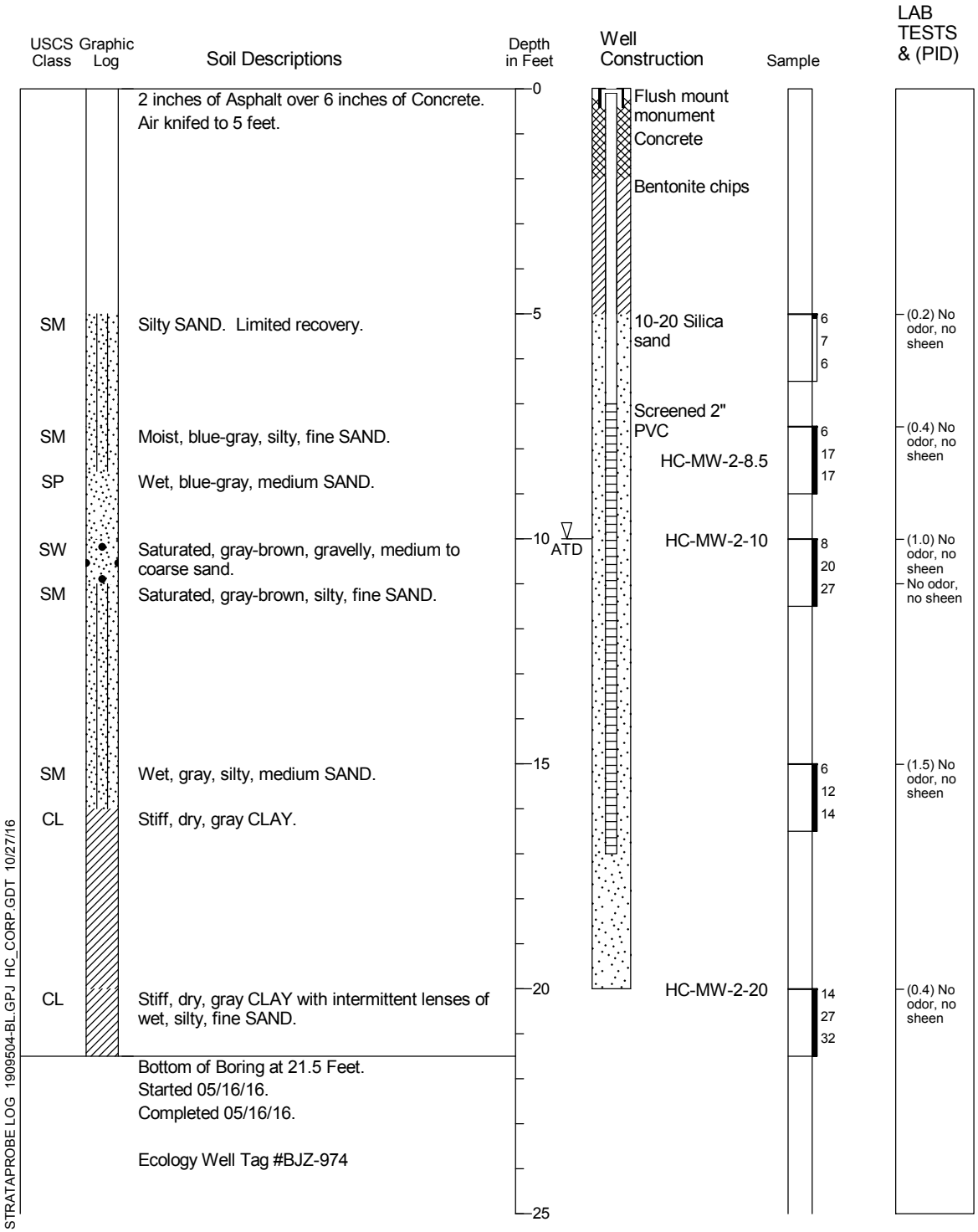
Figure A-2

Boring Log HC-MW-2

Location: 47° 34' 42.07" N 122° 17' 43.44" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



STRATAPROBE LOG 1909504-BL.GPJ HC_CORP.GDT 10/27/16

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HARTCROWSER

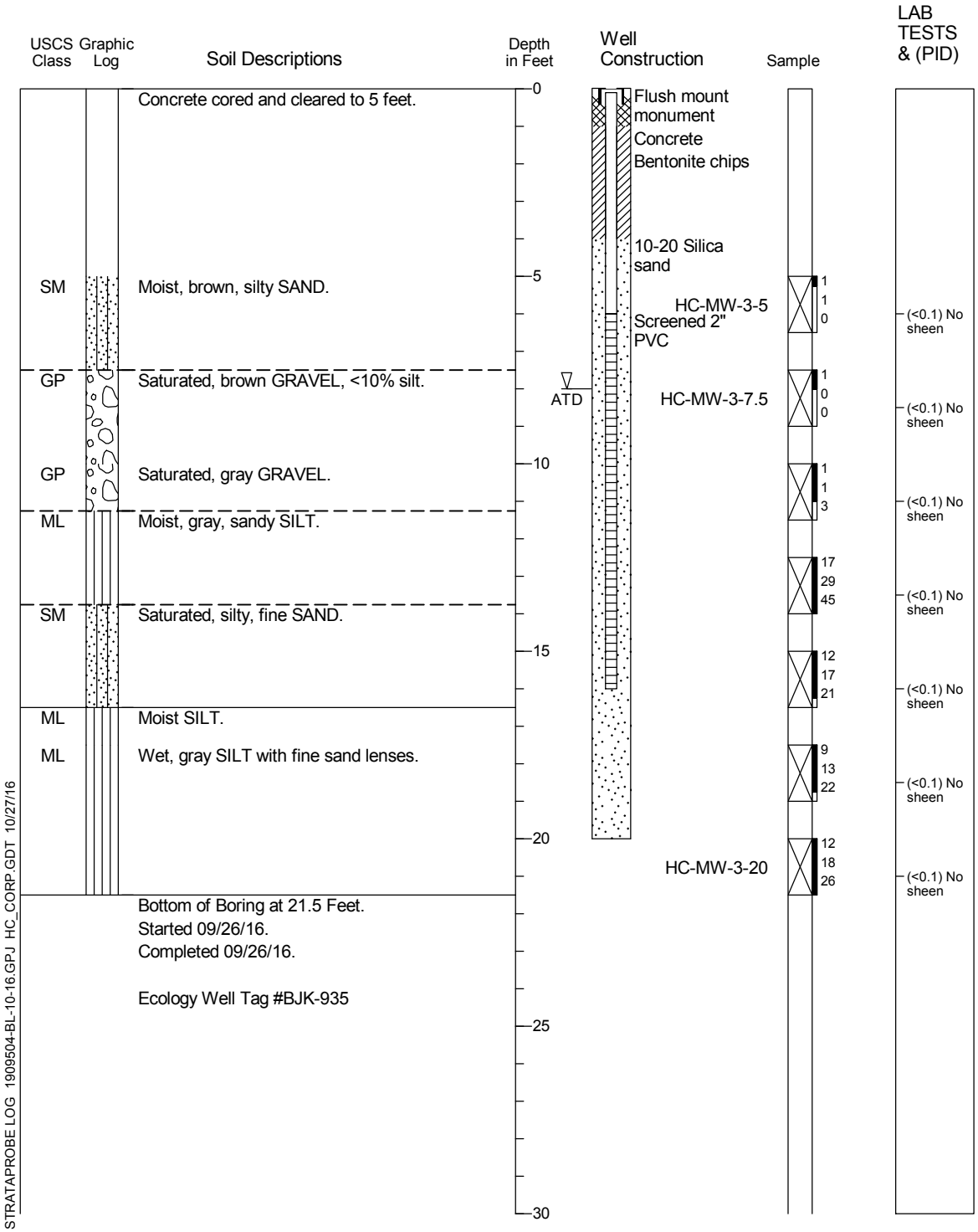
19095-04 *5/16*

Figure A-3

Boring Log HC-MW-3

Location: 47° 34' 42.54" N 122° 17' 42.88" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



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19095-04 *9/16*

Figure A-4

Boring Log HC-MW-4

Location: 47° 34' 43.63" N 122° 17' 42.87" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby

