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PRELIMINARY PLANNING ASSESSMENT



Property:

Former Whidbey Marine & Auto Supply
1695 East Main Street
Freeland, Washington

Prepared for:

Washington Pollution Liability
Insurance Agency
300 Desmond Drive Southeast
Lacey, Washington

Report Date:

October 23, 2017

Preliminary Planning Assessment

Prepared for:

Washington Pollution Liability Insurance Agency

300 Desmond Drive Southeast
Lacey, Washington 98503

Former Whidbey Marine & Auto Supply
1695 East Main Street
Freeland, Washington 98249

Project No.: 1303-001

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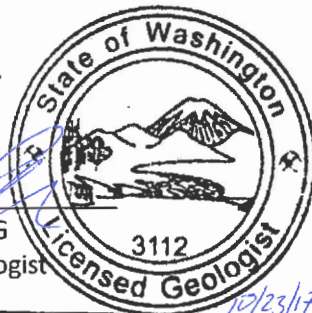


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ACRONYMS AND ABBREVIATIONS

µg/L	micrograms per liter
Apex	Apex Laboratories, LLC
ARAR	applicable or relevant and appropriate requirement
AS	air sparge
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CFR	Code of Federal Regulations
COC	chemical of concern
CSM	conceptual site model
DCA	disproportionate cost analysis
DRPH	diesel-range petroleum hydrocarbons
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
Farallon	Farallon Consulting, LLC
FS	feasibility study
GAC	granular-activated carbon
GRPH	gasoline-range petroleum hydrocarbons
HSA	hollow-stem auger
INW	Instrumentation Northwest
LNAPL	light nonaqueous-phase liquid
mg/kg	milligrams per kilogram
MTCA	Washington State Model Toxics Control Act
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NFA	No Further Action

ACRONYMS AND ABBREVIATIONS (CONTINUED)

NWTPH	Northwest Total Petroleum Hydrocarbon
O&M	operation and maintenance
OMB	U.S. Office of Management and Budget
ORPH	oil-range petroleum hydrocarbons
PID	photoionization detector
PPA	Preliminary Planning Assessment
QA/QC	quality assurance/quality control
RAO	remedial action objectives
RCW	Revised Code of Washington
ROI	radius of influence
ROW	right-of-way
the Site	the Former Whidbey Marine & Auto Supply property located at 1695 East Main Street in Freeland, Washington
SoundEarth	SoundEarth Strategies, Inc.
SVE	soil vapor extraction
TEE	Terrestrial Ecological Evaluation
TPH	total petroleum hydrocarbons
USC	United State Code
UST	underground storage tank
VCP	Voluntary Cleanup Program
WAC	Washington Administrative Code

EXECUTIVE SUMMARY

SoundEarth Strategies, Inc. (SoundEarth) has prepared this Preliminary Planning Assessment for the Former Whidbey Marine & Auto Supply located at 1695 East Main Street, in Freeland, Washington (the Site). The report was conducted for the Pollution Liability Insurance Agency in accordance with the Statement of Work 175SES00-03 to Contract Number 17-005SES for PPA.

Historical tax records indicate the current commercial building was constructed in 1964. Additions were made to the northwest and eastern portions of the original structure between 1954 and 1968. Records indicate that Whidbey Marine & Auto Supply operated at the Site between at least 1971 and 2014, during a portion of which it was a gasoline service station. Underground storage tank (UST) records indicate that four USTs were installed at the Site between 1982 and 1986, which included one 3,000-gallon UST (UST 1), two 10,000-gallon USTs (USTs 2 and 3), and one 8,000-gallon UST (UST 4). A release of unleaded gasoline from UST 2 was reported to the Washington State Department of Ecology in 2005. Fuel sales ceased in mid-2009 and the property was sold in October of 2009. The tanks were reportedly removed in 2011.

Previous investigations and the site characterization have identified concentrations of gasoline-range petroleum hydrocarbons (GRPH); diesel-range petroleum hydrocarbons; and benzene, toluene, ethylbenzene, and total xylenes (BTEX) exceeding the applicable Washington State Model Toxics Control Act (MTCA) Method A cleanup levels in soil in the vicinity of the former gasoline and diesel USTs on the eastern portion of the Site, and in the perched groundwater zone and the Sea Level Aquifer underlying the property. Soil contamination is present beneath the former UST area in saturated perched groundwater zone soil at approximately 55 feet below ground surface (bgs), and Sea Level Aquifer saturated soils from at least 105 to 115 feet bgs.

Two water-bearing zones have been identified at the Site. The perched groundwater zone was encountered between approximately 55 and 60 feet bgs during drilling activities in borings B08 and MW-17. The Sea Level Aquifer was encountered between approximately 100 and 105 feet bgs. Groundwater contouring indicated that the perched groundwater zone flows in a westerly direction. The perched groundwater zone appears to terminate west of MW-6 and MW-7 due to the absence of a continuous silt layer. Groundwater to the west appears to descend into the Sea Level Aquifer proximal to monitoring well MW-9. Groundwater contouring indicates that the Sea Level Aquifer flows in a southerly to southeasterly direction.

Groundwater sampling results indicated of GRPH and/or BTEX exceeding the applicable MTCA Method A cleanup levels in perched groundwater zone monitoring wells MW-4 through MW-8, and in Sea Level Aquifer monitoring wells MW-9, MW-12, MW-13, and MW-17.

Results of aquifer hydrological analysis indicate the estimated average hydraulic conductivity of the sea level water-bearing zone is 61.10 feet per day, based on slug testing conducted in monitoring wells MW-11 and MW-16. The hydraulic conductivity calculations yield a seepage velocity of 0.2 feet per day.

Based on all available data, soil contamination appears limited to the saturated zones of the perched groundwater zone and the Sea Level Aquifer underneath the property. Groundwater contamination has been confirmed in the perched groundwater zone underlying the property and migrating to the west beyond the property boundary, and in the Sea Level Aquifer beneath and to the west of the property.

EXECUTIVE SUMMARY (CONTINUED)

The Sea Level Aquifer flow direction is generally to the southeast. Monitoring wells downgradient of the confirmed Sea Level Aquifer contamination plume remain below laboratory reporting limits for all chemicals of concern (COCs).

Based on the shallow soil exceedances in MW-12, a secondary source may exist west of MW-12. SoundEarth recommends that an additional Sea Level Aquifer monitoring well be installed to the west of MW-12 to bound contamination to the west and determine if a secondary source exists.

SoundEarth conducted a focused feasibility study (FS) to develop and evaluate cleanup action alternatives to facilitate selection of a final cleanup action at the Site in accordance with WAC 173-340-350(8). An FS includes the development, screening, and evaluation process for numerous remedial alternatives. The focused evaluation of cleanup action alternatives considered the practicable remedial components confirmed to be effective at treating COCs in the affected media of concern.

The three cleanup action alternatives that were retained for additional consideration, which are described in more detail below in the following subsections, include the following:

- Cleanup Action Alternative 1, Air Sparge and Soil Vapor Extraction Remediation System
- Cleanup Action Alternative 2, Groundwater Extraction and Treatment System
- Cleanup Action Alternative 3, Monitored Natural Attenuation with an Environmental Covenant

SoundEarth recommends installation and operation of an air sparge and soil vapor extraction remediation system that would remove COCs from both the perched groundwater zone and Sea Level Aquifer, as outlined in Cleanup Action Alternative 1 (Section 6.3.1.1).

This executive summary is presented solely for introductory purposes, and the information contained in this section should be used only in conjunction with the full text of this report. A complete description of the project, Site conditions, investigative methods, and investigation results is contained within this report.

1.0 INTRODUCTION

SoundEarth Strategies, Inc. (SoundEarth) has prepared this Preliminary Planning Assessment (PPA) for the Former Whidbey Marine & Auto Supply located at 1695 East Main Street in Freeland, Washington (the Site). The Site location is shown on Figure 1. The PPA was conducted for the Pollution Liability Insurance Agency in accordance with the Statement of Work 175SES00-03 to Contract Number 17-005SES for PPA.

The Site is entered into the Washington State Department of Ecology (Ecology) Voluntary Cleanup Program (VCP) under VCP number NW1529.

1.1 PROJECT OBJECTIVES

The purpose of the PPA is to provide a comprehensive conceptual understanding of the Site and to evaluate and develop cleanup action alternatives to facilitate selection of a final cleanup action for the Site in accordance with Chapter 173-340-350(8) of the Washington Administrative Code (WAC 173-340-350[8]).

The objective of the PPA is to complete an environmental review for the Site and perform the following tasks:

- Investigate extent of the Site that could require contaminant remediation and select a preferred remedial action alternative to clean up the Site.
- Secure a property appraisal of the Site prior to improvements for which the owner has applied for financial assistance.
- Complete pre-construction planning for the system upgrades delineating both elapsed time and unit cost factors for the benefit of the owner who has applied for financial assistance.

2.0 BACKGROUND

This section provides a description of the general Site information, summary of current and historical uses of the Site and surrounding properties, and description of the Site environmental setting.

2.1 GENERAL SITE INFORMATION

The Site is located in Freeland, Washington, as shown on Figure 1. Information regarding the Site location, description, and key features is provided in Table 2-1.

Table 2-1 General Site Information

Site Name	Whidbey Marine & Auto Supply
Street Address	1695 East Main Street, Freeland, Washington
Property Owner	Campbell, David H.
Parcel Number	Island County No. R22911-076-1270
Parcel Shape and Size	Rectangular 0.4408 Acres / 19200 square feet
Facility/Site No.	FS ID #17222251
VCP No./Cleanup Site ID No.	#5610, VCP NW1529

2.1.1 UST System Components

The Site formerly housed four petroleum underground storage tanks (USTs): one 10,000-gallon gasoline UST, one 10,000-gallon diesel UST, one 8,000-gallon gasoline UST, and one 3,000-gallon diesel UST. The Site USTs, fuel dispensers, and associated piping were decommissioned and removed by Ultra-Tank Services, Inc., of Bellingham Washington, in January 2011. Approximately 15 feet of distribution piping was cleaned and left in place underneath the former dispenser area due to the proximity of building structures and utilities.

2.2 SITE HISTORY

A 1941 aerial photograph depicts the Site as being forested and undeveloped. Although tax records indicate the current commercial building was constructed in 1964, it is visible on a 1954 aerial photograph. Additions were made to the northwest and eastern portions of the original structure between 1954 and 1968. The Site appears to have remained relatively unchanged from its configuration in 1968 through the present day.

EDR's Historical Auto database indicates that Whidbey Marine & Auto Supply operated at the Site between at least 1971 and 2014, during a portion of which it operated as a gasoline service station. UST records indicate that four USTs were installed at the Site between 1982 and 1986, which included one 3,000-gallon UST (UST 1), two 10,000-gallon USTs (USTs 2 and 3), and one 8,000-gallon UST (UST 4). A release of unleaded gasoline from UST 2 was reported to Ecology in 2005. Fuel sales ceased in mid-2009, and the property was sold in October of 2009. The tanks were removed in 2011 by Ultra-Tank Services, Inc.

Historical information, including aerial photographs and topographic maps, are included in Appendix A.

2.3 SURROUNDING PROPERTY DESCRIPTIONS AND HISTORY

This section describes the current and past use and ownership of each of the parcels adjoining to and surrounding the property.

- **North.** By 1941 the north-adjoining parcel appears to have been forested and undeveloped. The portion of the parcel to the north of the Site does not appear to have ever been developed. However, a present commercial building was constructed on the parcel, to the east of the east-adjoining parcel, in 1970.

The current commercial building was constructed on the northwest-adjoining property in 1979, before which time it was undeveloped.

- **East.** By 1941 the east-adjoining parcel appears to have been in use as an agricultural field. Although tax records indicated the current building was constructed in 1976, it appears to be present in a 1954 aerial photograph.
- **South.** A present small commercial building is visible on a 1941 aerial photograph. Tax assessor records indicate the building was constructed in 1940. It is likely that the structure was initially used as a single-family residence. A second commercial building was constructed on the property between 1971 and 1981. It appears this building was replaced between 1990 and 2005 with a larger structure.

Two buildings are present on the southwest-adjointing property on a 1941 aerial photograph. The two buildings were demolished when the current commercial building was constructed in 2007.

- **West.** The west-adjointing parcel was undeveloped until the current commercial building was constructed in 1964.

2.4 POTENTIAL SOURCES OF OFF-SITE CONTAMINATION

This section describes potential off-site sources of contamination in the vicinity of the Site.

- Scotty's Service is listed in EDR's Historical Auto database as having operated at 1690 East Main Street, which appears to be the south-adjointing property. EDR indicates that Scotty's Service operated at that location between at least 1994 and 2009. UST records indicate that five USTs were removed from the Site in 2005. Two of the USTs are indicated to have been between 110 and 1,100 gallons in capacity, one between 2,000 and 5,000 gallons, and two between 5,000 and 10,000 gallons. The content of the USTs and their condition at the time of removal is not indicated.
- Whidbey Island Game Farm is listed in EDR's records as having operated approximately 450 feet west-northwest of the Site. Two USTs are indicated to have been removed in 1999; no other information regarding the tanks is available.
- Peacock Drycleaners is indicated to have operated at 1694 East Main Street, which appears to be located approximately 180 feet southwest of the Site. Peacock Drycleaners is listed as a historical inactive drycleaner. No other information about the drycleaner is available.
- Freeland Service station is listed in EDR's Historical Auto database as having operated as a gas station at 1650 East Main Street from 1988 to 2009. The northern portion of the Site is currently a Pacific Pride-branded gasoline service station. The southern portion of the Site is operated by Corey Propane and Oil, and appears to be a fuel storage yard for their distribution business.

2.5 SITE USE

Table 2-2 Site Use

Structure(s) Description and Size	One-story, 2,920-square-foot building constructed in 1964. Slab-on-grade foundation with concrete block and frame construction. Former gasoline service station, commercial retail space and automotive garage.
Current Use	Towing and automotive repair; retail storage.
Jurisdiction	Island County
Legal Description	89 - IN SW SW: BG NECR SW SW S640' TO ST HWY W25' TPB W120' N160' E120' S160' TPB
Quarter Section, Township, and Range	SW ¼ of Section 11, Township 29, Range 2E.
Land Use/Zoning	68 - Commercial Retail
Future Use	N/A

2.6 GEOLOGIC AND HYDROLOGIC SETTING

The *Geologic Map of the Freeland and Northern Part of the Hansville 7.5-Minute Quadrangles, Island County, Washington* (Polenz et al. 2006) indicates that the Site is underlain primarily by Everson Glaciomarine Drift deposits. Soil beneath the Site generally consisted of sands and silty sands to depths of at least 115 feet below ground surface (bgs). Previous investigations at the Site have encountered fine to coarse sand with trace silt to approximately 55 to 65 feet bgs. A silt layer was encountered in soil borings between approximately 55 and 65 feet bgs. The silt layer appears to be continuous on the property, but discontinuous across the Site to the west and south, and ranges from 15 feet thick in boring B07, to 3-inches thick in MW-11. Soil from 65 feet bgs to total depth explored of 115 feet bgs generally consisted of fine to coarse sand with trace silt.

Previous subsurface investigations identified two distinct groundwater zones underlying the Site, a perched zone and regional aquifer. A perched groundwater zone was encountered between 50 and 56 feet bgs, and appears to be consistent with the silt layer observed in soil borings. Groundwater level measurements in perched groundwater zone wells have been between 50.51 and 57.25 feet bgs. Groundwater contouring has indicated that perched groundwater flows to the west. Perched groundwater was not encountered in soil borings west of MW-6 and MW-7, and perched groundwater well MW-5 has been historically dry. This indicates that the perched groundwater zone is not continuous, and appears to terminate between wells MW-7 and MW-9. Based on the discontinuous silt layer and the absence of perched groundwater to the west, groundwater west of MW-6 and MW-7 likely travels vertically to the deeper Sea Level Aquifer.

Regional groundwater in the Sea Level Aquifer was encountered between 102 and 106 feet bgs in borings MW-1, and MW-9 through MW-18. Groundwater measurements in the Sea Level Aquifer monitoring wells have been between 99.66 and 104.80 feet bgs. Groundwater contouring of the Sea Level Aquifer groundwater elevations has indicated that the Sea Level Aquifer generally flows to the southeast. The Sea Level Aquifer is Whidbey Island's primary drinking water source. Three drinking water wells are approximately 1,900 to 2,900 feet south and south-southeast of the Site (Figure 1).

The closest surface body of water is the Puget Sound, located approximately 2,100 feet to the north of the Site.

3.0 FIELD INVESTIGATIONS

This section summarizes activities and results of field investigations conducted at the Site.

3.1 PREVIOUS INVESTIGATIONS

Previous investigations and groundwater monitoring events were conducted between October 2005 and February 2016 at the Site. Reports provided to SoundEarth from the previous consultant and available through the Ecology database are included in the References section of this PPA.

Based on previous report provided by Farallon Consulting, LLC (Farallon), the Site formerly consisted of retail fuel tanks and dispensers, an auto parts store, convenience store, and auto repair garage. Fuel was reportedly dispensed at the former Site facility since the 1950s. The most recent fueling system consisted of one 3,000-gallon diesel UST (UST 1), two 10,000-gallon gasoline USTs (USTs 2 and 3), and one 8,000-gallon gasoline UST (UST 4). A single pump island was used to dispense fuel from the three

pump dispensers. According to previous reports, Tank 1 was installed in 1982 and Tanks 2 through 4 were installed in 1986.

A release of unleaded gasoline from Tank 2 was reported to Ecology in 2005. Initial reconnaissance subsurface investigations were conducted at the Site in 2005 by Farallon to assess whether petroleum hydrocarbons had been released from the USTs present at the Site. On October 17, 2005, Farallon advanced six borings (B-1 through B-6) on the Site in the vicinity of the USTs to a maximum depth of 40 feet bgs using a direct-push drilling rig to assess shallow soil conditions. Benzene was detected at concentrations exceeding the Washington State Model Toxics Control Act (MTCA) Method A cleanup levels in all of the direct-push soil samples analyzed from borings B-2 through B-5, between depths of 12 and 32 feet bgs.

Between November 10 and 14, 2005, a single boring was advanced to the Sea Level Aquifer located beneath the Site to a depth 135 feet bgs using sonic drilling methods. A layer of silt was identified at approximately 61.5 feet bgs with overlying perched groundwater zone. Reconnaissance groundwater samples were collected from the Sea Level Aquifer, and the boring was subsequently backfilled to approximately 65 feet bgs where a monitoring well (MW-1) was installed in the perched groundwater zone identified during drilling. Gasoline-range petroleum hydrocarbons (GRPH) and/or benzene were detected at concentrations above MTCA Method A cleanup levels in soil from boring MW-1 between 14.5 and 61.5 feet bgs.

A soil vapor extraction (SVE) system, consisting of three SVE wells, one dual-purpose SVE/monitoring well, and a catalytic oxidation unit, was installed at the Site in 2006. Between November 16 and 18, 2006, two additional groundwater monitoring wells (MW-2 and MW-3), one additional soil boring (B-7), and the three SVE wells (SVE-2S, SVE-2D, and SVE-3) were installed on the Site using hollow-stem auger (HSA) drilling methods. GRPH and benzene were detected at concentrations above MTCA Method A cleanup levels in soil from boring MW-1. Groundwater samples of perched water collected from wells MW-2 contained a concentration of benzene above the MTCA Method A cleanup level. Results of the initial subsurface investigation are detailed in a Site Characterization Report completed by Farallon in February 2006 (Farallon 2006a).

In June of 2006, Farallon conducted an initial groundwater monitoring event, consisting of groundwater elevation measurements and groundwater sampling of wells MW-1 through MW-3. June 2006 groundwater monitoring and SVE system installation details are summarized in the October 2006 Cleanup Action Progress Report (Farallon 2006b). Continuous SVE system operation was commenced on September 13, 2006. A second groundwater monitoring event was conducted in October 2006.

Two additional monitoring wells (MW-4 and MW-5) were installed in the perched groundwater zone on the Site to depths of 56 and 63 feet bgs, respectively, utilizing HSA drilling methods. A groundwater monitoring event was conducted on all five of the existing wells (MW-1 through MW-5) in December 2007. Well MW-5 was found to be dry and was never sampled.

Farallon returned to the Site in March 2008 to conduct a supplementary subsurface investigation. Three additional groundwater monitoring wells were installed in the perched groundwater zone (MW-6 through MW-8) on the adjoining parcel to the west of the Site, to depths of 61, 59, and 61 feet bgs, respectively. Two additional remediation wells were concurrently installed, one air sparge (AS) well (AS-3) and one SVE well (SVE-4). All wells were installed using HSA drilling methods. Following well

installation two additional groundwater monitoring events was conducted in April and September 2008. Well MW-5 continued to be dry and was not sampled.

In April 2009, Farallon installed four additional groundwater monitoring wells (MW-9 through MW-12) at the Site, on tax parcel R22911-093-1210 and in the South Harbor Avenue right-of-way (ROW) to the west and southwest of the Site using HSA drilling methods. A 4.5-foot zone of sand with silt and silty sand was encountered in well MW-9 at 55 feet bgs, but did not appear to form a continuous aquitard and with no saturated zone encountered overlying it. The boring was advanced to 110 feet bgs and a groundwater monitoring well was set in the underlying Sea Level Aquifer. Similar soil conditions were observed in wells MW-10 through MW-12, and all were completed as groundwater monitoring wells screened in the Sea Level Aquifer at a total depth of 110 feet bgs. Following well installation, a groundwater monitoring event was conducted in May 2009, sampling from wells MW-1 through MW-4 and MW-6 through MW-12. GRPH and/or BTEX constituents (benzene, toluene, ethylbenzene, and total xylenes) were detected at concentrations above MTCA Method A cleanup levels in wells MW-2, MW-4, and MW-6 through MW-12.

In 2012, Farallon began measuring the presence of light nonaqueous-phase liquid (LNAPL) in the Sea Level Aquifer monitoring well MW-9. LNAPL thickness has ranged from 0.98 to less than 0.01 foot between 2012 and 2016. A sorbent sock has been used in MW-9 since 2012 to passively recover LNAPL.

Due to the use of the Sea Level Aquifer as Whidbey Island's primary drinking water source, Farallon installed four additional monitoring wells (MW-13 through MW-16) downgradient of the Site to provide a monitoring network upgradient of the Freeland Water and Sewer District drinking water wells. Three drinking water wells are approximately 1,900 to 2,900 feet south and south-southeast of the Site (Figure 1). GRPH, diesel-range petroleum hydrocarbons (DRPH), and BTEX have been detected in well MW-13 at concentrations exceeding the applicable MTCA Method A cleanup levels. None of the chemicals of concern (COCs) have been detected in groundwater samples collected from monitoring wells MW-14, MW-15, or MW-16.

Boring and well locations from previous investigations are shown on Figure 2. Historical soil data are shown on Figure 3. Soil analytical results are presented in Tables 1 and 2. Groundwater elevation measurements are presented in Table 3. Groundwater analytical results are presented in Table 4.

3.1.1 Data Gaps

Data gaps identified by SoundEarth based on previous investigations include the following.

- **Lateral extent of known groundwater impacts at the Site.** Previous investigations have identified impacts to the perched groundwater zone and Sea Level Aquifer. The lateral extent of the impacts to the Sea Level Aquifer has not been well defined to the east, west, or southwest.
- **The lateral and vertical extents of remaining soil contamination at the Site.** Previous reports indicate that the operation of an SVE system has removed all contaminated source material from the Site. However, no additional soil sampling has been conducted since the interim remedial actions.

- **The potential for additional source contributing to the contaminate plume.** No historical review of the Site or surrounding parcels has been completed. At least one former gasoline service station operated southwest of the Site.

3.2 SITE CHARACTERIZATION

The following sections outline the field activities completed as part of the PPA on the Site between April and August 2017. The activities conducted as part of this PPA were performed between July 21 and August 23, 2017. Drilling activities were conducted under the supervision of a SoundEarth licensed geologist. Drilling services were provided by Cascade Drilling of Woodinville, Washington.

The scope of work included the following:

- Reviewing the contamination at the Site based on existing historical data and review of historical records for the Site.
- Preparing a Work Plan that met the substantive requirements of WAC 173-340-350(7)(8). The Work Plan summarized the Site history and the identified data gaps necessary to characterize the nature and extent (lateral and vertical) of contamination present in soil, groundwater, and vapor at the Site and select a preferred remedial action alternative to clean up the Site and support preconstruction planning for infrastructure upgrade as necessary (SoundEarth 2017).
- Preparing a health and safety plan in accordance with MTCA and Part 1910.120 of Title 29 of the Code of Federal Regulations (29 CFR 1910.120) before initiating field activities.
- Advancing and soil sampling borings B08, B09, MW-17, and MW-18.
- Completing borings MW-17 and MW-18 as groundwater monitoring wells.
- Logging subsurface soil, field-screening recovered soil samples, and submitting selected soil samples for laboratory analysis of one or more of the following: GRPH, DRPH, ORPH, and BTEX.
- Conducting aquifer testing on select monitoring wells to determine Sea Level Aquifer characteristics.
- Collecting low-flow groundwater samples from monitoring wells MW-1 through MW-4 and MW-6 through MW-18.
- Surveying monitoring well MW-17 and MW-18 casing elevations relative to previously installed monitoring wells.
- Completing a vapor intrusion assessment in accordance with Ecology's *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action* (Ecology 2009), and *Updated Process for Initially Assessing the Potential for Petroleum Vapor Intrusion (Implementation Memorandum #14; Ecology 2016a)*.
- Preparing this PPA Report.

A detailed description of the investigation activities is provided in the following subsections.

3.2.1 Utility Survey

Prior to commencement of subsurface activities, SoundEarth conducted a public and private utility locate to identify all subsurface features at the Site. The public utility was conducted by

calling the one-call utility notification center to locate all public utilities. Private utility locates were conducted by Applied Professional Services, Inc on July 26, 2017, and by C-N-I Locates, LDT on August 14, 2017. The locations of identified utilities are depicted on Figure 2.

3.2.2 Soil Investigation

On July 26 through 28, 2017, two borings (B08 and MW-17) were advanced on the Site using a sonic rotary drill rig. Borings were advanced to 66 and 116 feet bgs, respectively, to assess current petroleum concentrations in soil and potential petroleum impacts to the Sea Level Aquifer on the Site. Soil samples were collected from the core barrel and placed in plastic sleeves, resulting in disturbed but continuous soil samples. The soil was classified using the Unified Soil Classification System. Soil characteristics, including moisture content, relative density, texture, and color, were recorded on the boring logs, which are provided as Appendix B. Soil from approximately 2- to 3-foot intervals was placed in a plastic bag for the semi-quantitative field analysis of volatile organic vapors using a photoionization detector (PID).

On August 14 and 15, 2017, two borings (B09 and MW-18) were advanced along the east side of the South Harbor Avenue ROW using a HSA drill rig. Borings were advanced to 71.5 and 115.5 feet bgs, respectively, to assess petroleum impacts to soil and groundwater downgradient to the southwest of the Site. Soil samples were collected from the bottom depth of each interval and removed from the boring, resulting in the collection of relatively undisturbed cores of soil. The soil was classified using the Unified Soil Classification System. Soil characteristics, including moisture content, relative density, texture, and color, were recorded on the boring logs, which are provided as Appendix B. Soil from each interval was placed in a plastic bag for the semi-quantitative field analysis of volatile organic vapors using a PID.

Soil samples were placed into laboratory-prepared glassware in accordance with the U.S. Environmental Protection Agency (EPA) Method 5035 guidelines. Samples were labeled, placed on ice in a cooler, and delivered to Apex Laboratories, LLC. (Apex), of Tigard, Oregon, under standard chain-of-custody protocols. Samples were selected for laboratory analysis of GRPH by Northwest Total Petroleum Hydrocarbon (NWTPH) Method NWTPH-Gx, DRPH and ORPH by Method NWTPH-Dx, and BTEX by EPA Method 8021B.

Three soil samples collected from boring MW-17 were additionally submitted to Otto Rosenau & Associates, Inc., of Seattle, Washington, for particle size analysis to aid in aquifer hydrological assessment (Section 3.2.5). Copies of the Particle Size Distribution Reports are included in Appendix C.

3.2.3 Groundwater and Monitoring Well Installation and Sampling

On July 26 through 28, 2017, boring MW-17 was completed as a permanent groundwater monitoring well, constructed using 2-inch-diameter PVC casing with 0.010-inch slotted well screen, and screened from 100 to 115 feet bgs.

On August 14 and 15, 2017, borings MW-18 was advanced along the east side of the South Harbor Avenue using an HSA drill rig to approximately 115.5 feet bgs. Soil boring MW-18 was completed as a permanent groundwater monitoring well, constructed using 2-inch-diameter PVC casing with 0.010-inch slotted well screen, and screened from 100 to 115 feet bgs.

Following installation, monitoring wells MW-17 and MW-18 were developed using a submersible pump. Approximately 55 and 80 gallons of purge water were removed from wells MW-17 and MW-18, respectively.

On August 21, 2017, permanent monitoring wells were sampled in accordance with the EPA *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* (EPA 1996). Prior to sampling, all wells were opened and groundwater elevation measurements were collected after allowing groundwater to equilibrate for a minimum of 1 hour. Purging and sampling of groundwater were performed using a bladder pump and dedicated polyethylene tubing. During purging, water quality was monitored using a Quanta water-quality meter equipped with a flow-through cell. The six water quality parameters that were monitored and recorded during well purging included temperature, pH, specific conductivity, dissolved oxygen, turbidity, and oxidation-reduction potential.

Groundwater samples were labeled, placed on ice in a cooler, and delivered to Apex, under standard chain-of-custody protocols. Samples were selected for laboratory analysis of GRPH by Method NWTPH-Gx, DRPH and ORPH by Method NWTPH-Dx, and BTEX by EPA Method 8021B.

Groundwater monitoring well MW-5 was found to be dry, with insufficient trace water at the bottom of the screen to collect a sample. The flow and recharge rates of groundwater in wells MW-2 and MW-7 in the perched groundwater zone were too low to collect sufficient water volume for DRPH and ORPH analysis.

3.2.4 Vapor Intrusion Assessment

SoundEarth completed a vapor intrusion (VI) assessment in accordance with Ecology's draft 2009 guidance and updated in 2016.

Based on the available soil and groundwater data, a release of petroleum hydrocarbons to the environment has occurred. The soil and groundwater data collected post interim remedial action indicate that soil and groundwater impacts beneath the Site begin at 55 feet bgs, borings B-8 and MW-17.