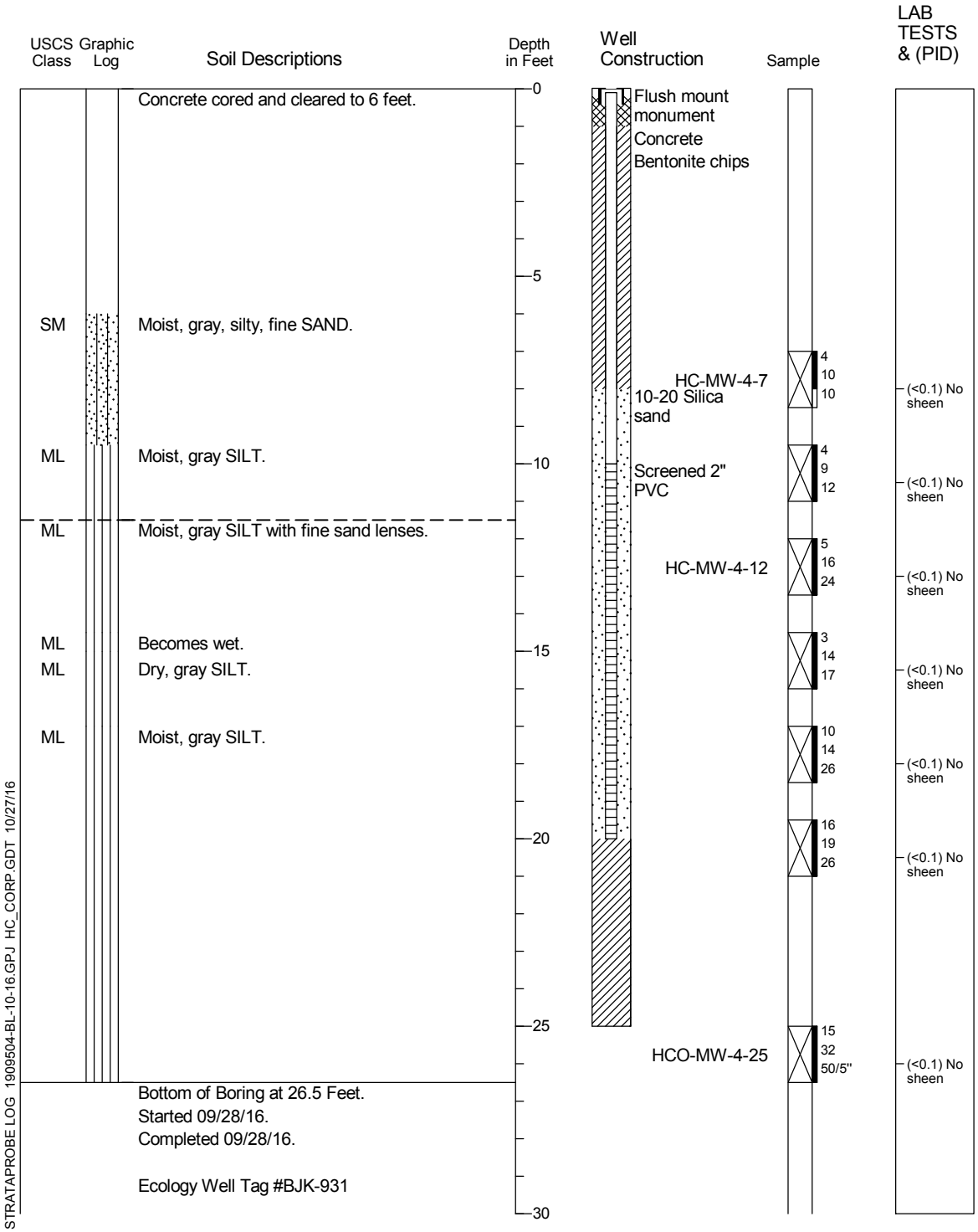

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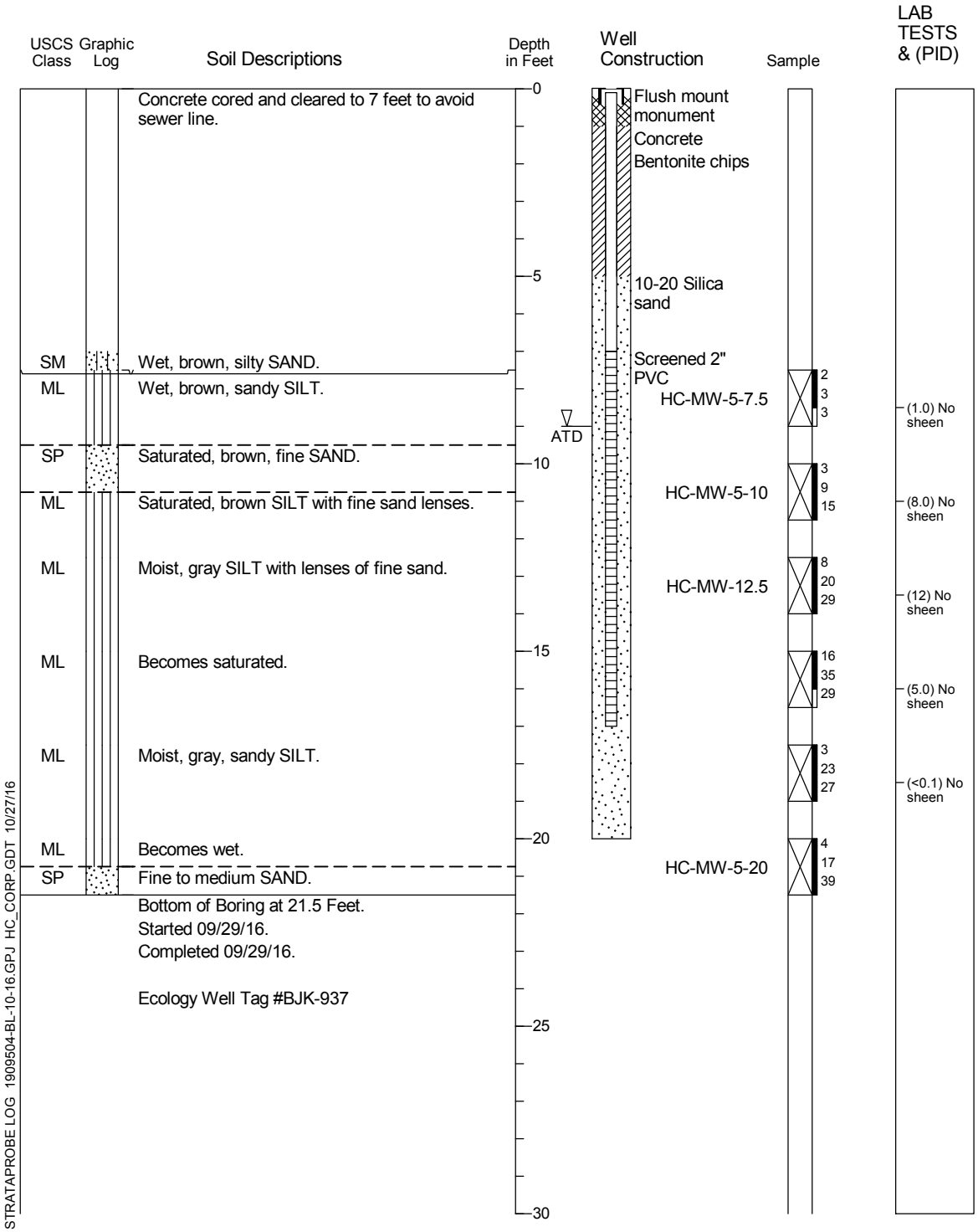
Figure A-5

Boring Log HC-MW-5

Location: 47° 34' 42.38" N 122° 17' 43.98" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



STRATAPROBE LOG 1909504-BL-10-16.GPJ HC_CORP.GDT 10/27/16

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HARTCROWSER

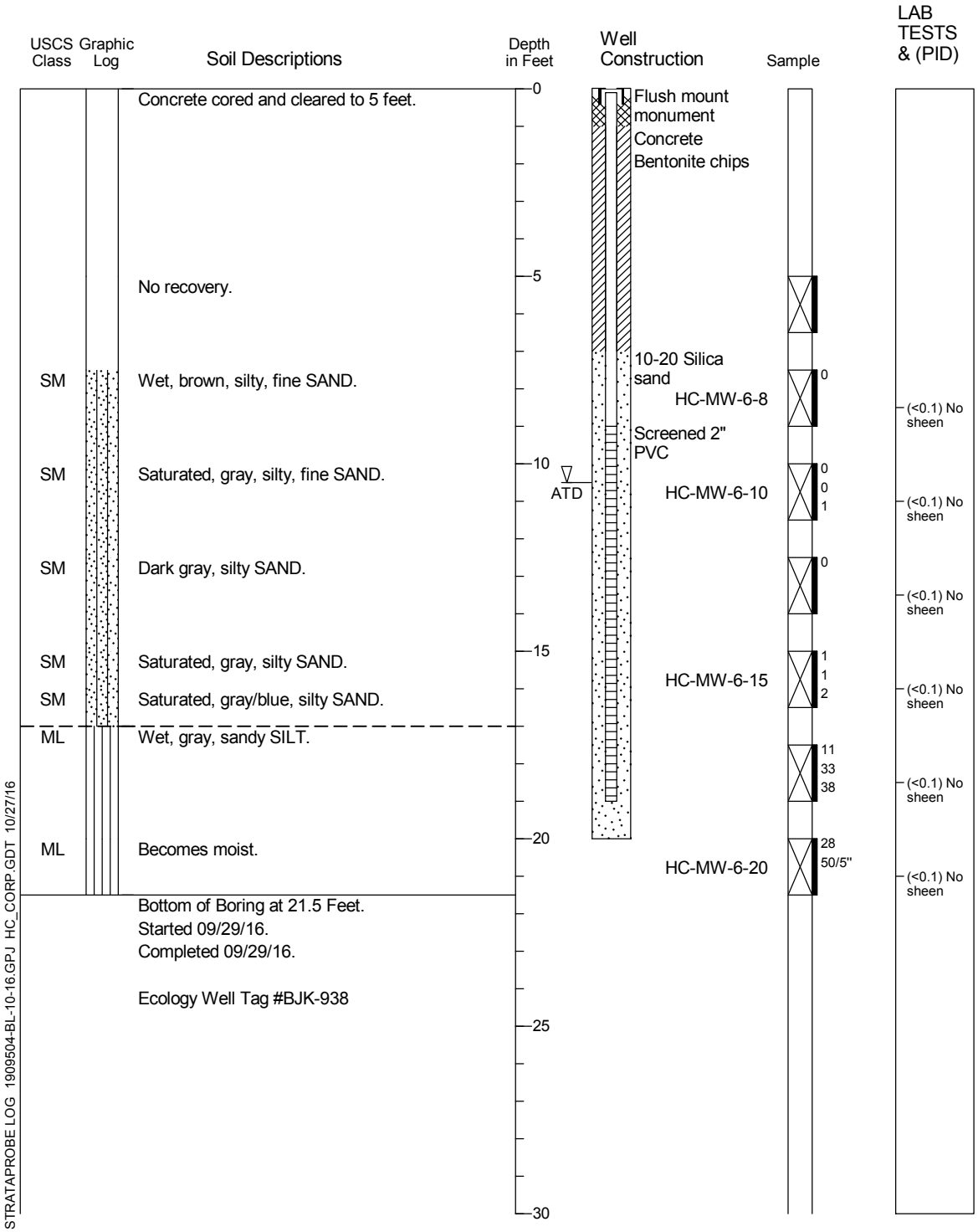
19095-04 *9/16*

Figure A-6

Boring Log HC-MW-6

Location: 47° 34' 42.58" N 122° 17' 45.88" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



STRATAPROBE LOG 1909504-BL-10-16.GPJ HC_CORP.GDT 10/27/16

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HARTCROWSER

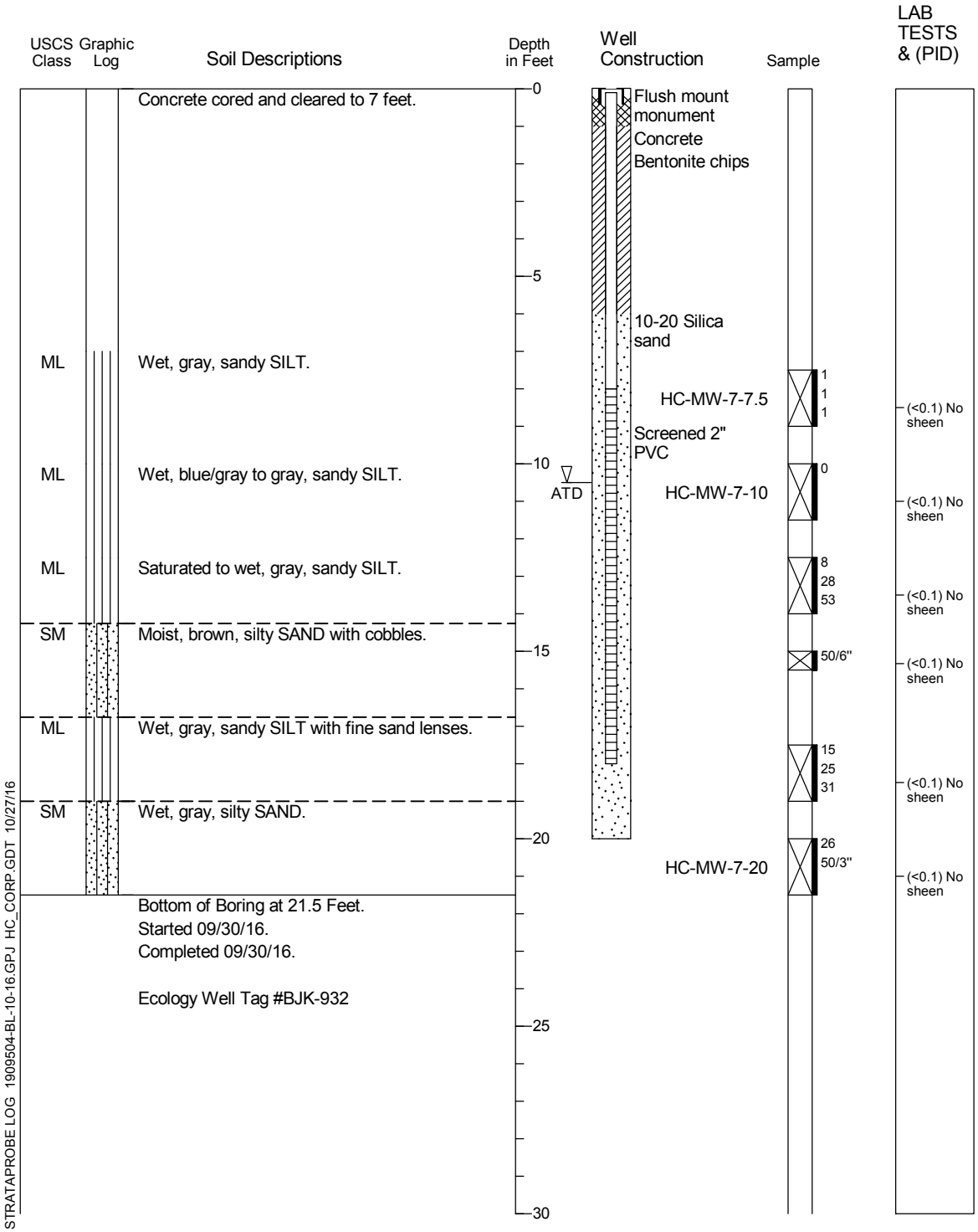
19095-04 *9/16*

Figure A-7

Boring Log HC-MW-7

Location: 47° 34' 43.12" N 122° 17' 45.86" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



STRATAPROBE LOG 1909504-BL-10-16.GPJ HC_CORP.GDT 10/27/16

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

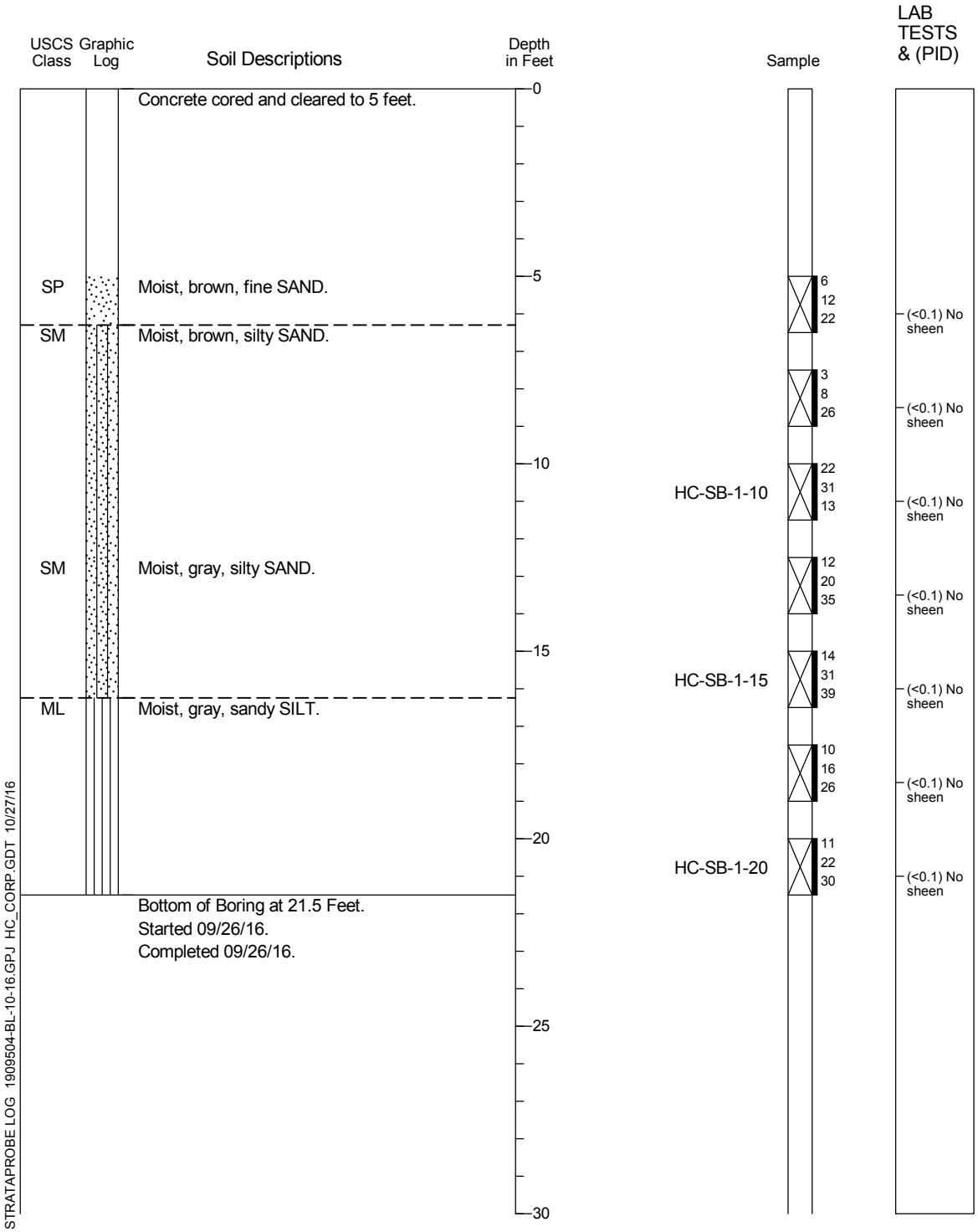
19095-04 *9/16*

Figure A-8

Boring Log HC-SB-1

Location: 47° 34' 42.95" N 122° 17' 42.87" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



STRATAPROBE LOG 1909504-BL-10-16.GPJ HC_CORP.GDT 10/27/16

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

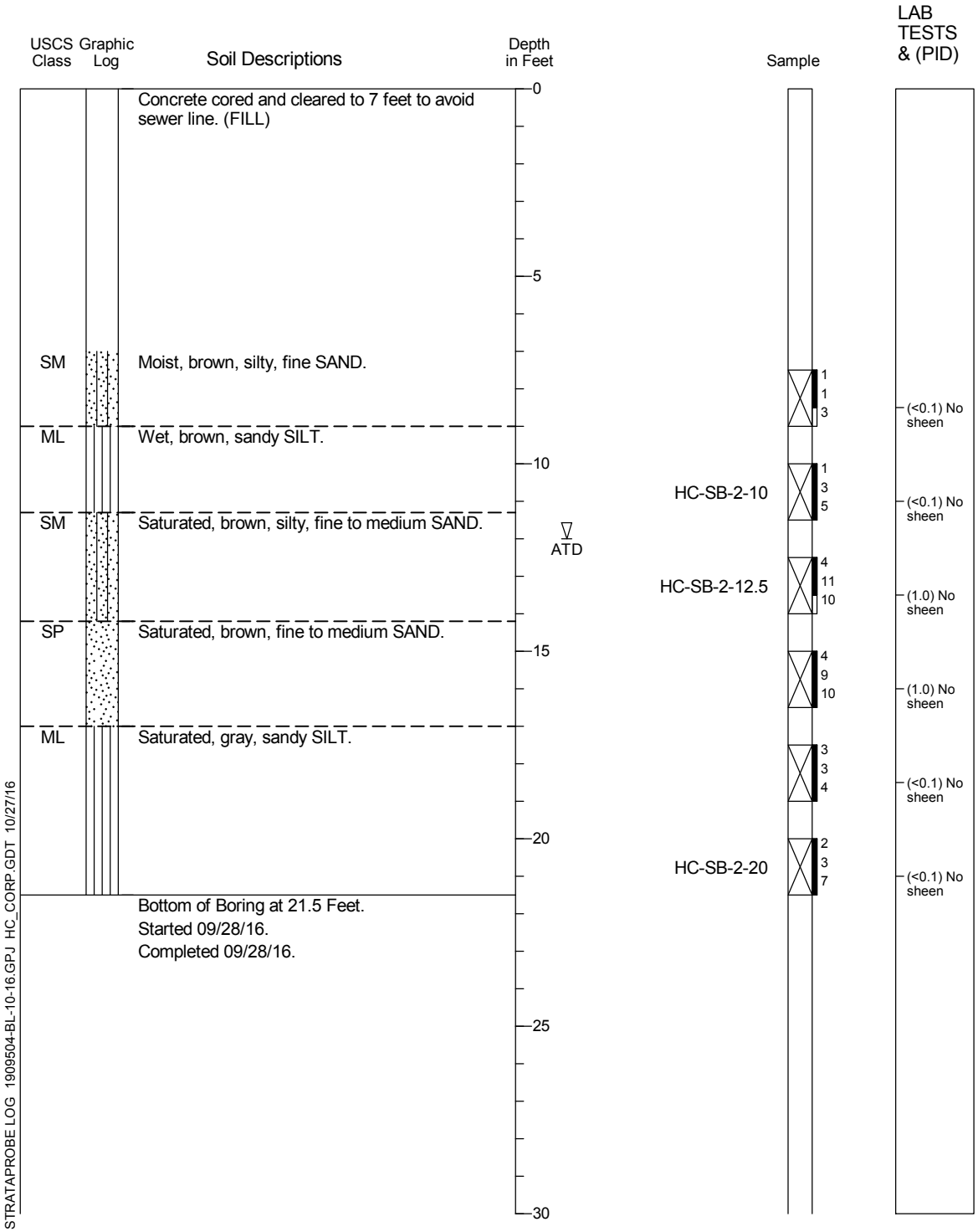
19095-04 *9/16*

Figure A-9

Boring Log HC-SB-2

Location: 47° 34' 42.38" N 122° 17' 44.83" W
Approximate Ground Surface Elevation: Feet
Horizontal Datum: WGS84
Vertical Datum:

Drill Equipment: Hollow Stem Auger
Hammer Type: 140 lb. Autohammer
Hole Diameter: 8 inches
Logged By: J. Green Reviewed By: R. Stainsby



STRATAPROBE LOG 1909504-BL-10-16.GPJ HC_CORP.GDT 10/27/16

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

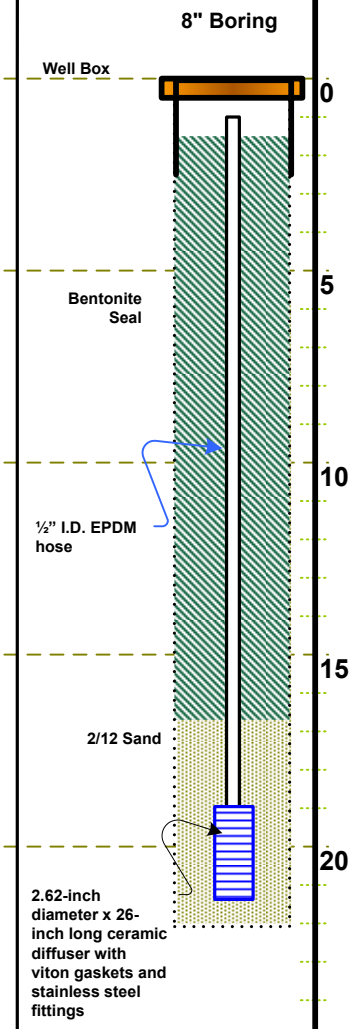
HARTCROWSER

19095-04 *9/16*

Figure A-10

01-0356-cip-1 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Soil and subsurface gravel				
			Silty Sand, poorly graded, Olive, moist, loose, medium dense, not compacted, fine to medium sand		SM		
			Groundwater encountered at ~ 13-feet As above, color change to Olive Grey at 13-14-feet				
			Sandy Silt, Grey, wet, very dense, till. E.O.B. at 22-feet		ML		



0 5 10 15 20 25 30

Depth in feet

Drilling Method:	Hollow-stem auger	**Date:** 8-19-05	**Other Information:**
Drilling Company:	Cascade Drilling	**Weather:** Sunny	
Boring Diameter:	8-inches	**Page** 1 **of** 1	
Logged By:	Harrington		

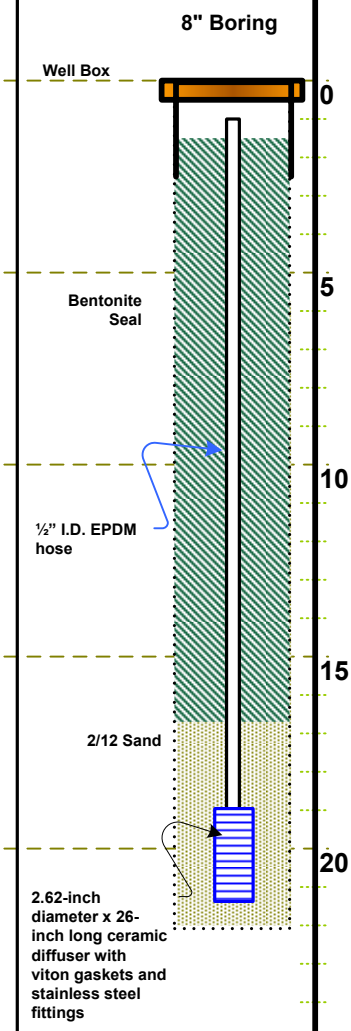
g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

IP-1

01-0356-cip-2 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Soil and subsurface gravel				
			Silty Sand, poorly graded, Olive, moist, loose, medium dense, not compacted, fine to medium sand		SM		
			As above, color change to Olive Grey at 12-13-feet Groundwater encountered at ~ 13-feet				
			Sandy Silt, Grey, wet, very dense, till. E.O.B. at 22-feet		ML		



0 5 10 15 20 25 30

Depth in feet

Drilling Method:	Hollow-stem auger	Date: 8-19-05	Other Information:
Drilling Company:	Cascade Drilling	Weather: Sunny	
Boring Diameter:	8-inches	Page 1 of 1	
Logged By:	Harrington		

g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

IP-2

01-0356-cip-3 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Asphalt and subsurface gravel				8" Boring; Well Box
			Silty Sand, poorly graded, Olive, moist, loose, medium dense, not compacted, fine to medium sand		SM		Bentonite Seal; ½" I.D. EPDM hose
			As above, color change to Olive Grey at 12-feet Groundwater encountered at ~ 13-feet				2/12 Sand
			Sandy Silt, Grey, wet, very dense, till.		ML		2.62-inch diameter x 26-inch long ceramic diffuser with viton gaskets and stainless steel fittings
			E.O.B. at 22-feet				

0 5 10 15 20 25 30

Depth in feet

Drilling Method:	Hollow-stem auger	**Date:** 8-19-05	**Other Information:**
Drilling Company:	Cascade Drilling	**Weather:** Sunny	
Boring Diameter:	8-inches	**Page** 1 **of** 1	
Logged By:	Harrington		

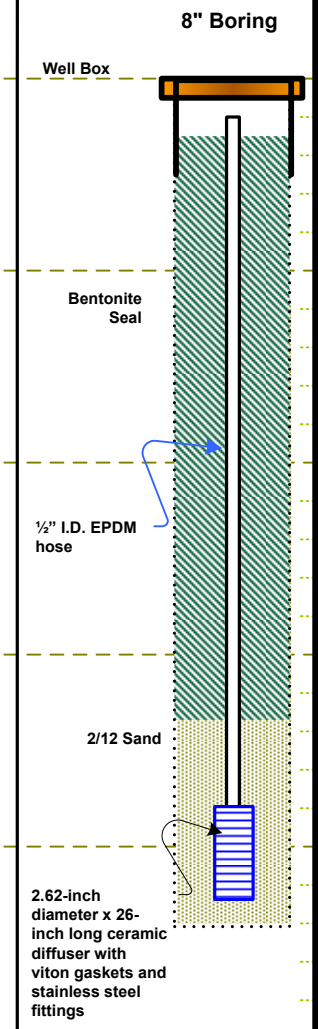
g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

IP-3

01-0356-cip-4 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Concrete and subsurface gravel				
			Silty Sand, poorly graded, Olive, moist, loose, medium dense, not compacted, fine to medium sand		SM		
			Groundwater and odor encountered at ~ 13-feet As above, color change to Olive Grey at 13-feet				
			Sandy Silt, Grey, wet, very dense, till. E.O.B. at 22-feet		ML		



0 5 10 15 20 25 30

Depth in feet

Drilling Method:	Hollow-stem auger	**Date:** 8-19-05	**Other Information:**
Drilling Company:	Cascade Drilling	**Weather:** Sunny	
Boring Diameter:	8-inches	**Page** 1 **of** 1	
Logged By:	Harrington		