Ecology's updated 2016 petroleum VI guidance recommends a vertical separation distance of 15 feet between the building foundation and shallowest point of contamination in order to be protective of the VI to indoor air pathway. The Site meets the criteria for the vertical separation distance and based on Ecology's 2016 guidance the vapor intrusion assessment is complete, and no additional assessment is necessary.

3.2.5 Aquifer Hydrogeological Assessment

On August 8, 2017, SoundEarth conducted slug tests in monitoring wells MW-11 and MW-16 to estimate the hydraulic conductivity of the Sea Level Aquifer beneath the Site.

Based on the depth to water in each of the wells, either a 3-foot or a 5.2-foot slug was used for slug testing. Both of the slugs used for testing were constructed from a piece of PVC pipe filled with clean sand to displace a known volume within the water column. Water levels were monitored during the slug tests using an Instrumentation Northwest (INW) Aquistar PT2X vented pressure transducer that incorporates automatic logging of water level data using INW Aqua4Plus software. The pressure transducer was programmed to record readings at intervals ranging from 8 readings per second to 1 reading per second during the slug tests. An electronic

water level indicator was also used to obtain periodic manual water level measurements during the slug tests.

The test wells were opened and allowed to equilibrate with the atmosphere for at least 30 minutes prior to conducting each test. The pressure transducer was placed at a depth of at least 1 foot below the targeted submergence depth of the slug. Water levels were monitored after placing the pressure transducer in the monitoring well to confirm that the water level had stabilized before inserting the slug. To start the slug test, the slug was lowered into the well until it was fully submerged. Following the introduction of the slug, water levels were allowed to equilibrate. After equilibration was reached, the slug was quickly removed from the monitoring well to test the rising-head, and water levels were allowed to re-equilibrate. Four rising-head tests were conducted on monitoring well MW-16. After completing the first rising-head test on monitoring well MW-11, the slug and transducer cable became lodged in the well. Therefore, no additional testing could be completed on MW-11. Equipment was removed from the well the following day.

Following field testing, the water level data were downloaded from the pressure transducers, compiled, and processed for analysis. Data processing included selecting the time interval of interest, reducing the measurement frequency where appropriate, and converting the water levels to displacements (change versus the initial water level). Time series files of the recorded displacements for each test were then exported to AquiferWin32 (Environmental Solutions, Inc.) for analysis.

The data from each test was analyzed by the Bouwer and Rice (1976) method, using the procedures described by Bouwer (1989), which pertain to wells screened across the water table. Assumptions of the Bouwer and Rice method include the following (Todd and Mays 2005, Bouwer 1989):

- The aquifer is unconfined and has an apparently infinite areal extent.
- The aquifer is homogeneous, isotropic, and of uniform thickness over the area influenced by the slug test.
- Prior to the test, the water table is (nearly) horizontal over the area that will be influenced by the test.
- The head in the well is lowered instantaneously at time zero; the drawdown in the water table around the well is negligible; there is no flow above the water table.
- The inertia of the water column in the well and the linear and non-linear well losses are negligible.
- The well either partially or fully penetrates the saturated thickness of the aquifer.
- The flow to the well is in steady state.
- Because the water table in the aquifer is kept constant and is taken as a plane source of water, the Bouwer and Rice method can also be used for a leaky aquifer, provided that its lower boundary is an aquiclude and its upper boundary is an aquitard.

A summary of the slug test results is provided in Table 5. The results from the slug tests indicated the following:

- The estimated hydraulic conductivity of the Sea Level Aquifer in monitoring well MW-11 is 102.90 feet per day. The average estimated hydraulic conductivity from the four tests conducted in monitoring well MW-16 is 19.30 feet per day.
- The average hydraulic conductivity from the slug tests in monitoring wells MW-11 and MW-16 is 61.10 feet per day.

A detailed presentation of the input and output for the estimated hydraulic conductivities for each slug test are presented in Appendix D.

A seepage velocity (v_s) for groundwater within the Sea Level Aquifer was estimated using the following equation:

$$v_s = \frac{Ki}{n}$$

The observed soil profile within the screened interval of monitoring wells MW-11 and MW-16 consisted of fine to coarse sand with trace silt interbedded with silty sand. Based on these soil types, an average porosity of 0.375 is assumed for soil within the Sea Level Aquifer (Freeze and Cherry 1979). The estimated hydraulic conductivity (K) of 61.10 feet per day, the assumed average porosity (n) of 0.375 for sand, and estimated hydraulic gradient (i) of 0.0012 from the 2017 groundwater elevation contours were used to estimate the seepage velocity for water within the Sea Level Aquifer. Contours for groundwater flow are shown on Figures 4 and 5. Based on these values for K, i, and n, the estimated seepage velocity for the Sea Level Aquifer is 0.20 feet per day.

Chemical migration rates are often slower relative to the groundwater flow due to attenuation mechanisms, such as adsorption and degradation reactions. The effect of adsorption reactions on chemical migration rates is quantified by the retardation factor (R), which is estimated from the chemical-specific partition coefficient (K_d), soil bulk density (ρ_b), and porosity (Φ) (Kuo 1999).

$$R = 1 + \frac{\rho_b K_d}{\Phi}$$

The velocity of the contamination (v_c) can then be estimated using the estimated seepage velocity and chemical-specific retardation factors:

$$v_c = v_s/R$$

The retardation factor for petroleum hydrocarbons at the Site has not been calculated. If monitored natural attenuation is selected as the remedial alternative, additional assessment is recommended to calculate chemical-specific retardation factors and potential contaminate migration rates to ensure that petroleum contamination will not reach the point of compliance for groundwater at the Site.

3.2.6 Quality Assurance and Quality Control

SoundEarth conducted a quality assurance/quality control (QA/QC) review of all laboratory analytical reports in order to evaluate the usability of analytical results to meet the objectives of the PPA. The following QA/QC criteria were reviewed:

- The laboratory data package for completeness.
- Sample chain-of-custody forms, including a comparison of the requested analyses against laboratory reported information, signatures, sample condition upon receipt by the laboratory, and sample preservation.
- Holding times for each analysis.
- Laboratory QA/QC, including recoveries for surrogate, matrix spike, matrix spike duplicates, laboratory control standards, laboratory duplicates, and relative percent differences for duplicate sample analysis and matrix spike/matrix spike duplicates and laboratory control standards/laboratory control duplicates.

3.2.7 Sampling and Analytical Results

Soil and groundwater analytical results are depicted on Figure 6 and 7, and presented in Tables 1, 2, and 4. Cross sections of the Site are presented on Figure 8 and 9. Copies of the laboratory analytical reports are included in Appendix E. Copies of the Particle Size Distribution Reports are included in Appendix C. Copies for the forensic chromatograms are included in Appendix F.

3.2.7.1 Soil

Soil observed in borings on the Site consisted of sand and silty sand to the maximum depth reached, with intermittent thin layers of silt. An approximately 10-foot-thick zone of silt and silt with sand was encountered in soil borings B08 and MW-17 between 54 and 65 feet bgs, underlying the perched groundwater zone. Soil analytical results indicated the following:

- Concentrations of GRPH that exceeded the MTCA Method A cleanup level were detected in boring B08 at 55 feet bgs, and boring MW-17 at 55, 105, and 115 feet bgs.
- Concentrations of benzene that exceeded the MTCA Method A cleanup level were detected in boring MW-17 at 105 and 115 feet bgs. A concentration of toluene that exceeded the MTCA Method A cleanup level was detected in boring MW-17 at 105 feet bgs. Concentrations of ethylbenzene and total xylenes that exceeded the MTCA Method A cleanup level were detected in boring B08 at 55 feet bgs, and in boring MW-17 at 105 feet bgs.
- Concentrations of DRPH and ORPH were below the applicable cleanup levels for all soil samples analyzed.

Particle size sieve analysis results indicated the following:

- Soil from the perched groundwater zone collected from 50 to 54 feet bgs consisted of 0 percent gravel, 91 percent sand and 9 percent fines (silt and clay) particle sizes by weight.

- Soil from the aquitard silt layer collected from 54 to 55 feet bgs consisted of 0 percent gravel, 4 percent sand, and 96 percent fines particle sizes by weight.
- Soil from the Sea Level Aquifer collected from 100 to 110 feet bgs consisted of 0 percent gravel, 93 percent sand, and 7 percent fines particle sizes by weight.

Forensic analysis of the soil samples indicated:

- Soil chromatograms for samples MW-17 at 54 feet bgs and 105 feet bgs indicated a fuel pattern of unleaded modern gasoline that has undergone substantial weathering. The samples from 54 and 105 feet bgs indicated the same fuel pattern in both samples.

3.2.7.2 Groundwater

Perched zone groundwater was observed in soil borings B08 and MW-17 between approximately 55 to 60 feet bgs. Sea Level Aquifer groundwater was observed in soil borings MW-17 and MW-18 between 102 and 103 feet bgs. Perched groundwater measured in monitoring wells ranged from 50.51 (MW-1) to 57.25 feet bgs (MW-6). Sea Level Aquifer groundwater measured in monitoring wells ranged from 99.66 (MW-10) to 103.71 feet bgs (MW-16). Using these measurements, the groundwater elevations were calculated and contoured for both groundwater zones, as shown on Figure 4 and 5. The contours indicated an average gradient of 0.053 feet per foot between wells MW-1 and MW-6 in the perched groundwater zone, and an average gradient of 0.012 feet per foot between wells MW-10 and MW-16 in the Sea Level Aquifer.

Groundwater analytical results are depicted on Figure 7. Groundwater analytical results indicated the following:

- Concentrations of GRPH that exceeded the MTCA Method A cleanup level were detected in perched groundwater zone monitoring wells MW-4, MW-6, MW-7, and MW-8, and in Sea Level Aquifer monitoring wells MW-9, MW-12, MW-13, and MW-17.
- Concentrations of at least one BTEX constituent that exceeded the applicable MTCA Method A cleanup level were detected in perched groundwater zone monitoring well MW-6, and in Sea Level Aquifer monitoring wells MW-9, MW-12, MW-13, and MW-17.
- Concentrations of DRPH that exceeded the MTCA Method A cleanup level were detected in perched groundwater zone monitoring wells MW-4, MW-6, and MW-8, and in Sea Level Aquifer monitoring wells MW-9, MW-12, and MW-13. The detected concentrations of DRPH exceeding cleanup levels were noted by the laboratory as being biased high due to GRPH overlap. Groundwater samples from monitoring wells MW-2 and MW-7 were not analyzed for DRPH due to insufficient sample volume due to low groundwater recharge.
- Concentrations for all COCs were below the applicable MTCA Method A cleanup levels for monitoring wells MW1-through MW-3, MW-10, MW-11, MW-14 through MW-16, and MW-18.

3.2.7.3 Vapor

No soil gas sampling was conducted as part of this site characterization investigation. The vapor exposure pathway is considered incomplete for human or terrestrial exposure based on the depth to groundwater and remaining soil contamination underlying the Site.

3.2.7.4 Data Quality Review

The results of QA/QC review indicated that the following criteria were acceptable:

- All data packages/laboratory reports were complete and all samples were received properly preserved and in good condition.
- No issues with the chain of custody forms and holding times were identified.
- Recoveries for surrogates, matrix spikes, matrix spike duplicates, laboratory control standards, duplicates and relative percent differences for matrix spike/matrix spike duplicates were within the method limits.

The sample volumes collected for groundwater samples MW02-20170822 and MW07-20170822 were insufficient to fill the required sample containers for DRPH analysis due to insufficient water column present and slow recharge within the two monitoring wells. DRPH analysis was not performed on the groundwater samples from these two wells.

The analytical results for the soil and groundwater samples are considered to be usable to meet the objectives of the PPA. A copy of the laboratory analytical reports is provided as Appendix E.

3.2.8 Remaining Data Gaps

Due to logistical constraints SoundEarth was unable to acquire access to adequately advance a boring to the west of existing monitoring well MW-12 in order to evaluate the western extent of groundwater contamination in the Sea Level Aquifer. The western extent of contamination inferred in the conceptual site model (CSM) is an estimate based on the distance and direction of contaminate flow elsewhere on the Site.

4.0 CONCEPTUAL SITE MODEL

A preliminary CSM has been developed to identify confirmed and suspected source areas of COCs to the media of concern, potential migration pathways, potential receptors, and exposure pathways at the Site. The CSM is discussed below.

4.1 CHEMICALS AND MEDIA OF CONCERN

The chemicals and media of concern for the Site are GRPH, DRPH, ORPH, and BTEX in soil and groundwater.

4.2 NATURE AND EXTENT OF CONTAMINATION

Historical borings around the former USTs confirmed shallow petroleum hydrocarbon impacts to soil in the immediate vicinity of the former USTs from approximately 15 to 30 feet bgs. A confirmed release from former UST 2 is the primary source for petroleum impacts to soil and groundwater at the Site. Field screening indicates much of this contamination has been remediated by the SVE system that operated between 2006 and 2009. Deeper soil contamination remains on the Site, extending laterally to the west

and south from the Site in saturated soil in the perched groundwater zone from approximately 50 to 60 feet bgs, and at the top of the Sea Level Aquifer from approximately 100 to 110 feet bgs. Clean soil samples were collected within the silt layer at approximately 60 to 61 feet bgs, indicating that the deeper soil and groundwater impacts are not from direct vertical migration.

Groundwater monitoring wells indicated that petroleum hydrocarbon impacts to groundwater are present in the perched groundwater zone and the Sea Level Aquifer underlying the Site. Perched groundwater contamination above MTCA Method A cleanup levels extends laterally from the immediate vicinity of the former USTs and flows to the west (Figure 4). MW-5 is currently and historically dry, confirming the termination of the perched groundwater zone west of MW-6 and MW-7. Based on the steep perched groundwater zone gradient and the termination of the perched groundwater zone (Figure 4), groundwater west of MW-6 and MW-7 appears to flow vertically into the Sea Level Aquifer at MW-9. Sea Level Aquifer groundwater generally flows to the southeast (Figure 5). Petroleum impacts to the Sea Level Aquifer are consistent with the contoured flow direction to the southeast and south, observed in concentrations above MTCA Method A cleanup levels in wells MW-6 through MW-9, MW-12, MW-13, and MW-17.

Based on contour maps, the Sea Level Aquifer flows generally toward the southeast. MW-12 is located west-southwest of MW-9 and the Site, and concentrations of GRPH exceeding the MTCA Method A cleanup level were detected in soil at 45 feet bgs. Based on the groundwater flow direction, shallow soil exceedances in MW-12, and concentrations of petroleum hydrocarbons in groundwater in MW-12, a secondary source may exist west of MW-12.

Cross sections depicting the Site are presented on Figures 8 and 9. An illustration of the conceptual site model and transport of contaminated groundwater is shown on Figure 10.

4.3 CONTAMINANT FATE AND TRANSPORT

The fate and transport of the contaminants in the environment affect their migration, mobility, and persistence. Within the media of concern, petroleum hydrocarbons may exist in four phases. The four phases include soil vapor (soil gas), solid phase (adsorption on to soil particles), aqueous phase (dissolved in groundwater and soil pore water), and light nonaqueous-phase liquids (LNAPL; within the soil and on the groundwater). The transport of petroleum hydrocarbons is the media of concern and is dependent on the texture of the soil and hydrologic properties of the aquifer. The fate of the petroleum hydrocarbons is dependent on their chemical properties (solubility and volatility) and biological and abiological processes in the media of concern. The fate and transport of petroleum hydrocarbons results in their natural attenuation in the environment. Natural attenuation is defined by a variety of physical, chemical, or biological processes that, under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, or concentration of contaminants in soil or groundwater.