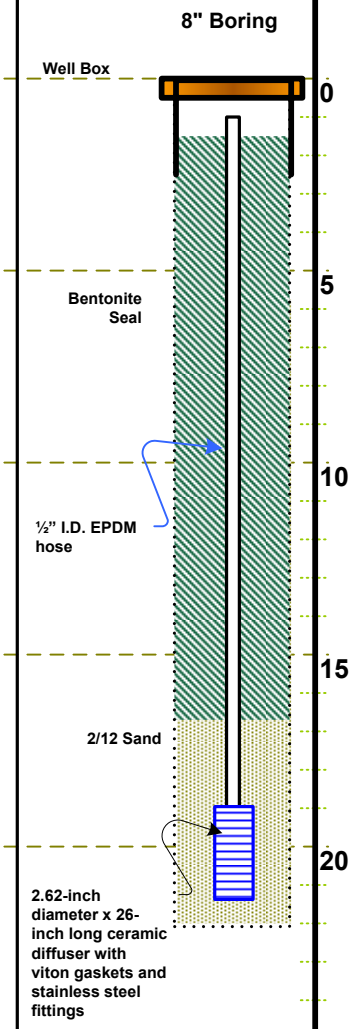
g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

IP-4

01-0356-cip-5 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Asphalt and subsurface gravel				
			Silty Sand, poorly graded, Olive, moist, loose, medium dense, not compacted, fine to medium sand		SM		
			Groundwater encountered at ~ 13-feet				
			As above, color change to Olive Grey at 17-19-feet				
			Sandy Silt, Grey, wet, very dense, till. E.O.B. at 22-feet		ML		



0 5 10 15 20 25 30

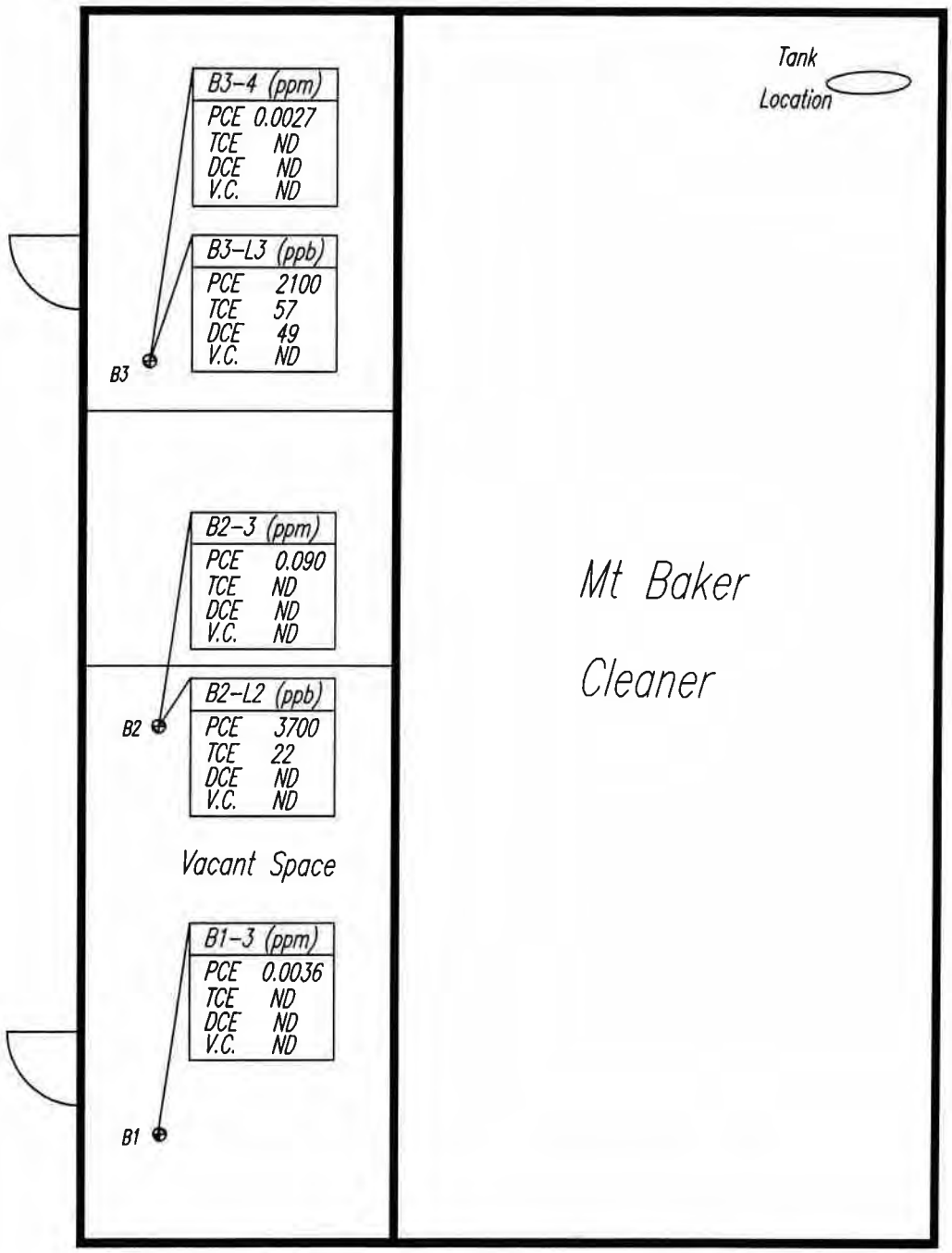
Depth in feet

Drilling Method:	Hollow-stem auger	Date: 8-19-05	Other Information:
Drilling Company:	Cascade Drilling	Weather: Sunny	
Boring Diameter:	8-inches	Page 1 of 1	
Logged By:	Harrington		

g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

IP-5



Legend:

⊕ Sampling Location

Not to Scale

KEE, LLC
P.O. Box 2532, Redmond, WA 98073-2532
(206)914-4989 (P),(425)836-0463 (F)

Site Plan

Mt Baker Cleaners
Seattle, WA

File Number: MC052410-001
Sample Date: May 24, 2010
Figure 2

B1

SAMPLE DATA					SOIL PROFILE			GROUNDWATER	
Depth (ft)	Sample Location	Sampler Type	Blows/Foot	FID (ppm)	Graphic Symbol	USCS Symbol	Sampling Method : Hand Auger Ground Elevation (ft) : No Reference Sampled By : KEE, LLC Sampling Completion on : 5/24/10	Water Level	Monitoring Well on site: No
0									Locking waterproof well seal in flush-mounted monument
1									
2						SP-SM	Brown, fine to medium SAND with silt, micaceous, non-plastic (loose, dry to moist) (no odor) (hydraulic fill)		Concrete
3	⊕	Hand Auger		0					Bentonite chips
4									
5									
6									
7									10/20 Colorado sand pack
8									
9									
10									
11									
12									3/4-inch diameter, schedule 40 PVC screen (0.020-inch slot size), with Pre-Pack filter
13									
14									
15									Threaded end cap

Notes: 1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Refer to "Unified Soil Classification System" for explanation of graphics and symbols.

LEGEND:
⊕ Sampling Location
▽ Water Table

KEE, LLC
P.O. Box 2532, Redmond, WA 98073-2532
(206)914-4989 (P),(425)836-0463 (F)

Log of Boring B1
Mt Baker Cleaners
Seattle, WA

File Number: MC052410-001
Sampling Date: May 24, 2010
Figure B1

B2

SAMPLE DATA					SOIL PROFILE			GROUNDWATER	
Depth (ft)	Sample Location	Sampler Type	Blows/Foot	FID (ppm)	Graphic Symbol	USCS Symbol	Sampling Method : Hand Auger Ground Elevation (ft) : No Reference Sampled By : KEE, LLC Sampling Completion on : 5/24/10	Water Level	Monitoring Well on site: Yes
0									Locking waterproof well seal in flush-mounted monument
1									
2						SP-SM	Brown, fine to medium SAND with silt, micaceous, non-plastic (loose, dry to moist) (no odor) (hydraulic fill)		Concrete
3	⊕	Hand Auger		0					Bentonite chips
4									
5									
6									
7									10/20 Colorado sand pack
8									
9									
10									
11								▽	
12									3/4-inch diameter, schedule 40 PVC screen (0.020-inch slot size), with Pre-Pack filter
13									
14						CL-CH	Dark Brown, fine to medium Clay with sand, silty clay, plastic (dense, moist to wet) (no odor)		
15									Threaded end cap

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Refer to "Unified Soil Classification System" for explanation of graphics and symbols.

LEGEND:
⊕ Sampling Location
▽ Water Table

KEE, LLC
P.O. Box 2532, Redmond, WA 98073-2532
(206)914-4989 (P),(425)836-0463 (F)

Log of Boring B2
Mt Baker Cleaners
Seattle, WA

File Number: MC052410-001
Sampling Date: May 24, 2010
Figure B2

B3

SAMPLE DATA					SOIL PROFILE			GROUNDWATER	
Depth (ft)	Sample Location	Sampler Type	Blows/Foot	FID (ppm)	Graphic Symbol	USCS Symbol	Sampling Method : Hand Auger Ground Elevation (ft) : No Reference Sampled By : KEE, LLC Sampling Completion on : 5/24/10	Water Level	Monitoring Well on site: Yes
0									Locking waterproof well seal in flush-mounted monument
1									
2						SP-SM	Brown, fine to medium SAND with silt, micaceous, non-plastic (loose, dry to moist) (no odor) (hydraulic fill)		Concrete
3	⊕	Hand Auger		0					Bentonite chips
4									
5									
6									
7									10/20 Colorado sand pack
8									
9									
10									
11								▽	
12									
13									3/4-inch diameter, schedule 40 PVC screen (0.020-inch slot size), with Pre-Pack filter
14						CL-CH	Dark Brown, fine to medium Clay with sand, silty clay, plastic (dense, moist to wet) (no odor)		
15									Threaded end cap

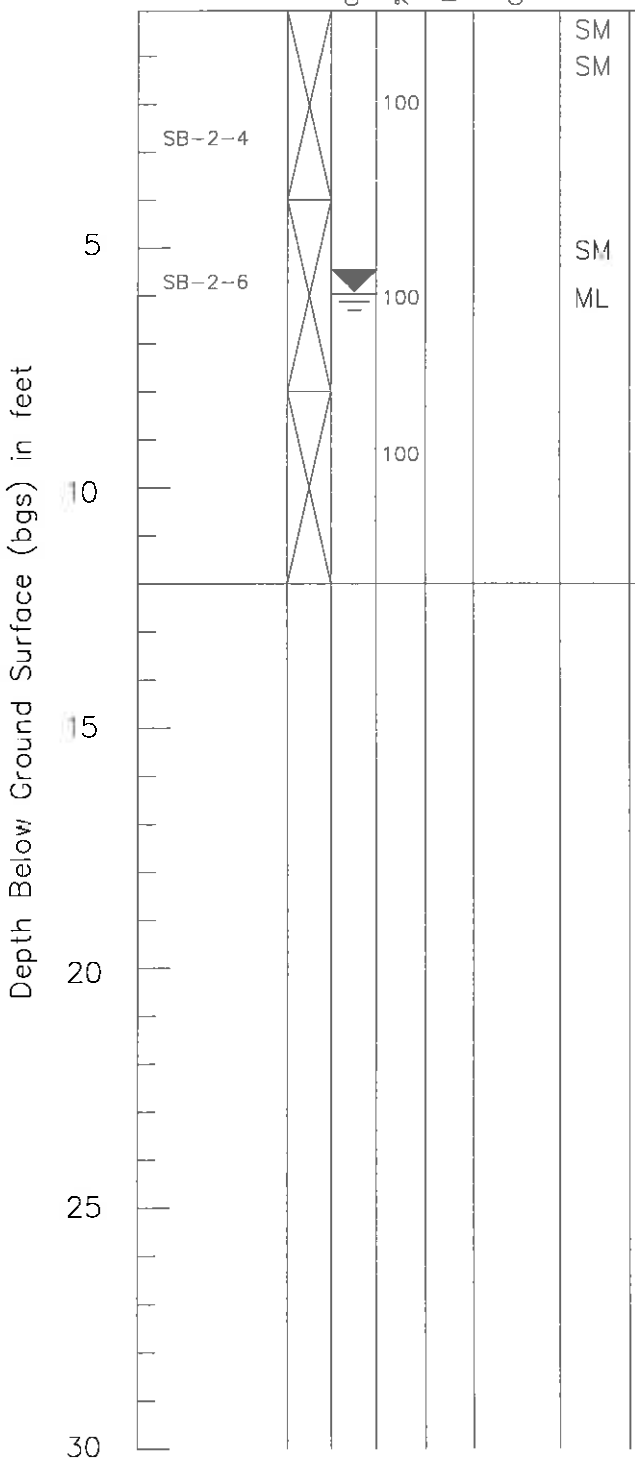
Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Refer to "Unified Soil Classification System" for explanation of graphics and symbols.

LEGEND:
⊕ Sampling Location
▽ Water Table

KEE, LLC
P.O. Box 2532, Redmond, WA 98073-2532
(206)914-4989 (P),(425)836-0463 (F)

Log of Boring B3
Mt Baker Cleaners
Seattle, WA

File Number: MC052410-001
Sampling Date: May 24, 2010
Figure B3



Logged by: Steve Worsley
Driller: ESN Northwest
Drilling Method: PowerProbe
Sampling Method: Acetate Liner
Casing Type: Not Applicable (NA)
Annular Pack: NA
Slot Size: NA

Hammer Size: NA
Date Drilled: 01/25/06
Hole Diameter: 1 inch
Hole Depth: 12 feet
Well Diameter: NA
Well Depth: NA
Screened Interval: NA

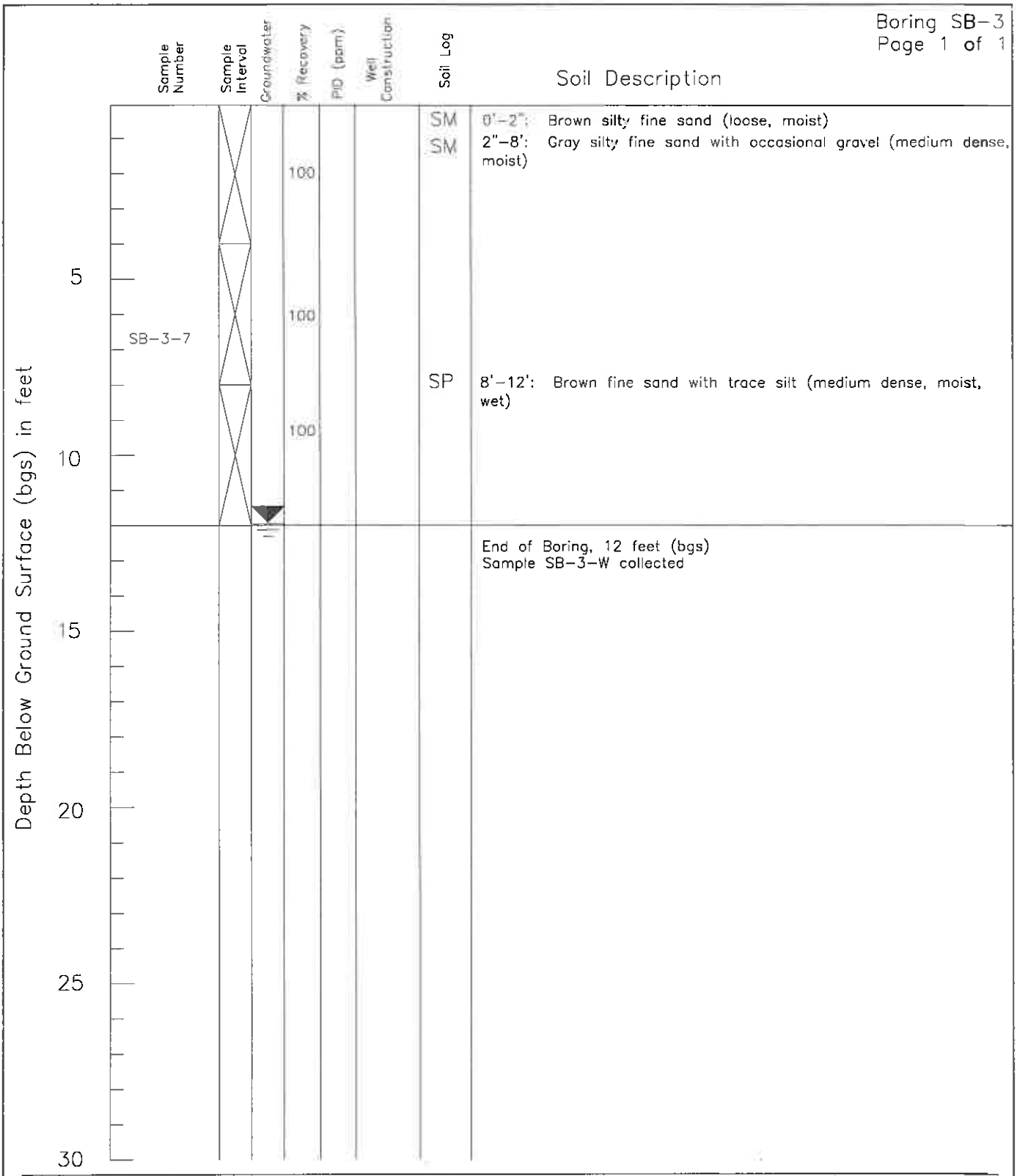
Depth to Water (First Encountered): 6 feet
Depth to Water (Static): NA
NR = no response

Soils classified visually using the Unified Soils Classification System

KANE ENVIRONMENTAL INC
3831 Stone Way N, Seattle, WA - 206-691-0476
www.kane-environmental.com

Phase I/II ESA
Mt. Baker Apts
2530-2580 29th Avenue South
Seattle, Washington

Soil Boring Log



Logged by: Steve Worsley	Hammer Size: NA	Depth to Water (First Encountered): 12 feet
Driller: ESN Northwest	Date Drilled: 01/25/06	Depth to Water (Static): NA
Drilling Method: PowerProbe	Hole Diameter: 1 inch	NR = no response
Sampling Method: Acetate Liner	Hole Depth: 12 feet	
Casing Type: Not Applicable (NA)	Well Diameter: NA	
Annular Pack: NA	Well Depth: NA	
Slot Size: NA	Screened Interval: NA	

Soils classified visually using the Unified Soils Classification System

KANE ENVIRONMENTAL INC
3831 Stone Way N, Seattle, WA - 206-691-0476
www.kane-environmental.com

Phase I/II ESA
Mt. Baker Apts
2530-2580 29th Avenue South
Seattle, Washington

Soil Boring Log

01-0356-cmw-1 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Exposed Soil				8" Boring
17 13 10		NS	Silty Sand, light brown, damp, medium dense, no odor.	15	SM		
13 17 20		NS	Silty Sand, changed to Olive Brown, damp, dense, no odor.	65	SM		
			Groundwater at 12.6'				
10 22 30		MW1-15	Gravely Sand, Grey, wet at 15', very dense, no odor.	60	SW		
100/6 100/6 100/6		MW1-20	Sandy Silt, Dark Grey, wet, very dense, no odor. Gravely Silt, Light Brown, very dense, no odor	10	ML		
100/5		NS	Silt (glacial till), Grey, wet, very dense E.O.B. at 23.5-feet	10			

Depth in feet

Well Box
Locking Well Cap
Concrete Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2/12 Sand
2" PVC Plug

Drilling Method:	Hollow-stem auger	Date: 8-9-05	Other Information:
Drilling Company:	Cascade Drilling	Weather:	
Boring Diameter:	8-inches	Page 1 of 1	
Logged By:	R. Roberts		

g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

MW-1

01-0356-cmw-2 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Concrete				8" Boring
2 6 12		NS	Gravely Sand, light brown, damp, medium dense, no odor.	20	SM		
			Groundwater at 13.2'				
50/1		MW2-15	Gravely Silt, Grey, moist, very dense, no odor.	15	ML		
11 50/5		MW2-20	Sandy Silt, Grey, wet, very dense.				
50/6		NS	E.O.B. at 23-feet				

Well Box
Locking Well Cap
Concrete Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen, slots 0.010
2/12 Sand
2" PVC Plug

0 5 10 15 20 25 30

Depth in feet

Drilling Method:	Hollow-stem auger	**Date:** 8-9-05	**Other Information:**
Drilling Company:	Cascade Drilling	**Weather:** Sunny	
Boring Diameter:	8-inches	**Page** 1 **of** 1	
Logged By:	R. Roberts		

g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

MW-2

01-0356-cmw-3 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Concrete				8" Boring
			Silty Sand, light brown, damp, medium dense, no odor.				Well Box, Locking Well Cap, Concrete Seal, Bentonite Seal, 2" PVC Blank
12 11 9		NS	Silty Sand, changes to Grey at 8.5-feet, damp, medium dense, no odor.		SM		
1 1 1		MW3-15	Gasoline odor in cuttings				2" PVC Screen
			Groundwater at 12.8'				2/12 Sand
11 50/6		MW3-20	Sandy Clay, Grey, wet, very dense.		ML		2" PVC Plug
			Silty Sand, Grey, wet, very dense		SM		Bentonite Seal
50/6		NS	E.O.B. at 23-feet, backfilled with Bentonite to 20-feet				

0 5 10 15 20 25 30

Depth in feet

Drilling Method:	Hollow-stem auger	**Date:** 8-9-05	**Other Information:**
Drilling Company:	Cascade Drilling	**Weather:** Sunny	
Boring Diameter:	8-inches	**Page** 1 **of** 1	
Logged By:	R. Roberts		

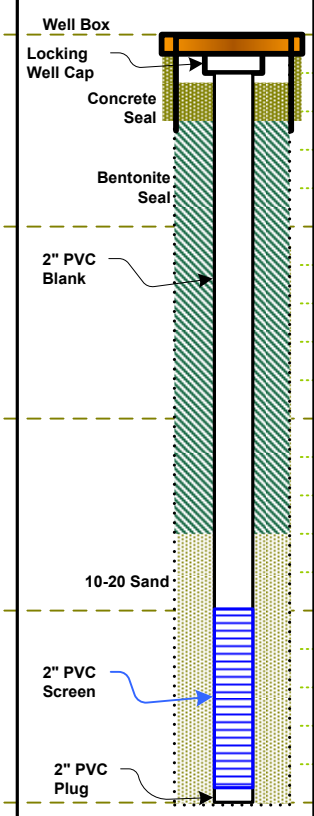
g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

MW-3

01-0356-d mw-4 boring_log.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)	WELL CONSTRUCTION
			Surface: Concrete	50			8" Boring
		MW4-12					
		MW4-20	Groundwater at 12.8'				
			Silty Sand, Grey, wet, very dense		SM		
			E.O.B. at 23-feet, backfilled with Bentonite to 20-feet				



0 5 10 15 20 25 30

Depth in feet

Drilling Method:	Direct Push/Auger	**Date:** 6/22/2006	**Other Information:**
Drilling Company:	NW Probe	**Weather:** Sunny	
Boring Diameter:	2" (8" @ surface)	**Page** 1 **of** 1	
Logged By:	R. Roberts		

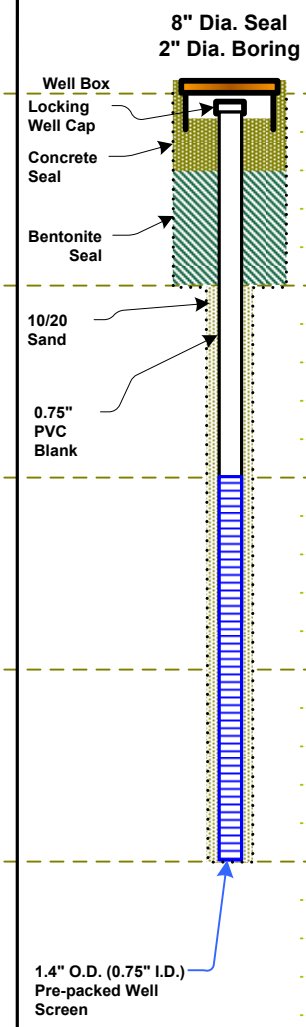
g-logics

Boring/Well Log
2800 MLK Way South
Seattle, WA

MW-4

01-0356-d bl mw-5.vsd

BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	SOIL DESCRIPTION	Recovery %	USCS	PID (ppmv in headspace)
			Portland Cement Concrete Slab			
			Light-brown, gravelly, silty SAND, no odor	40	SM	
		MW5-12	Damp, no odor	40		0.0
			Gray silty SAND, very wet, strong aged-gasoline		Brown / Gray	
		MW5-16	odor from 14' to 16'	60		0.3
		MW5-20	Dark brown sandy SILT. Damp, w/6" peat layer, slight odor E.O.B. at 20 feet	60	ML	0.0



0 5 10 15 20 25 30

Depth in feet

Drilling Method: Direct-Push	Date: 6-22-2006	Other Information:	
Drilling Company: NW Probe	Weather: Clear, sunny		
Boring Diameter: 2-inches	Page 1 of 1		
Logged By: R. Roberts			

g-logics

Boring/Well Log
MLK Former Gas Station
2800 Martin Luther King Way South
Seattle, WA

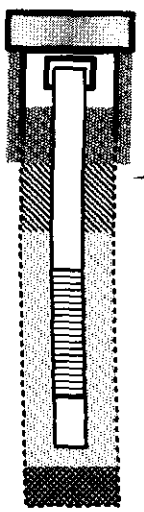
MW-5

Boring/Well Number: P-1 **Project Name:**

Project Number: 356-C	Date: 6/6/05	Page 1 of 1	
Drilling Method: Probe	Started: 8:15	Weather: PT. Cloudy	
Drilling Company: Cascade	Completed:	Other Information:	
Boring Diameter: 2"	Backfilled With: Bent		
Logged By: Rob Beck	Surface Conditions: Asphalt		