4.3.1 Environmental Fate of Petroleum Hydrocarbons in the Subsurface

The most significant fate process for petroleum hydrocarbons is biodegradation (i.e., natural attenuation). Once petroleum hydrocarbons enter the subsurface, natural attenuation of the compound begins. The natural attenuation processes include intrinsic abiotic and biotic degradation in the groundwater and soil, and adsorption onto soil particles. Both abiotic and biotic processes degrade petroleum hydrocarbons to carbon dioxide, assuming the appropriate geochemical conditions are present in soil and groundwater. Adsorption onto soil particles

retards the vertical and lateral migration of petroleum hydrocarbons, and the residual saturation capacity of soil affects the vertical migration of LNAPL. In addition, advection and dispersion dilute the concentration of petroleum hydrocarbons in the groundwater as the compounds migrate downgradient from the source release areas. Evidence for natural attenuation processes in soil and groundwater would include the presence of aerobic to slightly anaerobic conditions in the groundwater, significant shrinking in the magnitude and extent of the petroleum contaminant plumes, degradation products for the COCs in the groundwater and soil, and the absence of petroleum hydrocarbons in groundwater at or below the source area or at downgradient monitoring wells.

4.3.2 Transport Mechanism Affecting the Distribution of Petroleum Hydrocarbons in the Subsurface

The transportation and distribution of petroleum hydrocarbons in the vadose zone beneath the Site is controlled by a number of factors, including the following:

- The mass of contamination released from the source area.
- The vertical migration of dissolved-phase petroleum hydrocarbons through the soil column due to gravity-driven advection and the moisture content of the soil.
- Adsorption and desorption of contaminants from soil particles and organic matter. Adsorption is a function of moisture content of the soil, the organic-carbon partitioning coefficient for the contaminants, and the concentration of organic matter in the soil.
- The lateral distribution of concentrations of total petroleum hydrocarbons (TPH) and BTEX in groundwater may be a result of leaching of adsorbed-phase petroleum-contaminated soil via soil-to-water partitioning, and the natural attenuation processes, such as advection/dispersion, diffusion, sorption, and biodegradation.
- The diffusive transport of contaminated vapors from areas of high to low concentrations.
- Advective transport of vapors due to changes in pressure and temperature gradients.
- Natural mechanisms, including temperature, groundwater, and barometric pressure fluctuations, may result in the volatilization of TPH and BTEX in soil and groundwater to soil vapor via soil and/or groundwater to air partitioning. Soil vapor with concentrations of TPH and BTEX may transport to the surface with barometric pressure fluctuations.

The transportation and distribution of petroleum hydrocarbons in the groundwater controls the lateral and vertical migration of petroleum hydrocarbons by advection and dispersion transport mechanisms. Advection is a function of hydraulic conductivity of the aquifer material and the hydraulic gradient of the groundwater. Under advective transport, dissolved contaminants follow the direction of groundwater flow, sometimes referred to as the advection front. Dispersive mixing causes some contaminant molecules to move ahead (longitudinal) of the average advective velocity along the hydraulic gradient and some molecules to move laterally (transverse) to the hydraulic gradient. The net effect is to spread (disperse) the contaminant plume about the advective front. The amount of spreading is related to the dispersivity of the

soil, microscopic velocities through the pore spaces in the soil, the advective velocity of groundwater flow, and the molecular diffusion of the contaminant in the water within the pore space.

4.4 EXPOSURE PATHWAY ASSESSMENT

The preliminary exposure assessment identifies potential receptors for exposure pathways for environmental media of potential concern from contaminant fate and transport mechanisms. Potential receptors at risk from exposure associated with the presence of COCs at the Site are human and ecological receptors. The objective of the preliminary exposure assessment is to assess the completeness of exposure pathways from environmental media of potential concern and associated contaminant fate and transport mechanisms for the potential receptors for the Site. The results from the preliminary exposure assessment will assist with the evaluation of potential feasible cleanup alternatives that are protective of the potential receptors identified as complete. The preliminary exposure assessment for each exposure pathway and associated environmental media of potential concern is summarized below by affected environmental media. The exposure pathway assessment is visualized in Figure 11.

4.4.1 Soil

Soil with concentrations of COCs above the preliminary cleanup levels may present a potential exposure pathway to human and/or ecological receptors. The potential exposure pathways for soil at the Site include direct contact (dermal contact and ingestion), leaching to groundwater, direct contact to surface water, and inhalation of soil vapors. The exposure pathways for subsurface soil via dermal contact or ingestion and the exposure pathway via leaching to groundwater are considered complete for the COCs at the Site. The standard point of compliance for the direct contact exposure pathway for soil is 15 feet bgs for human health and 6 feet bgs for terrestrial receptors. A depth of 15 feet bgs is a reasonable depth that could be excavated during normal redevelopment activities and distributed at the ground surface (WAC 173-340-[6][d] and WAC 173-340-7490[4][b]).

The Site is currently partially paved, which minimizes the exposure risk for terrestrial receptors. Compacted gravel fill overlies the former UST excavation area on the southeastern portion of the Site. Based on the depth of soil contamination at the Site, the pathway is considered incomplete for direct contact. The pathway for soil leaching to groundwater is considered complete.

4.4.2 Groundwater

Potential exposure pathways for groundwater contamination include the pathway to surface water, volatilization into soil vapor, or via the direct contact pathway, which comprises both the dermal contact and ingestion pathways. According to an inventory of groundwater supply wells in the vicinity of the Site, three drinking water wells are located approximately 1,900 to 2,900 feet south and south-southeast of the Site (Figure 1). None of the COCs have been detected in groundwater samples collected from monitoring wells MW-14, MW-15, or MW-16, which lie downgradient of the Site and upgradient of the nearest drinking water wells. The non-detect wells between the known contaminate plume and the drinking water wells, indicate there is not an immediate threat to the water supply. The perched groundwater zone at the Site is not used as a drinking water source and is likely a non-potable resource as defined in WAC 173-340-720[2][b][i].

Based on the flow direction and impacts to the Sea Level Aquifer, the groundwater pathway is considered complete due to the use of the aquifer as a drinking water source.

4.4.3 Vapor

The exposure pathway for inhalation of volatile COCs from soil gas or groundwater is considered incomplete. The air-filled pore space between soil grains in the unsaturated zone, or partially saturated zone, is referred to as soil gas or soil vapor. Based on the depth to groundwater and remaining soil contamination underlying the Site of over 50 feet bgs, the vapor exposure pathway is considered incomplete for human or terrestrial exposure.

4.5 TERRESTRIAL ECOLOGICAL EVALUATION

A Terrestrial Ecological Evaluation (TEE) is required by WAC 173-340-7940 at locations where a release of a hazardous substance to soil has occurred. The TEE is intended to assess potential risk to plants and animals that live entirely or primarily on affected land. The Site qualifies for a TEE exclusion based on WAC 173-340-7491(1)(a) since all soil contaminated with hazardous substances is located below the point of compliance (Section 5.2.2.1) following the UST decommissioning and removal and the soil remediation completed by Farallon in January 2011 (Farallon 2011a; Table 2).

5.0 PROPOSED CLEANUP STANDARDS

The proposed cleanup standards selected for the Site are consistent with applicable regulatory standards and local, state, or federal laws. The relevant requirements and the associated media-specific cleanup levels for the identified COCs are summarized in the following sections.

5.1 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

Under WAC 173-340-350 and 173-340-710, applicable or relevant and appropriate requirements (ARARs) include regulatory cleanup standards, standards of control, and other environmental requirements, criteria, or limitations established under state and federal law that specifically address a contaminant, remedial action, location, or other circumstances at a site. The following table summarizes the preliminary ARARs for the Site.

Table 5-1 Preliminary ARARs for the Site

Preliminary ARAR	Citation or Source
MTCA	Chapter 70.105 of the Revised Code of Washington (RCW)
MTCA Cleanup Regulation	WAC 173-340
Ecology, Toxics Cleanup Program – <u>Guidance To Be Considered</u>	<i>Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action</i> , Review DRAFT, October 2009, Publication No. 09-09-047
State Environmental Policy Act	RCW 43.21C
Washington State Shoreline Management Act	RCW 90.58; WAC 173-18, 173-22, and 173-27
The Clean Water Act	33 United States Code [USC] 1251 et seq.
Comprehensive Environmental Response,	42 USC 9601 et seq. and 40 CFR 300

Preliminary ARAR	Citation or Source
Compensation, and Liability Act of 1980	
The Fish and Wildlife Coordination Act	16 USC 661-667e; the Act of March 10, 1934; Ch. 55; 48 Stat. 401
Endangered Species Act	16 USC 1531 et seq.; 50 CFR 17, 225, and 402
Native American Graves Protection and Repatriation Act	25 USC 3001 through 3013; 43 CFR 10 and Washington's Indian Graves and Records Law (RCW 27.44)
Archaeological Resources Protection Act	16 USC 470aa et seq.; 43 CFR 7
Washington Dangerous Waste Regulations	WAC 173-303
Solid Waste Management Act	RCW 70.95; WAC 173-304 and 173-351
Occupational Safety and Health Administration Regulations	29 CFR Parts 1910, 1926
Washington Department of Labor and Industries Regulations	WAC 296
Water Quality Standards for Surface Waters of the State of Washington	RCW 90.48 and 90.54; WAC 173-201A
Water Quality Standards for Ground Water	WAC 173-200
Department of Transportation Hazardous Materials Regulations	40 CFR Parts 100 through 185
Washington State Water Well Construction Act	RCW 18.104; WAC 173-160
Island County regulations, codes, and standards	All applicable or relevant and appropriate regulations, codes, and standards.
Freeland, Washington regulations, codes, and standards	All applicable or relevant and appropriate regulations, codes, and standards.

5.2 CLEANUP STANDARDS

The selected cleanup alternative must comply with the MTCA cleanup regulations specified in WAC 173-340 and with applicable state and federal laws. The associated media-specific cleanup levels for the identified COCs are summarized in the following sections.

5.2.1 Cleanup Levels

Table 5-2 Proposed Cleanup Levels for Soil

COC	Cleanup Level (mg/kg)	Source
GRPH	30	MTCA Method A, Unrestricted; WAC 173-340-740(2)(b)(i)
DRPH	2000	
ORPH	2000	
Benzene	0.03	
Toluene	7	
Ethylbenzene	6	
Total Xylenes	9	

NOTES:

COC = chemicals of concern

DRPH = diesel-range petroleum hydrocarbons

GRPH = gasoline-range petroleum hydrocarbons

mg/kg = milligrams per kilogram

MTCA = Washington State Model Toxics Control Act

ORPH = oil-range petroleum hydrocarbons

WAC = Washington Administrative Code

Table 5-3 Proposed Cleanup Levels for Groundwater

COC	Cleanup Level (µg/L)	Source
GRPH	800	MTCA Method A, Table Value; WAC 173-340-720(3)(b)(i)
DRPH	500	
ORPH	500	
Benzene	5	
Toluene	1000	
Ethylbenzene	700	
Total Xylenes	1000	

NOTES:

µg/L = micrograms per liter

COC = chemicals of concern

DRPH = diesel-range petroleum hydrocarbons

GRPH = gasoline-range petroleum hydrocarbons

MTCA = Washington State Model Toxics Control Act

ORPH = oil-range petroleum hydrocarbons

WAC = Washington Administrative Code

5.2.2 Points of Compliance

5.2.2.1 Points of Compliance for Soil

In accordance with WAC 173-340-740(6)(b-d), the point of compliance for direct contact exposure is throughout the Site from the ground surface to 15 feet bgs. Confirmation sampling conducted during UST removal and remedial excavation activities indicate that soil with concentrations of COCs exceeding MTCA Method A cleanup levels has been removed from the Site (Table 2).

5.2.2.2 Points of Compliance for Groundwater

In accordance with WAC 173-340-720(8)(a)(b), the standard point of compliance for groundwater is defined as the uppermost level of the saturated zone extending vertically to the lowest depth that potentially could be impacted by the COCs throughout the Site.

Monitoring wells MW-1 through MW-4 and MW-6 through MW-8 will be used to evaluate whether compliance at the Site has been achieved in perched groundwater zone. The perched groundwater zone terminates and flows downwards into the Sea Level Aquifer groundwater zone approximately 50 feet west of the property boundary, forming the western perched groundwater zone point of compliance.

Monitoring wells MW-9 through MW-18 will be used to evaluate whether compliance at the Site has been achieved in Sea Level Aquifer groundwater.

5.3 AREAS REQUIRING REMEDIATION

The area identified as requiring remediation includes petroleum-impacted soil and groundwater located in the vicinity of the former USTs in the southern portion of the Site, and extending westerly and southerly across the property boundaries. Remaining petroleum-impacted soil appears in the saturated areas of the perched groundwater zone and Sea Level Aquifer, at approximately 50 to 60 feet bgs, and 95 to 115 feet bgs, respectively.

6.0 FEASIBILITY STUDY

The purpose of this focused feasibility study (FS) is to develop and evaluate cleanup action alternatives to facilitate selection of a final cleanup action at the Site in accordance with WAC 173-340-350(8). An FS includes the development, screening, and evaluation process for numerous remedial alternatives. Because Site-specific conditions preclude the implementation of many potential remedial components, a more focused evaluation was prepared, including only those alternatives which are implementable and capable of achieving the remediation objectives.

The FS is used to screen cleanup alternatives and eliminate those that are not technically possible, those with costs that are disproportionate under WAC 173-340-360(3)(e), or those that will substantially affect the future planned business operations at the Site. Based on the screening, the FS presented below evaluates the most practicable remedial alternatives in order to recommend a cleanup action for the Site, in conformance with WAC 173-340-360 through 173-340-390.

6.1 REMEDIAL ACTION OBJECTIVES

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

There are two ROAs for the Site. The first is to establish engineering controls to prevent impacted groundwater from migrating across the East Main Street ROW toward the drinking water supply wells located downgradient from the Site in the Sea Level Aquifer. The second is to treat all impacted soil and groundwater on the Site to concentrations compliant with MTCA Method A cleanup levels and obtain a Property-specific No Further Action (NFA) determination from Ecology.

6.2 IDENTIFICATION AND EVALUATION OF TECHNOLOGIES

Remedial components (technologies) were evaluated with respect to the degree to which they comply with the cleanup requirements set forth in MTCA. According to MTCA, a cleanup alternative must satisfy all of the following threshold criteria as specified in WAC 173-340-360(2):

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

These criteria represent the minimum standards for an acceptable cleanup action.

WAC 173 340-360 (2)(b) also requires the cleanup action alternative to:

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

Using the above criteria, several remedial technologies were evaluated and screened for effectiveness, implementability, and relative cost to produce a short list for further inclusion in the development of alternatives. Table 6 summarizes the remedial component screening process. The remedial technologies that passed the screening process include the following:

- **Monitored Natural Attenuation with an Environmental Covenant.** The existing groundwater monitoring well network indicates that groundwater has migrated downgradient, off of the western and southern property boundaries. The impacted groundwater off Site would be monitored to verify improvement in groundwater quality. Implementation of this technology would also include groundwater monitoring to demonstrate plume stability.

Under MTCA, engineering controls can be considered a remedial alternative if site conditions conform to the expectations listed in WAC 173-340-370 and the alternative complies with the remedy selection process in WAC 173-340-350 through 173-340-360, which include:

- Engineering controls, such as containment, can be used at sites or portions of sites that contain large volumes of materials with relatively low levels of hazardous substances where treatment is impracticable.
- Active measures must be taken to prevent precipitation runoff from coming into contact with contaminated soils and waste materials.
- Hazardous substances that remain at the Site at concentrations exceeding cleanup levels must be consolidated to the maximum extent practicable where needed to minimize the potential for direct contact and migration of hazardous substances.
- Action must be taken to prevent/minimize releases to surface water via stormwater runoff and groundwater discharges in exceedance of cleanup levels.
- Cleanup actions must not result in a significantly greater overall threat to human health and the environment than other alternatives.

- Appropriate monitoring requirements must be conducted to ensure that human health and the environment are protected.
- **Air Sparge with Soil Vapor Extraction.** Air sparge (AS) combined with SVE is a proven technology for the remediation of the COCs (GRPH, DRPH, and benzene) in soil and groundwater. AS delivers compressed air to the saturated zone to strip volatile compounds from the water and enhance aerobic bioremediation with increased dissolved oxygen concentrations. SVE induces a pressure and concentration gradient in the subsurface causing volatile compounds to desorb from the soil and flow with the vapor stream to a common collection point for discharge or treatment. SVE also collects the stripped compounds from the AS process.
- **Pump and Treat.** A pump and treat system would pump impacted groundwater out of dewatering wells in both the perched groundwater zone and the Sea Level Aquifer, and subsequently treat it with granular-activated carbon (GAC) to remove COCs. After treatment, the water would be reinfiltrated into the Sea Level Aquifer to maintain the groundwater storage. The system would prevent impacted groundwater from migrating off Site and cause the groundwater plume to shrink over time.

6.2.1 Applicability of Model Remedies

SoundEarth reviewed the applicability of Model Remedies to streamline the cleanup methods for the Site in accordance with Ecology's *DRAFT: Model Remedies for Sites with Petroleum Impacts to Groundwater*, dated August 2016, and Ecology's *DRAFT: Model Remedies for Sites with Petroleum Contaminated Soil*, dated September 2015. Based on the concentrations of GRPH, DRPH, and BTEX in soil and groundwater beyond the property boundary, the Site does not qualify for a Model Remedy (Ecology 2016b).

6.3 DEVELOPMENT OF REMEDIAL ALTERNATIVES

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

- **Protectiveness.** The overall protectiveness of human health and the environment, including the degree to which existing risks are reduced, the time required to reduce risk at the facility and attain cleanup standards, the risks resulting from implementing the alternative, and improvement of overall environmental quality.
- **Permanence.** The degree to which the alternative permanently reduces the toxicity, mobility, or volume of hazardous substances, including the adequacy of the alternative in destroying the hazardous substances, the reduction or elimination of hazardous substance releases and the sources of releases, the degree of irreversibility of the waste treatment process, and the characteristics and quantity of treatment residuals generated during the treatment process.
- **Effectiveness over the long term.** The degree of certainty that the alternative will be successful, the reliability of the alternative during the period of time over which hazardous substances are expected to remain on the Site, and the magnitude of residual risk associated with the

contaminated soil and/or groundwater components. The following types of cleanup action components, presented in descending order, may be used as a guide when assessing the relative degree of long-term effectiveness of the chosen alternative:

- Reuse or recycling
 - Destruction or detoxification
 - Immobilization or solidification
 - On-site or off-site disposal in an engineered, lined, and monitored facility
 - On-site isolation or containment with attendant engineering controls
 - Institutional controls and monitoring
- **Management of Short-Term Risks.** The risk to human health and the environment associated with the alternative during its construction and implementation, and the effectiveness of measures that will be taken to manage such risks.
 - **Technical and Administrative Implementability.** The ability to implement the alternative, including consideration of the technical feasibility of the alternative, administrative and regulatory requirements, permitting, scheduling, size, complexity, monitoring requirements, access for construction operations and monitoring, and integration with the future development plans for the Site.
 - **Consideration of Public Concerns.** The protection of the public interest, including considerations of perception, protection of the community, trust in the cleanup and involved parties, and impact on the surrounding areas.

6.3.1 Pilot Studies and Alternatives

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

The three cleanup action alternatives that were retained for additional consideration, which are described in more detail below in the following subsections, include the following:

Cleanup Action Alternative 1, Air Sparge and Soil Vapor Extraction Remediation System

Cleanup Action Alternative 2, Groundwater Extraction and Treatment System

Cleanup Action Alternative 3, Monitored Natural Attenuation with an Environmental Covenant

6.3.1.1 Cleanup Action Alternative 1, Air Sparge and Soil Vapor Extraction Remediation System

Under this alternative, the cleanup action involves installing an AS/SVE remediation system that would remove COCs from both the perched groundwater zone and Sea Level Aquifer groundwater and from impacted soil throughout the Site. The system would include both shallow and deep AS and SVE components. Shallow AS wells would deliver compressed air to the

saturated zone of the perched groundwater zone to strip volatile compounds from the water and enhance aerobic bioremediation with increased dissolved oxygen concentrations. Shallow SVE wells would strip COCs by inducing a pressure and concentration gradient in the vadose zone above the perched groundwater zone. Horizontal SVE galleries would be installed for vapor recovery within the system trenching. The shallow AS and SVE wells and galleries would be located such that the entire extent of impacted groundwater in the perched groundwater zone would be treated.

Deep wells would have two separate well screens separated by inflatable packers that would enable them to act as both AS and SVE wells. Compressed air would be introduced to the saturated zone in the Sea Level Aquifer through the lower well screen below the packer to strip COCs and encourage biodegradation. Above the packer, a vacuum would be applied to the well, which would be screened throughout the vadose zone. This would strip COCs from the vadose zone in between the Sea Level Aquifer and perched groundwater zone and collect vapors resulting from AS in the Sea Level Aquifer. The deep wells would be located along the southern property boundary so that all impacted groundwater migrating off the Site would be treated. With the removal of COCs from the source area in the perched groundwater zone and aeration of upgradient groundwater in the Sea Level Aquifer, downgradient groundwater in the Sea Level Aquifer would naturally attenuate across the Site and meet the groundwater point of compliance. A system enclosure and equipment would be installed on the property at a location near the system trenching, but with a low impact to the operations of the building tenant. Operation of an AS/SVE system could significantly decrease the remedial time frame. Figures 12 and 13 provide an illustration of the conceptual implementation of this cleanup action alternative.

Key assumptions for this alternative include the following:

- The power drop and electrical installation would not require installation of a transformer or installation of a power pole.
- Soil sampling would be required for soil excavated during trenching activities. A soil disposal profile would be developed for the Site prior to excavation activities. The estimated volume of soil to be removed is approximately 150 tons from the trenching. Soil sampling would determine the proper disposal facility for soil generated during trenching. An additional 50 tons of petroleum-impacted soil from the installation of 13 shallow AS wells, 10 shallow SVE wells, and 11 deep AS/SVE wells would be generated.
- Approximately 500 feet of trench excavation to a depth of 3 feet bgs would be necessary for the installation of system piping.
- The mass of imported fill would be equivalent to the soil produced from trenching and disposed of off property (150 tons).
- 13 shallow AS wells would be installed to a depth of approximately 60 feet to treat impacted groundwater in the perched groundwater zone.
- 10 shallow SVE wells would be installed to a depth of 30 feet and screened between 5 and 30 feet bgs within the vadose zone above the perched groundwater zone.

- 11 deep wells would be installed to a depth of approximately 120 feet bgs to treat impacted groundwater in the Sea Level Aquifer and strip COCs from the vadose zone above.
- A radius of influence (ROI) of 15 feet is assumed for the deep and shallow AS wells and for the shallow SVE wells. An ROI of 20 feet is assumed for the deep SVE. A pilot test is assumed to occur in order to identify the actual radii of influence for the system design.
- This estimate assumes GAC emission control is required for the operation of the system.
- Groundwater monitoring and operation and maintenance (O&M) activities would continue until an NFA determination from Ecology can be achieved. Operation of an AS/SVE system could significantly decrease the remedial time frame. For cost analysis purposes, it is assumed groundwater monitoring would continue for 5 years and O&M activities would continue for 3 years following installation. Compliance monitoring and the installation of additional monitoring wells and soil borings would take place in year 6.
- The emitted vapor stream would be treated by multiple vessels of vapor-phase GAC run in series. The influent and effluent flows would be sampled regularly to ensure all applicable regulations are being met and to provide data on the mass of COCs removed by the AS/SVE system.
- Approximately 10 tons of TPH-impacted soil is anticipated to be generated during the installation of compliance wells and soil borings. A soil disposal profile would be developed for the generated waste. The 10 tons of soil is assumed to be Class 2 contaminated soil.
- Two deep monitoring wells would be installed to a depth of approximately 115 feet bgs for compliance monitoring in the Sea Level Aquifer.
- Two shallow monitoring wells would be installed to a depth of approximately 60 feet bgs for compliance monitoring in the perched groundwater zone.
- Two deep and two shallow soil borings would be advanced to document the reduction of COC concentrations in soil on the Site.

The FS level cost estimate for this alternative is presented in Table 7. The estimated present worth cost is approximately \$994,000.

6.3.1.2 Cleanup Action Alternative 2, Groundwater Extraction and Treatment System

Cleanup Action Alternative 2 involves installing a pump and treat system to extract COC-impacted groundwater from both the perched groundwater zone and Sea Level Aquifer, treat it for removal of COCs and subsequently reinfiltrate it into the Sea Level Aquifer. This would prevent impacted groundwater from migrating off-Site, remove COCs from the source area, and eventually result in both the perched groundwater zone and Sea Level Aquifer meeting the groundwater point of compliance. Reinfiltration of the treated water would prevent a decrease of groundwater storage in the Sea Level Aquifer. This alternative includes compliance groundwater monitoring to document the reduction of COC concentrations in groundwater

across the Site. Figure 14 provides an illustration of the conceptual implementation of this cleanup action alternative.

Key assumptions for this alternative include the following:

- The power drop and electrical installation would not include installation of a transformer or installation of a power pole.
- Approximately 300 feet of trench excavation to a depth of 3 feet bgs would be necessary for the installation of system piping.
- Soil sampling would be required for soil excavated during trenching activities for disposal purposes. A soil disposal profile would be developed for the Site prior to excavation activities. The estimated volume of soil to be removed is approximately 180 tons from the trenching and an additional of 60 tons from the installation of 4 shallow and 14 deep dewatering wells.
- The mass of imported fill would be equivalent to the contaminated soil produced from trenching and disposed of off Property (180 tons).
- 4 shallow dewatering wells would be installed to a depth of approximately 60 feet bgs to extract impacted groundwater from the perched groundwater zone.
- 14 deep dewatering wells would be installed to a depth of approximately 120 feet bgs to extract impacted groundwater from the Sea Level Aquifer.
- An ROI of 20 feet is assumed for the shallow dewatering wells, and an ROI of 10 feet is assumed for the deep dewatering wells. A pilot test is assumed to occur in order to identify the actual radii of influence for the system design.
- The water stream would be treated by multiple vessels of liquid-phase GAC run in series. The influent and effluent flows would be sampled regularly to ensure all applicable regulations are being met and to provide data on the mass of COCs removed by the pump and treat system.
- Groundwater monitoring and O&M activities would continue until an NFA determination from Ecology can be achieved. For cost analysis purposes, it is assumed groundwater monitoring and O&M activities would continue for 19 years following installation. Compliance monitoring and the installation of addition monitoring wells and soil borings would occur in year 20.
- Installation of monitoring wells and soil borings for compliance monitoring is assumed to be the same as described in Section 6.3.1.1.

The FS level cost estimate for this alternative is presented in Table 8. The estimated present worth cost is approximately \$2,966,000.

6.3.1.3 Cleanup Action Alternative 3, Monitored Natural Attenuation with an Environmental Covenant

Under this alternative, the cleanup action involves installing a seal coat of asphalt to act as a containment cap to prevent stormwater infiltration and prevent direct contact with impacted soil or water in the source area beneath the Site. The environmental covenant would be necessary to ensure appropriate monitoring requirements and to ensure that human health and

the environment are protected. This alternative would include the installation of two deep and two monitoring wells for compliance monitoring in the Sea Level Aquifer and perched groundwater zone, respectively, the location of which would depend on how groundwater concentrations change with time. This alternative includes 30 years of groundwater monitoring to document the natural attenuation of TPH in groundwater across the Site. Figure 15 provides an illustration of the conceptual implementation of this cleanup action alternative.

Key assumptions for this alternative include the following:

- Initial monitoring (2 to 5 years) must confirm that the Sea Level Aquifer contaminant plume is at steady state or shrinking, or this alternative must be thrown out and an active alternative used.
- The asphalt seal coat installed on the Site would cover 5,100 square feet on the southern end of the Site.
- Installation of monitoring wells and soil borings for compliance monitoring is assumed to be the same as described in Section 6.3.1.1.
- Groundwater monitoring activities would continue until an NFA determination from Ecology can be achieved. For cost analysis purposes, it is assumed groundwater monitoring would continue for 30 years.

The FS level cost estimate for this alternative is presented in Table 9. The estimated present worth cost is approximately \$480,000.

6.4 EVALUATION OF REMEDIAL ALTERNATIVES

A summary of the evaluation of the alternatives described above using the MTCA evaluation criteria (WAC 173-340-360[3][f]) is presented below (Table 10):

- **Protectiveness.** Alternatives 1 and 2 are rated equally because they provide considerable protection for human health and the environment through their treatment and/or containment of COCs throughout the Site, including both the perched groundwater zone and Sea Level Aquifer. Alternative 3 provides little to no protection because COCs remain in place and have the potential to spread. If the TPH plume can be shown to be shrinking or very stable, then the protectiveness could be raised. Alternative 3 also receives a low score because it requires public education around the Site forbidding any groundwater wells from being installed.
- **Permanence.** Alternative 1 received the highest rating because it converts COCs into a vapor-phase stream in which they will either be emitted into the atmosphere at non-toxic concentrations or treated by vapor-phase GAC, which can be disposed of in a controlled off-property facility. Alternative 2 was rated lower because the dewatering system would require a much larger volume of liquid-phase GAC for treatment when compared to the vapor-phase GAC used in Alternative 1, resulting in a larger volume of hazardous substances. The Alternative 3 utilizes the naturally occurring degradation pathways to treat the impacts. As such, the long remedial timeline and risk associated with biodegradation causes Alternative 3 to be rated significantly lower.
- **Effectiveness over the Long Term.** Alternative 1 received the highest rating because it utilizes proven remedial technologies of AS and SVE for treatment of COCs throughout the Site, providing a high degree of certainty for success and long-term reliability. Alternative 2 rated

significantly higher than Alternative 3 because it reduces risk by immobilizing COCs in groundwater and providing a shorter remedial time frame. The relatively long remedial time frame and low degree of certainty for success associated with biodegradation resulted in a low rating for Alternative 3.