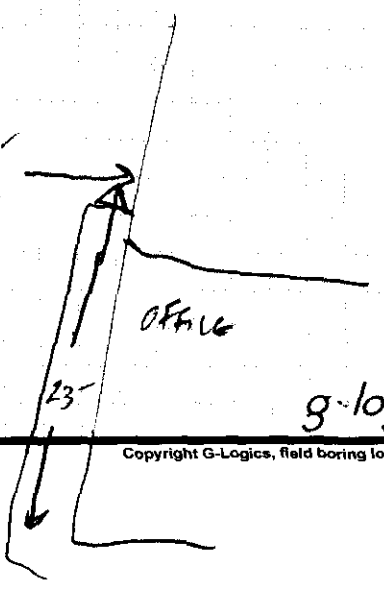
Depth in feet	Sample Type	Sample Number	~~Blows 6"~~ CA	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
5		P1-4		75	1.0		Gravel, Dr brown sand, lt. brown, damp sl. silty, gravelly sand no odor
10		P1-8		50	1.4		SAA No odor
5		P1-12	✓	75	1.4		wet @ 12' ~~SAA~~ No odor
20		P1-16	✓	50	53		~~Gray~~ silt @ 15-16' — GAS ODOR wood and clay @ 16'
	X			0			NO RECOVERY
			BOB @ 20'				Strong odor as water dripping from Sample

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB



Boring Location Diagram

Scale: 1 Square = NTS feet

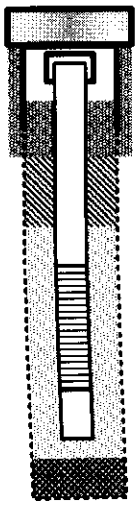


g-logics

Boring/Well Number:	P-2	Project Name:	
Project Number:	356-C	Date: 6/6/16	Page 1 of _____
Drilling Method:		Started:	Weather:
Drilling Company:		Completed:	Other Information:
Boring Diameter:		Backfilled With: Bentonite	
Logged By:		Surface Conditions:	

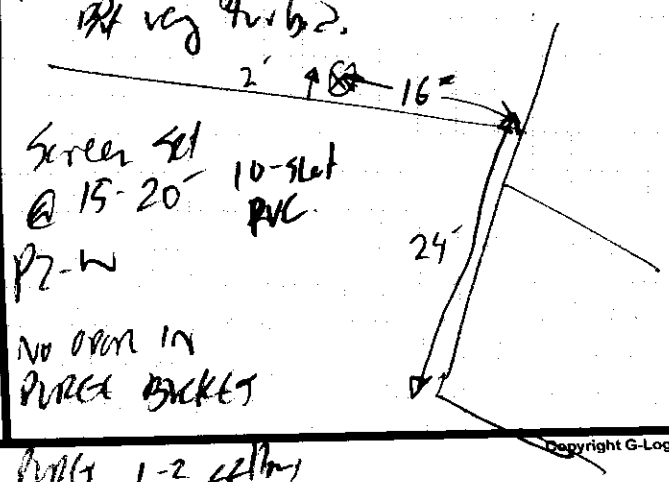
Depth in feet	Sample Type	Sample Number	~~Blows 6"~~ CA	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
5	I	P2-4		50	0.0		Dk Brown Sand w/Gravel Lt. Brown gravelly Sand No odors
0	I	P2-8		60	0.1		SAA No odor
5	I	P2-12		75	0.3		SAA - wet at 12', wetter @ ~12' No odor GRAVEL Layer
0	I	P2-16	✓	90	NA		Dk Grey Sand, Silt wet - Damp
	I	P2-20		90	0.3		wet Grey, Lt. Brown No odor Silty Clay Very dense/Stiff TILL

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB



Boring Location Diagram

Scale: 1 Square = _____ feet



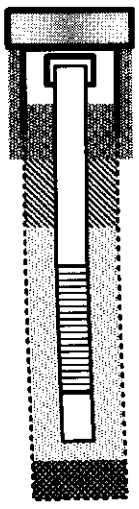
g-logics

Purge 1-2 gallons

Boring/Well Number: P-3		Project Name:
Project Number: 356-C	Date: 6/6	Page 1 of 1
Drilling Method: Probe	Started: 10:05	Weather: Rain
Drilling Company: Cascade	Completed:	Other Information:
Boring Diameter: 2"	Backfilled With:	
Logged By: MH/RL	Surface Conditions: Asphalt	

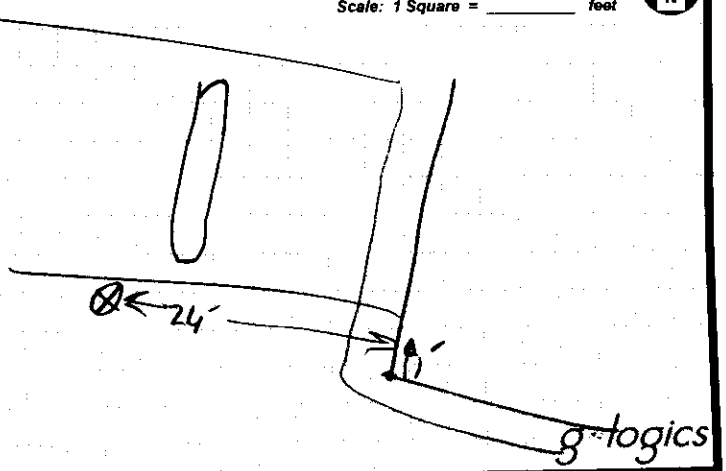
Depth in feet	Sample Type	Sample Number	Blows 6"	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
5	I	P3-4		90	0.7		Dk Brown Gravel w/Asphalt lt. Brn damp gravelly Sand No odor
0	I	P3-8		60	1.3		Gray sl. Sandy Silt No odor
5	I	P3-12	✓	65	4.2		Gray silty Sand Brn @ 12'
	I	P3-16		60	68	▽	wet Gray Sand Strong odor to 18'
0	I	P3-20		90	4.6		Dark Brown silty clay No odor

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB



Boring Location Diagram

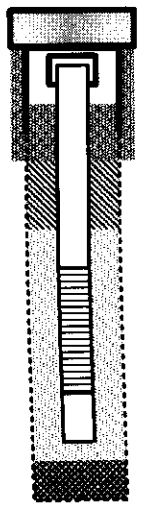
Scale: 1 Square = _____ feet



Boring/Well Number: P-4		Project Name: 2000 MLK
Project Number:	Date: 6/6	Page 1 of 1
Drilling Method:	Started:	Weather:
Drilling Company: Cascade	Completed:	Other Information:
Boring Diameter:	Backfilled With:	
Logged By: RH RL	Surface Conditions:	

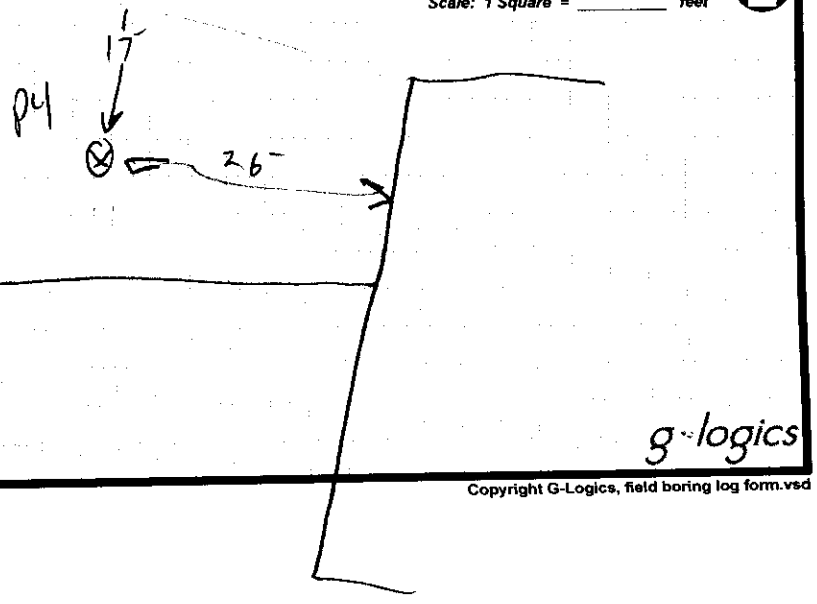
Depth in feet	Sample Type	Sample Number	Blows 6" CA	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
5		NS		70	1.9		Lt. Brown damp Sand w/ Some gravel (Med. Dense) No odor
10		P4-8		80	2.0		SAA No odor
		P4-12		65	1.9		SAA No odor
5		P4-14	✓	80	1.9	▽	Sand from gray @ 14' No odor Dark wood or peat @ 15 (4" layer)
							Dark Brown Silty Sand w/ peat, wet - dk brown Sand w/ layers to 1/8"
0		P4-20		95	1.8		Silty Gray Sand, wet, no odor (Med Dense)
				BOH 20'			

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB



Boring Location Diagram

Scale: 1 Square = _____ feet

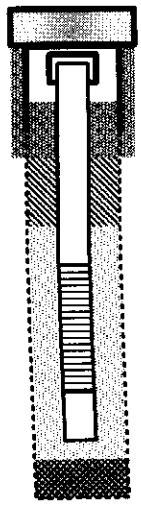


g-logics

Boring/Well Number: P-3		Project Name: 280 Mill
Project Number:	Date: 6/6/05	Page 1 of 1
Drilling Method: Park	Started: 11:20	Weather: Cloudy
Drilling Company: Cascade	Completed:	Other Information:
Boring Diameter: 2"	Backfilled With: Bentonite	
Logged By:	Surface Conditions: Asphalt	

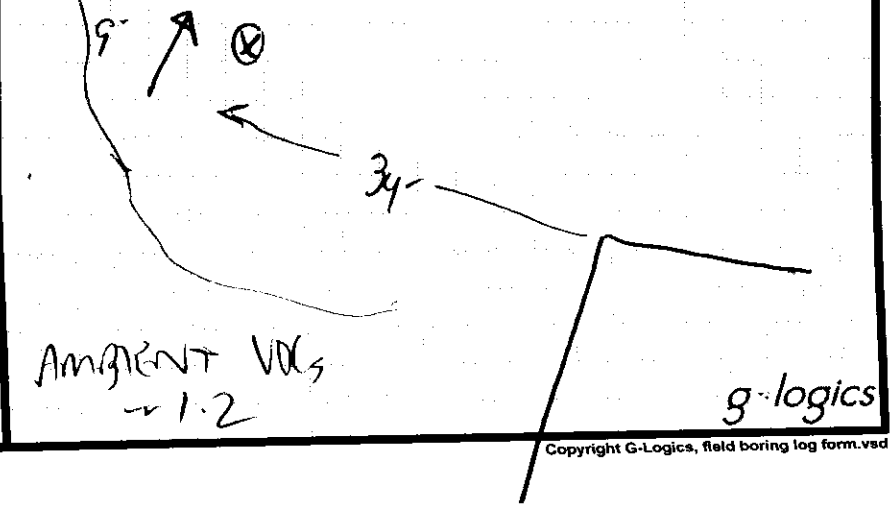
Depth in feet	Sample Type	Sample Number	~~Blows 6"~~ CA	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
							Asphalt
5		NS		90	1.5		Lt. Brown damp Sand No fines, no gravel, No odor.
0		NS		80	1.6		SAA w/ gravel (appx. 20%) No odor
		P5-12		80	1.5		SAA - Damp, with Gravel No odors, and fine Sand
5		P5-15		80	1.4		~~Gray damp Sand, Silt~~ Dark Brown Sand & Silt w/ Organics clayey
0		P5-19		80	1.4	▽	Wet Gray Sand - No odors Dense clayey Silt @ 20'
			BOB ~20'				

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB



Boring Location Diagram

Scale: 1 Square = _____ feet



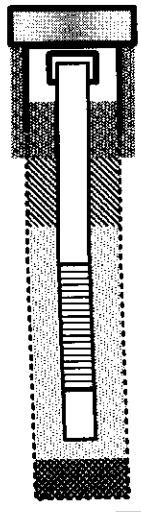
g-logics

Boring/Well Number:	P-6	Project Name:	2600 MLK
Project Number:	356-C	Date:	6/6/05
Drilling Method:	Probe	Started:	1230
Drilling Company:	Cascade	Completed:	
Boring Diameter:	2"	Backfilled With:	Bentonite, Concrete
Logged By:	BJR	Surface Conditions:	
		Page 1 of 1	
		Weather:	
		Other Information:	

Depth in feet	Sample Type	Sample Number	Blows 6"	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
5		P6-4		70	0.9		Lt. Brown damp gravelly Sand No odors
0		NS		80	1.1		SAA - No odors Increasing Silt
		P6-12		75	1.0		SAA - Silty gravelly fine Sand no odors
5		P6-16	✓	80	74		SAA - Grey @ 14' (wet) strong odor
		P6-18	✓	90	16		wet dark Brown Silt
20							Greenish grey silty Clay Dense, damp