- **Management of Short-Term Risks.** Short-term risks associated with the Site include the migration of COCs toward the downgradient drinking water supply well and further contamination of the Sea Level Aquifer from the source zone within the perched groundwater zone. Alternative 1 provides the most effective means of managing these risks by treating COCs over the shortest remedial time frame in both the perched groundwater zone and Sea Level Aquifer. Alternative 2 also minimizes these risks by immobilizing impacted groundwater in both zones. It received a lower rating than Alternative 1 because it has a much longer remedial time frame. Alternative 3 received the lowest rating because it relies on relatively slow degradation pathways and does not physically address the groundwater surrounding the Site for decades. Most residents and businesses in the area of the contamination plume get their water from the City of Freeland.
- **Technical and Administrative Implementability.** The technical and administrative obstacles to the implementation of Alternatives 1 and 2 are minimal. Both would require the installation of wells and trenching on the Site and adjacent properties. Alternative 3 is simple as it has no physical work being performed, but the implementability in restricting home and business owners from installing wells would be difficult.
- **Consideration of Public Concern.** An evaluation of public concern would require public involvement, but we assume that Alternatives 1 and 2 would be graded highly due to actions addressing the potential exposure pathways. We assume Alternative 1 would rate the highest because it addresses the pathways and eliminates risk over the shortest time frame. Alternative 3 is assumed to have a lower grade due to the appearance of limited or no actions being taken.

As indicated in Table 10, when weighting factors between 10 percent and 20 percent are used for each of the evaluation criteria, Alternative 1 achieved the highest-ranking score (7.7). Alternatives 2 and 3 achieved lower-ranking scores (6.8 and 2.4, respectively).

6.5 DISPROPORTIONATE COST ANALYSIS & RANKING CRITERIA

The purpose of a disproportionate cost analysis (DCA) is to facilitate selection of the cleanup alternative providing the highest degree of permanence to the maximum extent practicable.

This DCA considers Alternatives 1 through 3. Costs are considered disproportionate if the incremental costs of one alternative versus a less expensive alternative exceed the incremental benefit achieved by the more expensive alternative.

6.5.1 Cleanup Action Alternative Cost Estimating

- **Capital Costs.** These costs include expenditures for equipment, labor, and material necessary to install a remedial action. Indirect costs may be incurred for engineering, financial, or other services not directly involved with installation of remedial alternatives but necessary for completion of this activity.

- **Operation and Maintenance Costs.** O&M costs are post-construction costs necessary to provide effective implementation of the alternative. Such costs may include, but are not limited to, operating labor, maintenance materials and labor, disposal of residues, and administrative, insurance, and licensing costs.
- **Monitoring Costs.** These costs are incurred from monitoring activities associated with remedial activities. Cost items may include sampling labor, laboratory, analyses, and report preparation.
- **Present Worth Analysis.** Present worth analysis provides a method of evaluating and comparing costs that occur over different time periods by discounting all future expenditures to the present year. The present worth cost or value represents the amount of money which, if invested in year 0 and disbursed as needed, would be sufficient to cover all costs associated with a remedial alternative. The assumptions necessary to derive a present worth cost are inflation rate, discount rate, and period of performance. A discount rate, which is similar to an interest rate, is used to account for the time value of money. EPA policy on the use of discount rates for DCA cost analyses are stated in the preamble to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) published at the Federal Register (55 FR 8722) and in Office of Solid Waste and Emergency Response Directive 9355.3-20 titled *Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis* (EPA 1993). Based on the NCP and this directive, a discount rate of 0.5 percent is recommended in developing present value cost estimates for remedial alternatives discounted for 1 year, and 0.3 percent is recommended for 5 years, during the DCA. This specified rate of 0.5 and 0.3 percent represents a “real” discount rate in that it approximates the marginal pretax rate of return on an average investment in the private sector in recent years and has been adjusted to eliminate the effect of expected inflation. For this DCA, a real discount rate was selected based on the December 2016 revisions to Appendix C of the U.S. Office of Management and Budget (OMB) Circular A-94. The real discount rates used to estimate the present worth of annual operating costs are based on the estimated restoration time frame (life cycle) for each alternative and are extrapolated from the referenced OMB Circular, which is published annually.

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

Using these criteria, the present worth costs of Alternatives 1 through 3 are approximately as follows:

- Alternative 1, \$994,000 (Table 7)
- Alternative 2, \$2,966,000 (Table 8)
- Alternative 3, \$480,000 (Table 9)

Chart 1 plots these costs and alongside the ranking scores of each alternative to demonstrate each alternatives cost-to-benefit ratio. Chart 1 demonstrates that Cleanup Action Alternative 1,

AS and SVE Remediation System, has the best cost-to-benefit ratio. Accordingly, it has been chosen as the recommended remedial action alternative.

6.6 RECOMMENDED REMEDIAL ACTION ALTERNATIVE

After performing the analysis and ranking of alternatives in accordance with MTCA, Alternative 1 is the most feasible and most cost-effective remedy. Alternative 1 is the recommended alternative for the Site because it achieves the RAOs, meets the requirements set forth in WAC 173-340-360(3) and WAC 173-340-370, and is favorable with respect to the established evaluation and ranking criteria. Alternative 1 would mitigate the threat to human health and the environment associated with the Site by reducing exposure pathways in soil and groundwater. Finally, Alternative 1 exhibits the lowest cost-to-benefit ratio compared to the competing alternatives, as discussed in Section 6.5.

6.6.1 Remedial Action Costs and Timeline

The estimated current value of Alternative 1 is \$994,000 (Table 7). This cost represents the cost to design, permit, and install an AS/SVE system at the Site. The system includes installation of deep and shallow AS and SVE wells, horizontal SVE galleries, the construction of a fenced system enclosure, system equipment, and all necessary process piping. This cost also includes system start up and operation of the system for 3 years. The cost will increase if more than 3 years of operation are required. Please refer to section 6.3.1.1 for additional assumptions for this expected cost.

Once authorization to proceed has been given; the expected time frame for the design and installation of the system is approximately 6 months. The first 2 months of the timeline would include system design, pilot testing, and creation of bid documents. The second 2 months would include permitting, review of bids, and purchasing equipment with longer lead times. The final 2 months would include system installation and startup. This timeline could be extended if the permitting process exceeds the expected 2 month time frame. The anticipated timeframe for the system operation is approximately 3 years. Up to 6 years of groundwater monitoring are anticipated post-system operation to demonstrate groundwater compliance on Property and monitor off-property groundwater attenuation at the Site.

7.0 PROPOSED INFRASTRUCTURE UPGRADES—COSTS AND TIMELINE

This PPA does not include any proposed infrastructure upgrades as the Site is no longer an active gasoline service station. All work proposed in this report is for the remediation of impacted soil and groundwater on the Site.

8.0 PROPERTY APPRAISAL

No property appraisal will be completed for the Site.

9.0 CONCLUSIONS

Previous investigations and the site characterization have identified concentrations of GRPH, DRPH, and BTEX exceeding the applicable MTCA Method A cleanup levels in soil in the vicinity of the former gasoline and diesel USTs on the eastern portion of the Site, and in the perched groundwater zone and the Sea Level Aquifer underlying the property. Soil contamination is present beneath the former UST

area in saturated perched groundwater zone soil around 55 feet bgs and Sea Level Aquifer saturated soils from at least 105 to 115 feet bgs. The soil borings B09 and MW-18 did not contain concentrations of GRPH, DRPH, ORPH, or BTEX above their respective cleanup levels.

The perched groundwater zone was encountered between 55 and 60 feet bgs during drilling activities in borings B08 and MW-17. Groundwater measured in perched groundwater zone monitoring wells was encountered between 50.51 and 57.25 feet bgs, and contouring indicated that the perched groundwater zone flows in a westerly direction, terminating and descending into the Sea Level Aquifer around monitoring well MW-9.

The Sea Level Aquifer was encountered during drilling activities at depths of 102 to 103 feet bgs in borings MW-17 and MW-18. Groundwater measured in Sea Level Aquifer completed monitoring wells was encountered between 99.66 and 103.71 feet bgs, and contouring indicated that the Sea Level Aquifer flows in a southerly to southeasterly direction.

Groundwater sampling results indicated of GRPH and/or BTEX exceeding the applicable MTCA Method A cleanup levels in perched groundwater zone monitoring wells MW-4 through MW-8 and in Sea Level Aquifer monitoring wells MW-9, MW-12, MW-13, and MW-17.

Results of aquifer hydrological analysis indicate the estimated average hydraulic conductivity of the Sea Level Aquifer is 61.10 feet per day, based on slug testing conducted in monitoring wells MW-11 and MW-16.

Based on all available data, soil contamination appears limited to the saturated zones of the perched groundwater zone and the Sea Level Aquifer underneath the Site. Groundwater contamination has been confirmed in the perched groundwater zone underlying the Site and flowing to the west past the property boundary, and in the Sea Level Aquifer beneath and to the west of the Site, flowing to the southeast. Monitoring wells downgradient of the Sea Level Aquifer contamination plume remain below laboratory reporting limits for all COCs. Based on the groundwater flow direction, shallow soil exceedances, and concentrations of petroleum hydrocarbons in MW-12, as secondary source may exist west of MW-12.

10.0 RECOMMENDATIONS

Based on all available data, SoundEarth recommends installation and operation of an AS/SVE remediation system that would remediate COCs from both the perched groundwater zone and Sea Level Aquifer groundwater, as outlined in Cleanup Action Alternative 1 (Section 6.3.1.1). Based on the DCA, the operation of an AS/SVE system is the most cost effective method for active treatment of the source of contamination. The final system design would be contingent upon access agreements with adjacent properties.

If the installation and operation of an active treatment system is deemed financially unfeasibility, SoundEarth recommends natural attenuation with long-term groundwater monitoring.

11.0 LIMITATIONS

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

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

12.0 REFERENCES

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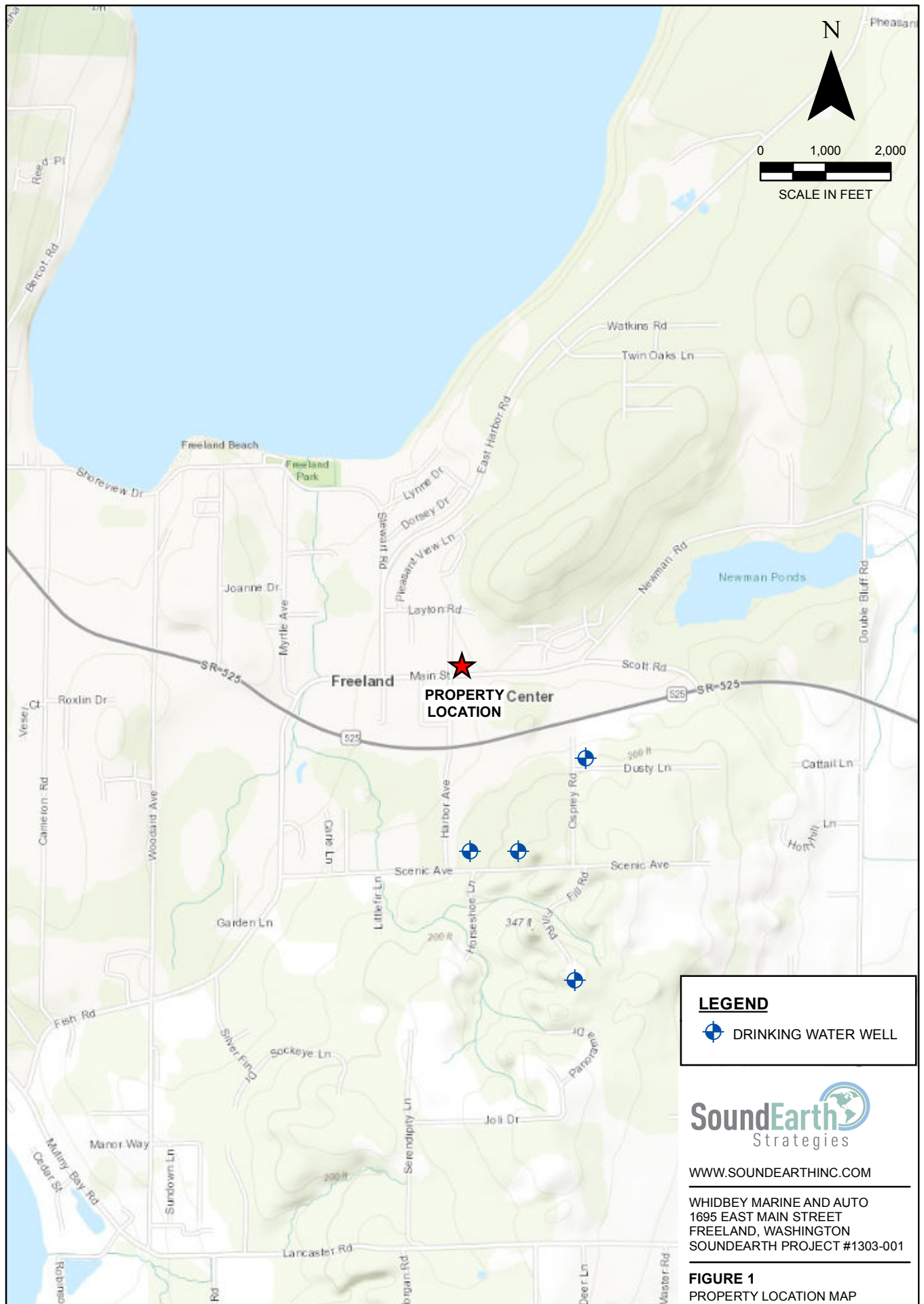
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FIGURES



LEGEND

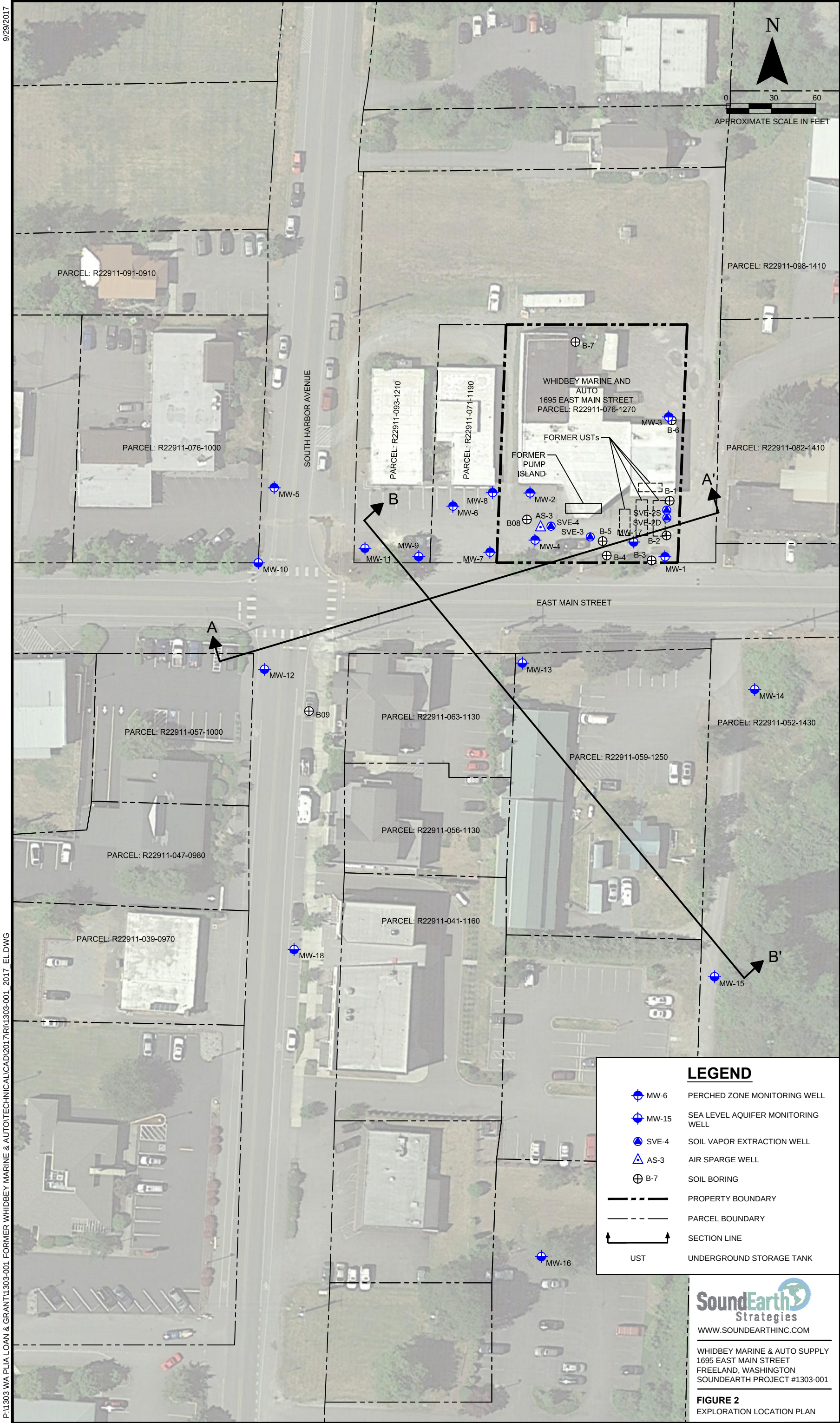
 DRINKING WATER WELL

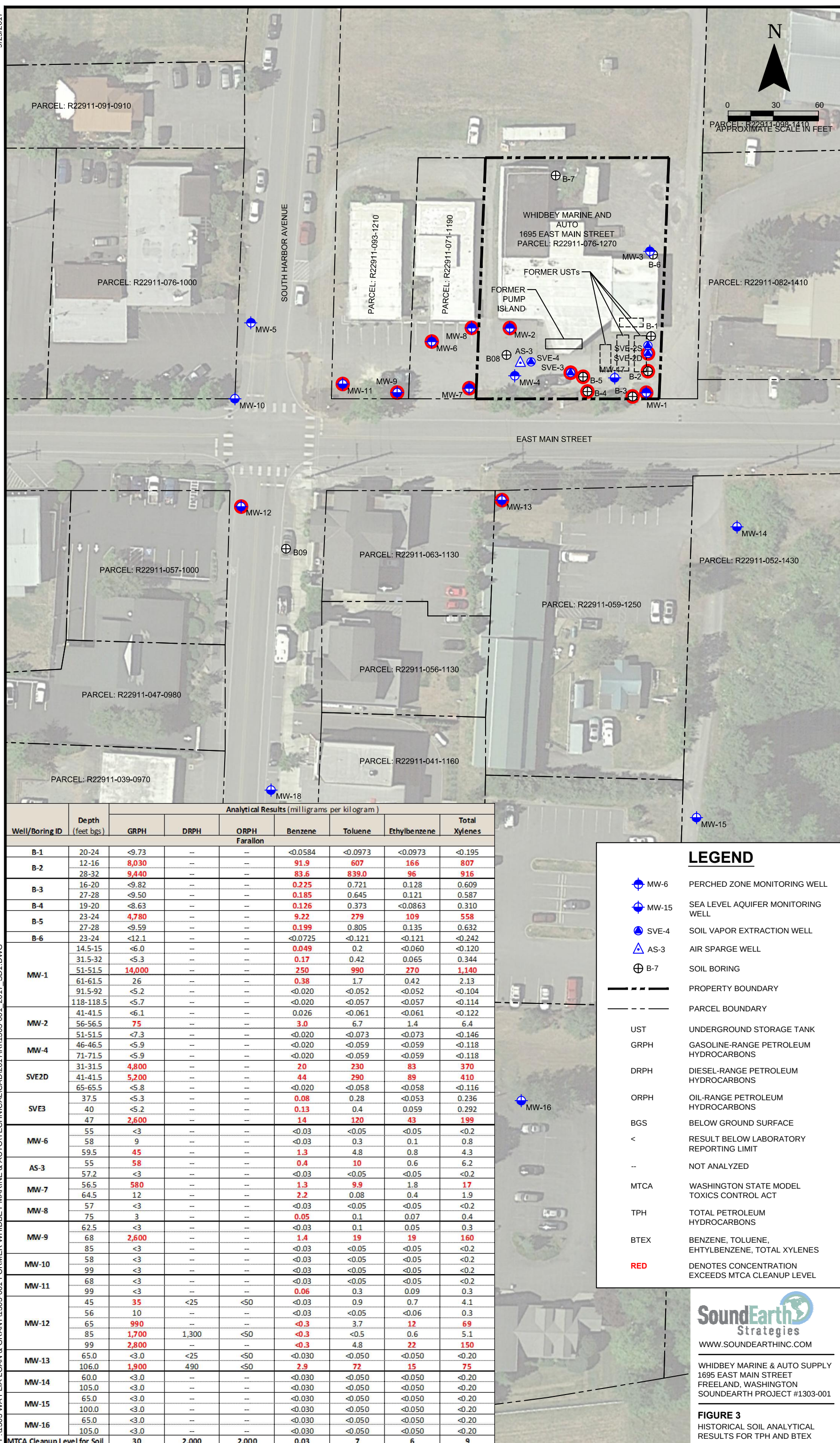
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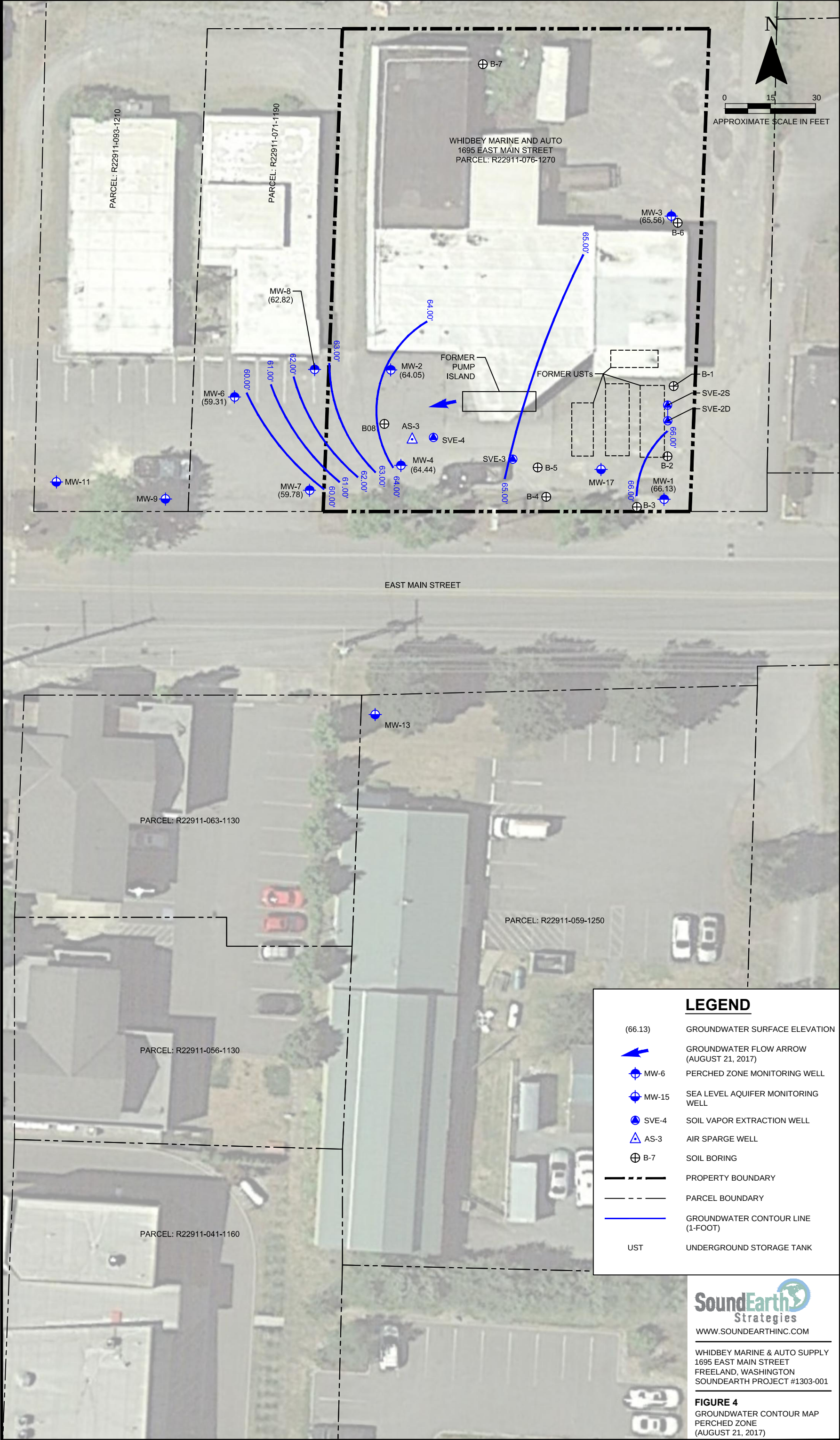
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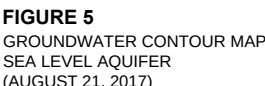
WHIDBEY MARINE AND AUTO
1695 EAST MAIN STREET
FREELAND, WASHINGTON
SOUNDEARTH PROJECT #1303-001

FIGURE 1
PROPERTY LOCATION MAP









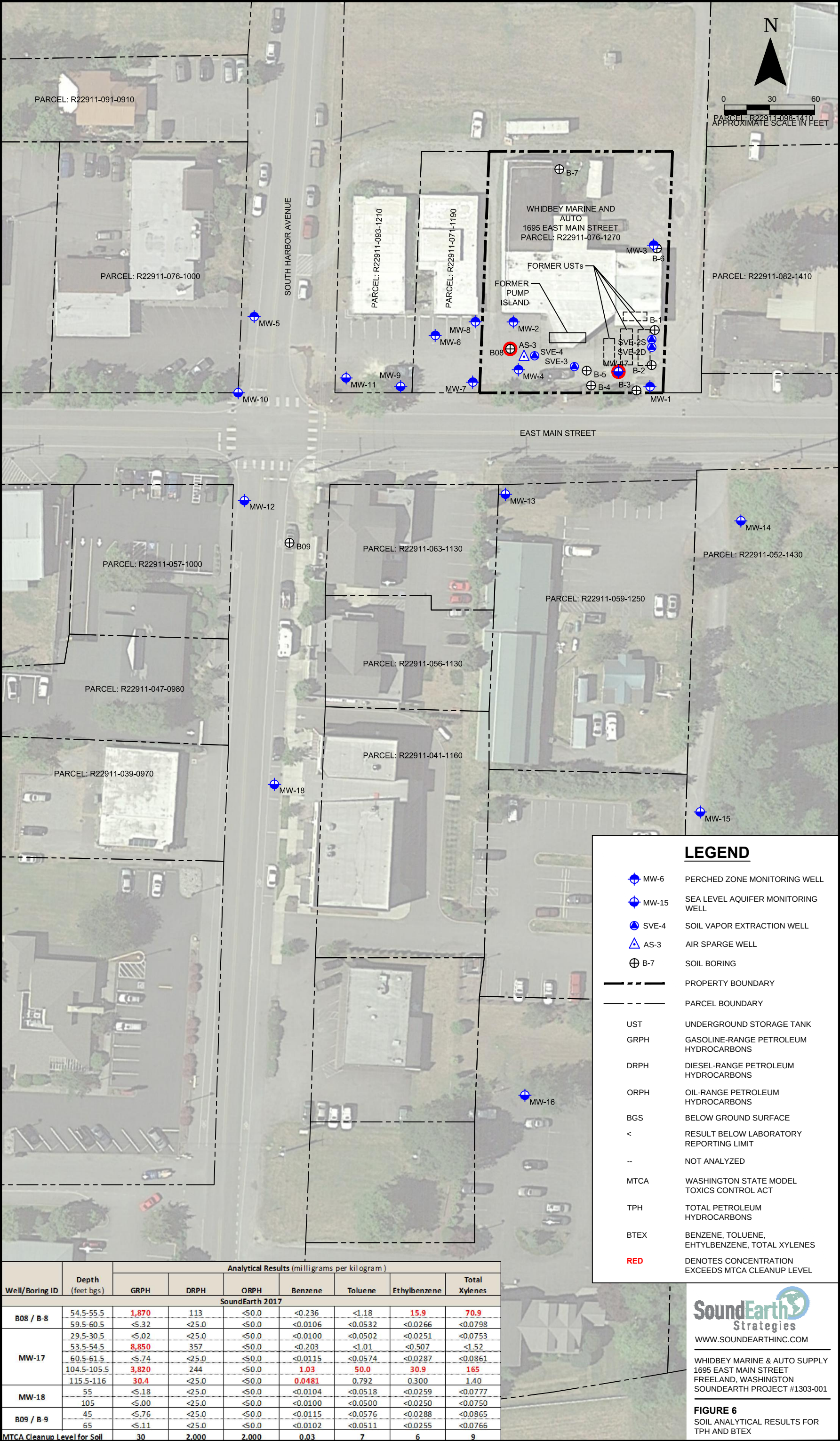




FIGURE 7
GROUNDWATER ANALYTICAL
RESULTS FOR TPH AND BTEX
(AUGUST 2017)