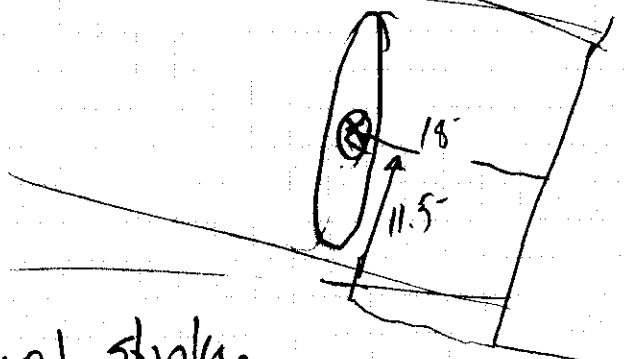
wood shred @17'

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB



Boring Location Diagram

Scale: 1 Square = _____ feet



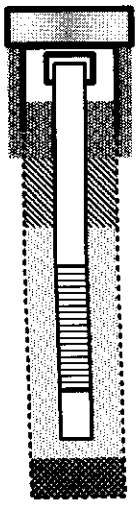
wet, strong odor @ ~13 to 17'

g-logics

Boring/Well Number: P-7		Project Name:
Project Number:	Date: 6/6	Page 1 of 1
Drilling Method:	Started: 1100	Weather:
Drilling Company: Cascade	Completed: 1330	Other Information:
Boring Diameter:	Backfilled With:	
Logged By:	Surface Conditions: Asphalt	

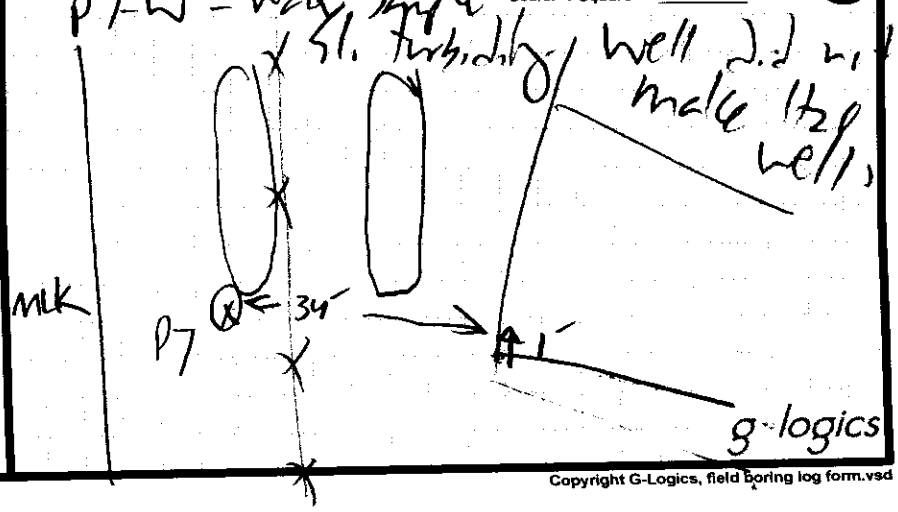
Depth in feet	Sample Type	Sample Number	Blows 6"	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
5	I	NS		60	0.4		Lt Brown dry gravelly Sand
0	I	NS		15	1.0		SAA - low recovery
5	I	P7-12		15	NS		dmp - wet @ 12' Lt. Brown Sandy Silt
	I	P7-16		15	1.4		~~Lt. Brown SAA - No odor~~
0	I	P7-18	✓	70	11.8		odor @ 16'-18' wet Gray Sand Rock in Shoe
							(Note sample depths are unreliable due to rock in Shoe)

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB



Boring Location Diagram

Scale: 1 Square = _____ feet

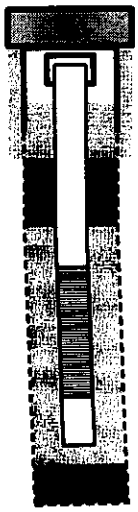


g-logics

Boring/Well Number: P-8		Project Name:
Project Number:	Date: 6/16/05	Page 1 of 1
Drilling Method: Probe	Started: 1:45	Weather: Sunny
Drilling Company: Cascade	Completed:	Other Information:
Boring Diameter:	Backfilled With:	
Logged By: PM RL	Surface Conditions: Concrete	

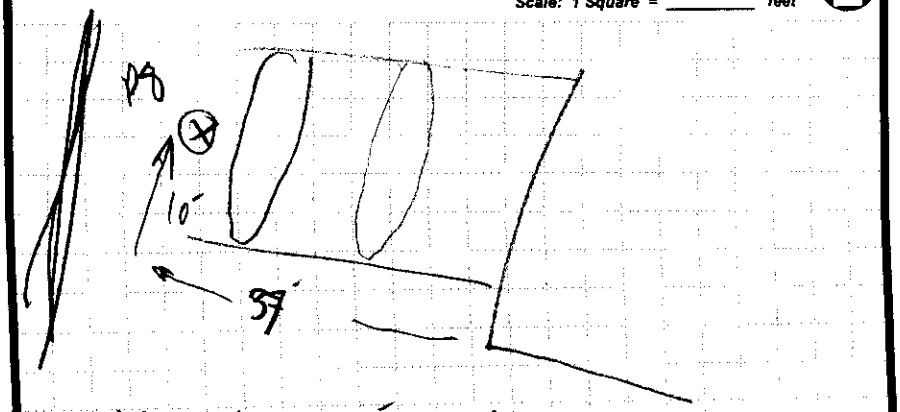
Depth in feet	Sample Type	Sample Number	Blows 6"	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
5	I	NS.		70	1.9		Lt. Brown damp gravelly Sand No odor
0	I	~~NS.~~		0			No Recovery
5	I	P8-12		10	50		Lav Petrol. Brown Sand Petrol. Odor
						▽	wet Gray Sand strong Pet. Odor
0	I	P8-16		50	>450		
		P8-20		100	25		damp dark brown and dark gray Silt. No odor

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB



Boring Location Diagram

Scale: 1 Square = _____ feet



Sidewalk is 10' west of P-8

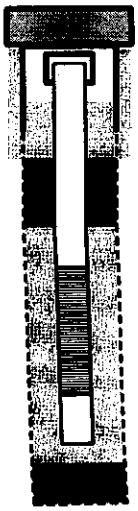
Old pump 1s/1n 2'-8" east of P-8

g-logics

Boring/Well Number: PG		Project Name:
Project Number:	Date: 6/6	Page 1 of 1
Drilling Method:	Started:	Weather:
Drilling Company:	Completed: 2:35	Other Information:
Boring Diameter:	Backfilled With:	
Logged By: RLS RZ	Surface Conditions:	

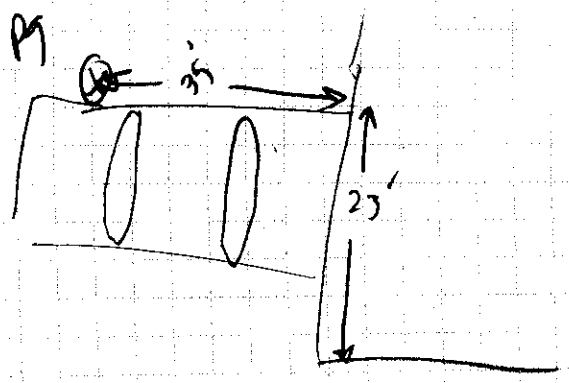
Depth in feet	Sample Type	Sample Number	Blows 6"	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
5		NS		70	3.9		Lt. Brown w/Red gravelly Sand Damp No odor
10		NS		60	4.1		SAA w/out Red oxidation No odor
15		PG-15		70	60 12		SAA - Lt Brown Gravelly Sand No odor damp Gray @ 12' - No odor Odor @ 14' to 15.5' - Gray wet Sand Dense gray Silt w/gravel No odor damp
20		PG-20		100	32		Dk Brown organic Silt 17-18 w/wood fiber Dk Gray - Gray clayey Silt No odor

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB



Boring Location Diagram

Scale: 1 Square = _____ feet



g-logics

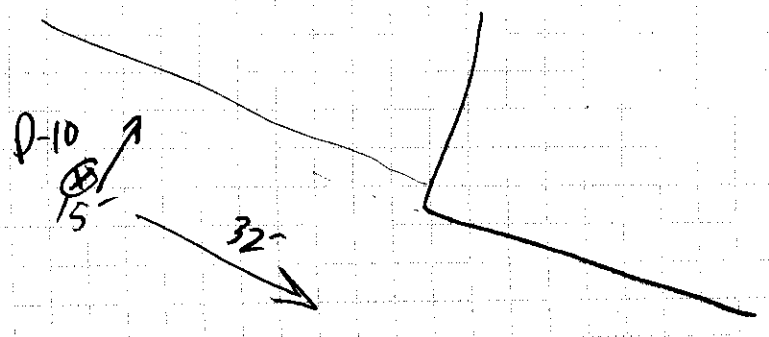
Boring/Well Number: D-10		Project Name:
Project Number:	Date: 6/6	Page 1 of 1
Drilling Method: Probe	Started: 2145	Weather: Sunny
Drilling Company: Cascade	Completed:	Other Information:
Boring Diameter:	Backfilled With:	
Logged By: BH	Surface Conditions: Asphalt	

Depth in feet	Sample Type	Sample Number	Blows 6"	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
5	I	NS		50	0.4		Lt. Brown silty Sand w/large chunks of gravel No odor
0	I	NS		50	0.8		Lt. Brown gravelly Sand No odor
5	I	NS		60	0.1		Lt. Brown fine Sand damp (no gravel) No odor Cobbles and gravel
0	I	D10-16		70	0.6		Gray Sand, Slt. odor w/gravel Lt. Brown and Gray Sand w/organics at 17'
		D10-20		100	3.2		Dark Brown Silty to Black Clay w/organics No odor

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB

Boring Location Diagram

Scale: 1 Square = _____ feet

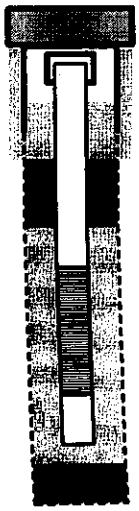


g-logics

Boring/Well Number: P-1		Project Name: 280 MLK	
Project Number: 356-C	Date: 6/6	Page 1 of 1	
Drilling Method: Probe	Started: 3:15	Weather: cloudy	
Drilling Company: Cascade	Completed:	Other Information:	
Boring Diameter:	Backfilled With:		
Logged By: RMP	Surface Conditions: Asphalt		

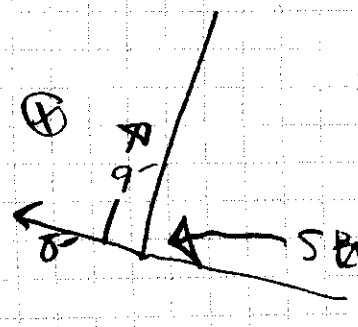
Depth in feet	Sample Type	Sample Number	Blows 6"	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
5		NS		80	0.5		Gravel and Sand Lt. Brown gravelly Sand damp, No odor
0		NS		75	1.2		Olive Brown Silty Fine Sand damp, No odor Gravel layer at 10'
5		P11-12		75	1.1		Olive Brown - Lt. Brown Silty Fine Sand No Odor
0		NS		60	0.5		▽? Dark Grey wet Silty Clay
		P11-20		70	1.4		Damp Grey Silty Clay No odor

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB



Boring Location Diagram

Scale: 1 Square = _____ feet



g-logics

Boring/Well Number: P-12		Project Name: 280 MK
Project Number:	Date: 6-22-06	Page ____ of ____
Drilling Method:	Started:	Weather:
Drilling Company: NW PROBE	Completed:	Other Information:
Boring Diameter:	Backfilled With:	
Logged By: BZ/DL	Surface Conditions:	

Depth in feet	Sample Type	Sample Number	Blows 6"	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
5		P12-4		75			Lt. Brown Gravelly SAND (FILL) Damp w odor
0		P12-0		30			SAA
		P12-2		30	0.0		SAA
5		P12-15			0.0	ML	Lt. Gy Wet Silt w odor
		~~P12-6~~		30		ML	Dk Brown Silt w Inclusions
0		P12-10		80		ML	Gry Wet Gravelly Sand / Silt / Sandy Gravel Wet

Monum. Rise

Ground Surface

Well Cap Void

Well Box

Cement Seal

Bentonite Seal

2" PVC Blank

2" PVC Screen

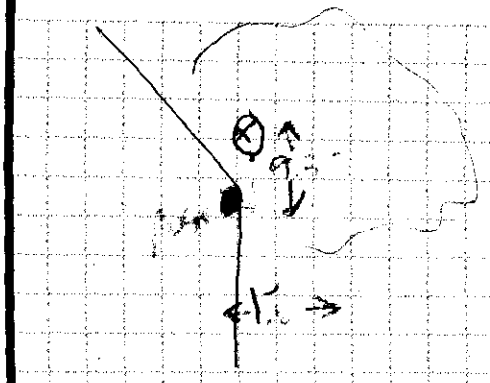
2" PVC Plug

Sand

Caving/BOB

Boring Location Diagram

Scale: 1 Square = _____ feet



g-logics

Boring/Well Number: P-13		Project Name:
Project Number: 356-D	Date: 6-22-06	Page ____ of ____
Drilling Method:	Started:	Weather:
Drilling Company: NW Prob	Completed:	Other Information:
Boring Diameter:	Backfilled With:	
Logged By:	Surface Conditions: dirt	

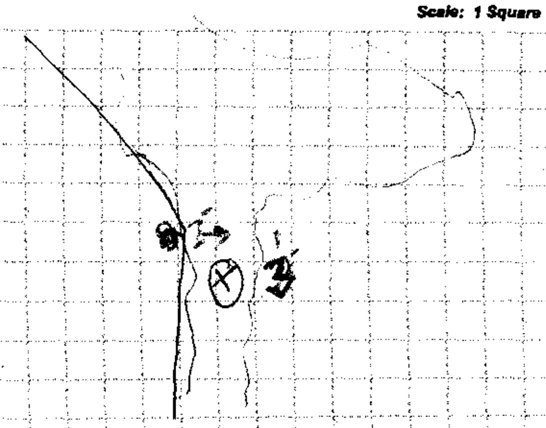
Depth in feet	Sample Type	Sample Number	Blows 6"	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/Consistency, Cementation, Grain Size, Odor, Other)
						SW	Lt. brown Gravelly Silty SAND (Fill)
		P13-4		60	,		
5							
		P13-8		70	0		SAA (Fill?)
0							
				40			SAA - Gray wet @ 12, Oxidation @ 11-12 / Siltier
		P13-12			0		
5				50			Gray Sand w/organics (Silty
		P13-16			0		Dark brown and Gray Silty Sand w/organics
0		P13-20			0		Gray wet Silty Sand - No odors
						ML	Gray blue green Silt - Hard
		P13-24			0		- No odors

Monum. Rise ____
Ground Surface ------>
Well Cap Void ____
Well Box ____
Cement Seal ____
Bentonite Seal ____
2" PVC Blank ____
2" PVC Screen ____
2" PVC Plug ____
Sand ____
Caving/BOB ____

Boring Location Diagram

Scale: 1 Square = ______ feet

N



g-logics

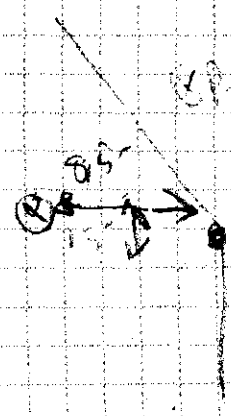
Boring/Well Number: P-14		Project Name:
Project Number:	Date: 6/12/06	Page 1 of 1
Drilling Method:	Started:	Weather:
Drilling Company:	Completed:	Other Information:
Boring Diameter:	Backfilled With:	
Logged By: BAR	Surface Conditions:	

Depth in feet	Sample Type	Sample Number	Blows 6"	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
				60	1		LT Brown Silty Gravelly Sand (dry) No odor
5							
		P14-4		50	0		SAA No odor
0							
		P14-2			0		SAA No odor
5		P14-1					Wet Gray Gravelly SAND No odor
		P14-3			0		6" Red Layer
0							Gray Gravelly SAND No odor
		BOH 20'					

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB

Boring Location Diagram

Scale: 1 Square = _____ feet



g-logics

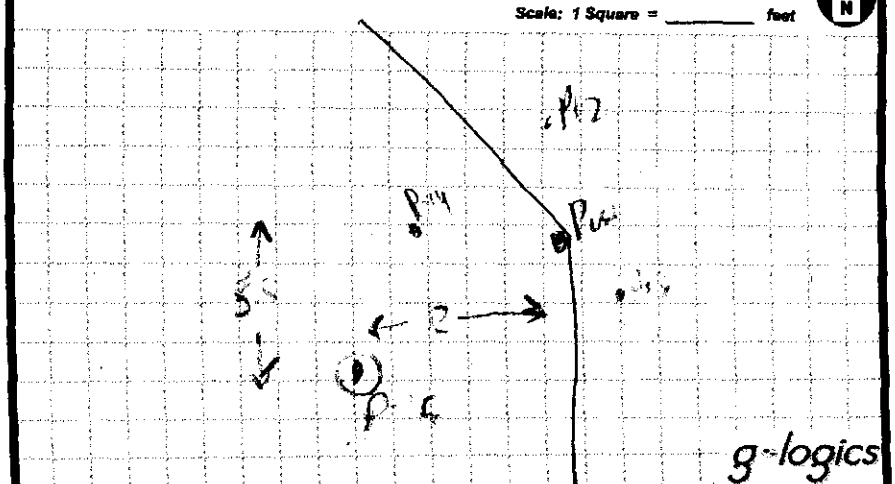
Boring/Well Number: P-15		Project Name:
Project Number: 350-D	Date: 6/22/06	Page 1 of 1
Drilling Method: AR-24	Started: 0945	Weather:
Drilling Company: NW Probe	Completed:	Other Information:
Boring Diameter: 2"	Backfilled With: Bento	
Logged By: RJR	Surface Conditions: Asphalt	

Depth in feet	Sample Type	Sample Number	Blows 6"	% Rec.	PID (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Composition, Grain Size, Odor, Other)
5				70	0		tr brown dry fine SAND
0		AS-1		60	0		SAA
5		AS-2		50	0		SAA
0		AS-20		5	0		NO RECOVERY (ROCK)
				0	—		(GRAY) DAMP WET SAND

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB

Boring Location Diagram

Scale: 1 Square = _____ feet



g-logics

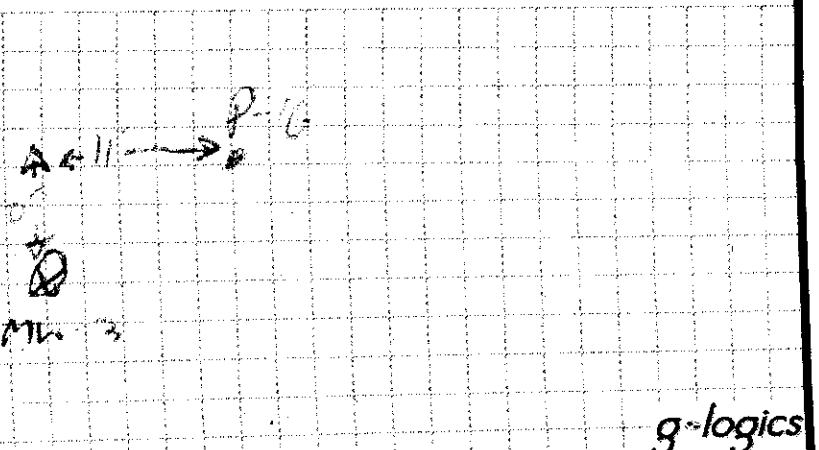
Boring/Well Number: P-16	Project Name:	
Project Number:	Date: 6-22-06	Page 1 of 1
Drilling Method: Probe	Started: 10:15	Weather:
Drilling Company: Nw Probe	Completed: 10:40	Other Information:
Boring Diameter: 2"	Backfilled With: Bent.	
Logged By: [illegible]	Surface Conditions: Asph.	

Depth in feet	Sample Type	Sample Number	Blows 6"	% Rec.	PID * (ppmv)	USCS	Soil Description (USCS Soil Type, Color, Moisture, Density/ Consistency, Cementation, Grain Size, Odor, Other)
5				40	,		Lt brown silty [illegible] SAND
0		P16-5		50	0		SAND
5		P16-12		50	0		SAND (Wet) Wet @ 14' Became Gray @ 15'
0		P16-16		60	0		Gray Silty SAND (Wet) Peat 8" Layer
		P16-20		65	0		Wet Gray Silty SAND No Odor

Monum. Rise
Ground Surface
Well Cap Void
Well Box
Cement Seal
Bentonite Seal
2" PVC Blank
2" PVC Screen
2" PVC Plug
Sand
Caving/BOB

Boring Location Diagram

Scale: 1 Square = _____ feet



g-logics

PBS Engineering + Environmental

BOREHOLE/WELL CONSTRUCTION LOG

Project Number:	*41017.000*	Date:	*6/25/09* Boring #: ***SB-1***
Project Name:	*McClellan Property*	Surface Elevation:	*n/a* (ft/ above MSL)
Project Location:	*2806 South McClellan Street, Seattle*	Start/End Date:	*6/25/09*
Driller/Equipment:	*ESN/PowerProbe*	Final Boring Depth:	*16'*
Geologist/Engineer:	*Project Manager - Harry Goren*	Outer Hole Diameter:	*2"*
Sample Method:	*Direct Push*	Sheet:	*1* of *3*

Depth (feet bgs)	Sample Data: Interval	Sample Data: Percent Recovery	Sample Data: PID Reading (ppm)	Sample Data: Sample ID	Blows/ft.	Groundwater Level	Soil Description
1							*0-4'*
2							*2"* grass
3							Very loose, medium brown silty sand, no gravel
4							
5							*4'-8'*
6							Light gray silty sand, moist, loose, no gravel, no odor or discoloration
7							
8							
9							*8'-12'*
10				*SB-1 (9-12)*			Light brown silty sand, moist, no gravel
1							(Dense from 11'-12') Glacial till
2							
3				*SB-1 (GW-1)*			*12'-15'*
4						▲	Light brown silty sand, no gravel, moist, very dense
5							15'-16'
6							Medium gray silty sand, very dense, dry
7							*Bottom of hole at 16' bgs*
8							
9							
20							

Groundwater first encountered at 14' bgs. Static level rose to 10' after 15 minutes. Perched lens between 11'-16'.Screened interval between 13'-16'.

SB-1

PBS Engineering + Environmental

BOREHOLE/WELL CONSTRUCTION LOG

Project Number:	*41017.000*	Date:	*6/25/09* Boring #: ***SB-2***
Project Name:	*McClellan Property*	Surface Elevation:	*n/a* (ft/ above MSL)
Project Location:	*2806 South McClellan Street, Seattle*	Start/End Date:	*6/25/09*
Driller/Equipment:	*ESN/PowerProbe*	Final Boring Depth:	*18'*
Geologist/Engineer:	*Project Manager - Harry Goren*	Outer Hole Diameter:	*2"*
Sample Method:	*Direct Push*	Sheet:	*2* of *3*

Depth (feet bgs)	Sample Data: Interval	Sample Data: Percent Recovery	Sample Data: PID Reading (ppm)	Sample Data: Sample ID	Blows/ft.	Groundwater Level	Soil Description
1							*0"-4'*
2							*2"* grass
3							Very loose, medium brown silty sand, no gravel
4							
5							*4'-8'*
6							Dark brown silty sand, moist, no gravel
7							
8							
9							*8'-11'*
10				*SB-2 (8-11)*			Light brown silty sand, moist, no gravel
1							Dense from 11'-12', dry (Glacial till)
2							
3							*12'-14'*
4							Very moist, light brown silty sand, no gravel (50% recovery)
5							14'-16'
6							Dark gray, very dense silty sand (till), dry (50% recovery) - no water in boring after 15 minutes
7							
8							
9							*Bottom of hole at 18' bgs (refusal)*
20							*No groundwater encountered. Rod detected minimal moisture at 18'. No recharge.*

SB-2

PBS Engineering + Environmental

BOREHOLE/WELL CONSTRUCTION LOG

Project Number:	*41017.000*	Date:	*6/25/09* Boring #: ***SB-3***
Project Name:	*McClellan Property*	Surface Elevation:	*n/a* (ft/ above MSL)
Project Location:	*2806 South McClellan Street, Seattle*	Start/End Date:	*6/25/09*
Driller/Equipment:	*ESN/PowerProbe*	Final Boring Depth:	*14'*
Geologist/Engineer:	*Project Manager - Harry Goren*	Outer Hole Diameter:	*2"*
Sample Method:	*Direct Push*	Sheet:	*3* of *3*

Depth (feet bgs)	Sample Data: Interval	Percent Recovery	PID Reading (ppm)	Sample ID	Blows/ft.	Groundwater Level	Soil Description
1							*0"-4'*
2							*2"* grass
3							Very loose, medium brown silty sand, no gravel
4							
5							*4'-8'*
6							Light brown silty sand, dry, loose, no gravel
7							*7'-8'*
8							Dark gray silty sand, moist, organic odor
9							*8'-12'*
10				*SB-3 (9-12)*			Medium dense, light gray silty sand, damp, trending to medium gray silty sand Moist from *11'-12'*
1							
2				*SB-3 (GW-2)*		▲	*12'-14'*
3							Saturated, light gray silty sand with trace gravels
4							
5							*Bottom of hole at 14' bgs*
6							
7							*Groundwater first encountered at 13' bgs. Static level rose to 10' after 15 minutes. Screened interval between 11-14'.*
8							
9							
20							

SB-3