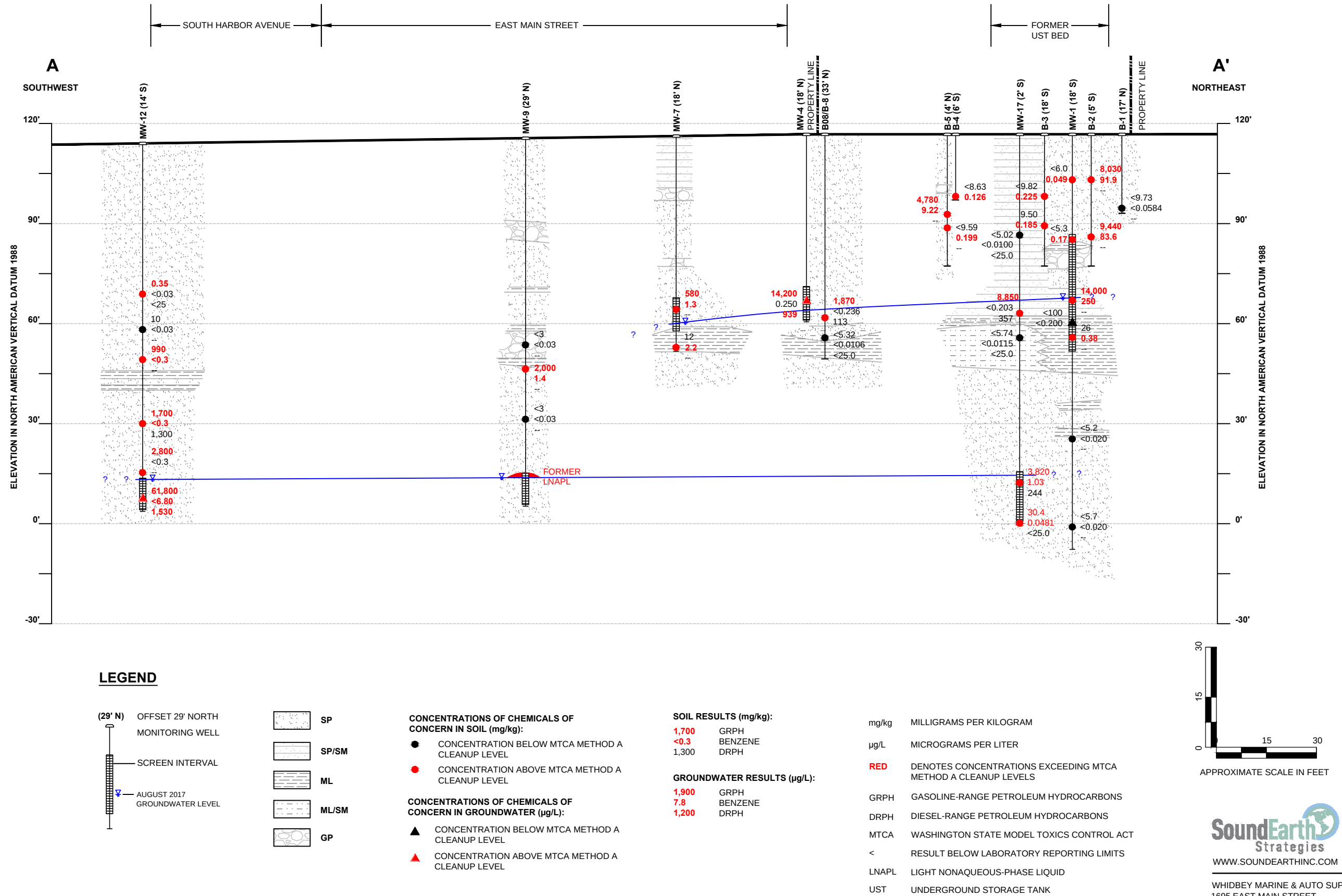
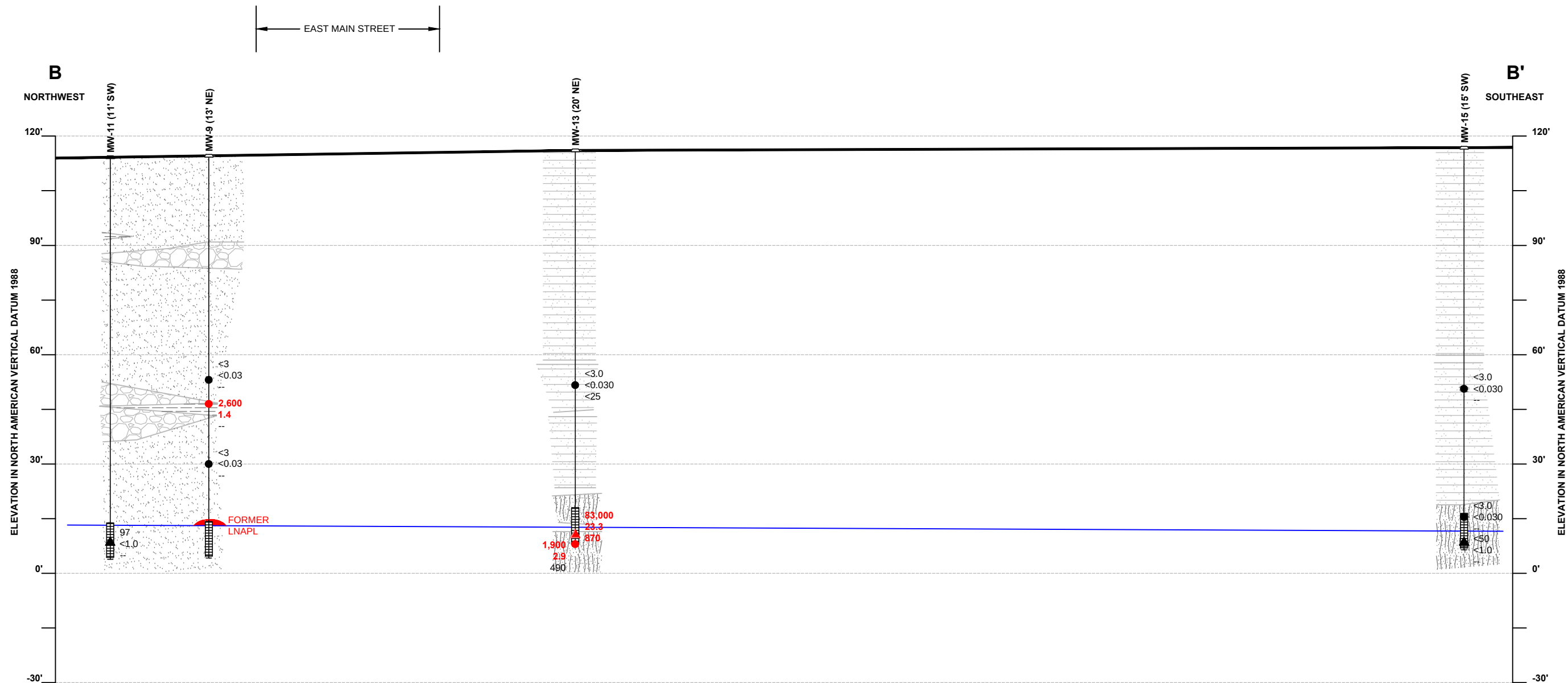


FIGURE 8
CROSS SECTION A-A'

9/29/2017
P:\1303 WA PLIA LOAN & GRANT\1303-001 FORMER WHIDBEY MARINE & AUTO\TECHNICAL\CAD\2017\RI\1303-001_2017_XBB.DWG



LEGEND

(29' N) OFFSET 29' NORTH MONITORING WELL

SCREEN INTERVAL

AUGUST 2017 GROUNDWATER LEVEL

- SP
- SP/SM
- ML
- SW
- GP

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

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

CONCENTRATIONS OF CHEMICALS OF CONCERN IN GROUNDWATER (µg/L):

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

SOIL RESULTS (mg/kg):

<3.0 GRPH
<0.030 BENZENE
<25 DRPH

GROUNDWATER RESULTS (µg/L):

97 GRPH
<1.0 BENZENE
-- DRPH

mg/kg MILLIGRAMS PER KILOGRAM

µg/L MICROGRAMS PER LITER

RED DENOTES CONCENTRATIONS EXCEEDING MTCA METHOD A CLEANUP LEVELS

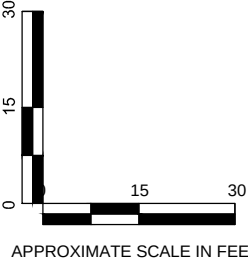
GRPH GASOLINE-RANGE PETROLEUM HYDROCARBONS

DRPH DIESEL-RANGE PETROLEUM HYDROCARBONS

MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT

< RESULT BELOW LABORATORY REPORTING LIMITS

LNAPL LIGHT NONAQUEOUS-PHASE LIQUID

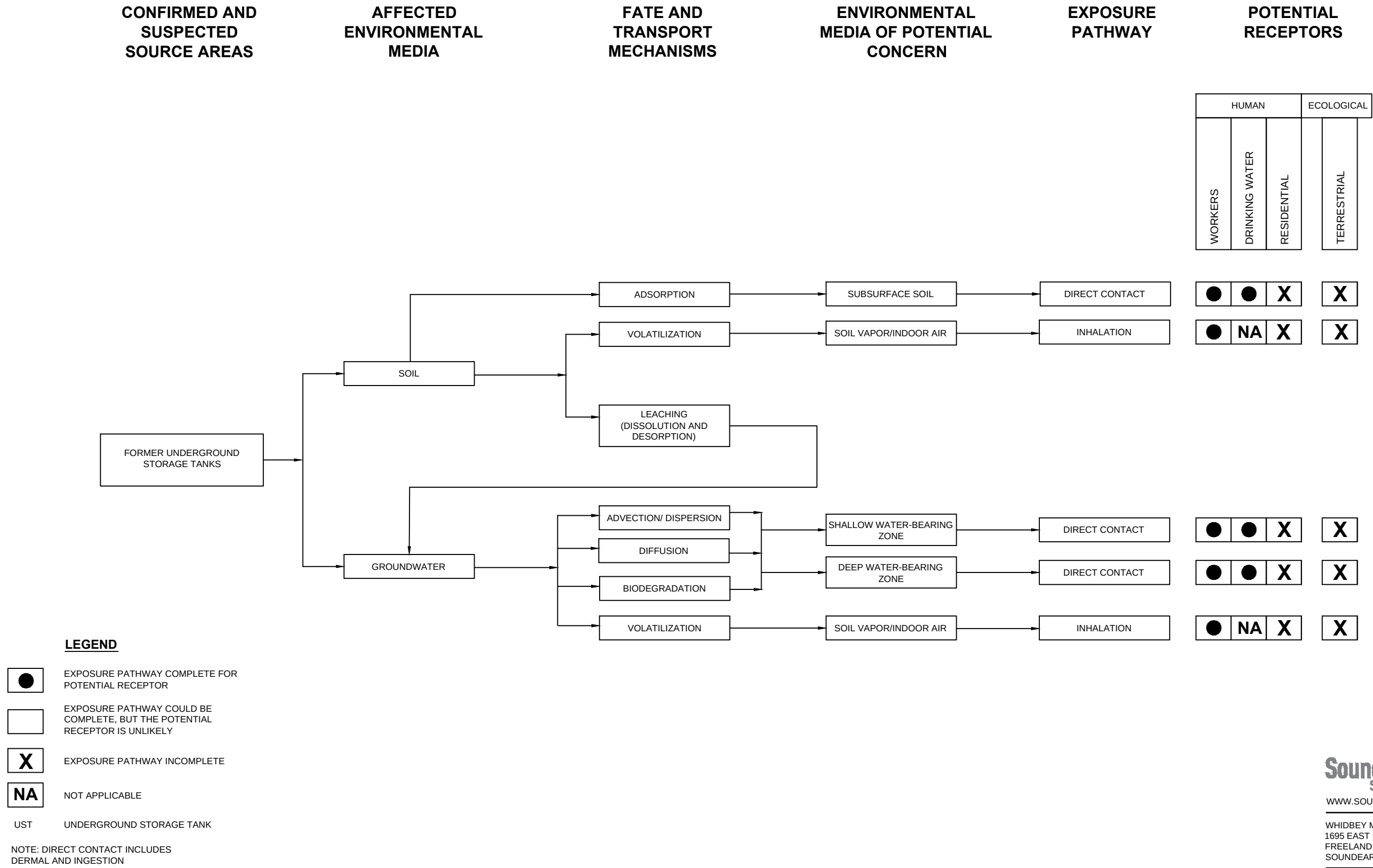


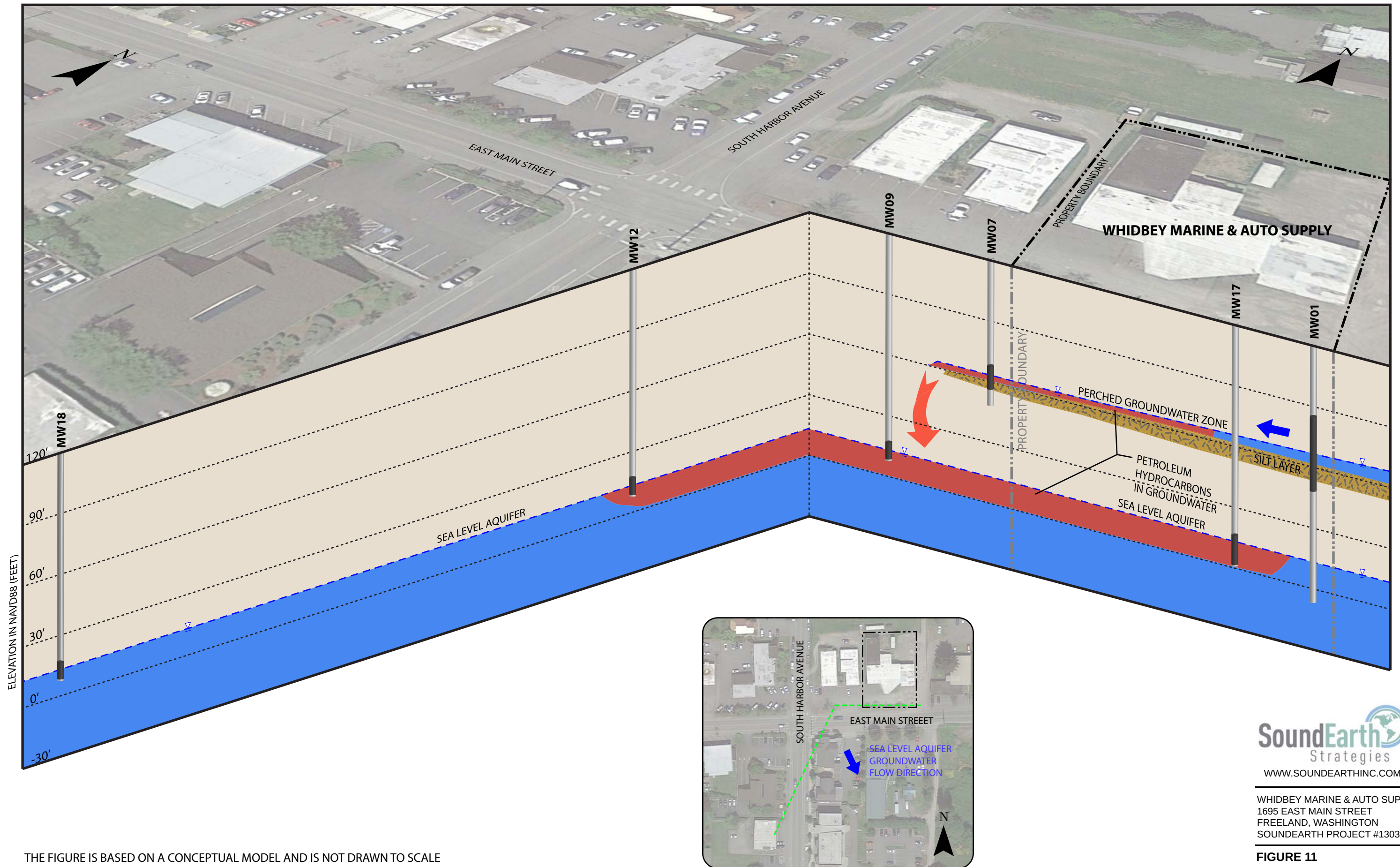
SoundEarth Strategies

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WHIDBEY MARINE & AUTO SUPPLY
1695 EAST MAIN STREET
FREELAND, WASHINGTON
SOUNDEARTH PROJECT #1303-001

FIGURE 9
CROSS SECTION B-B'

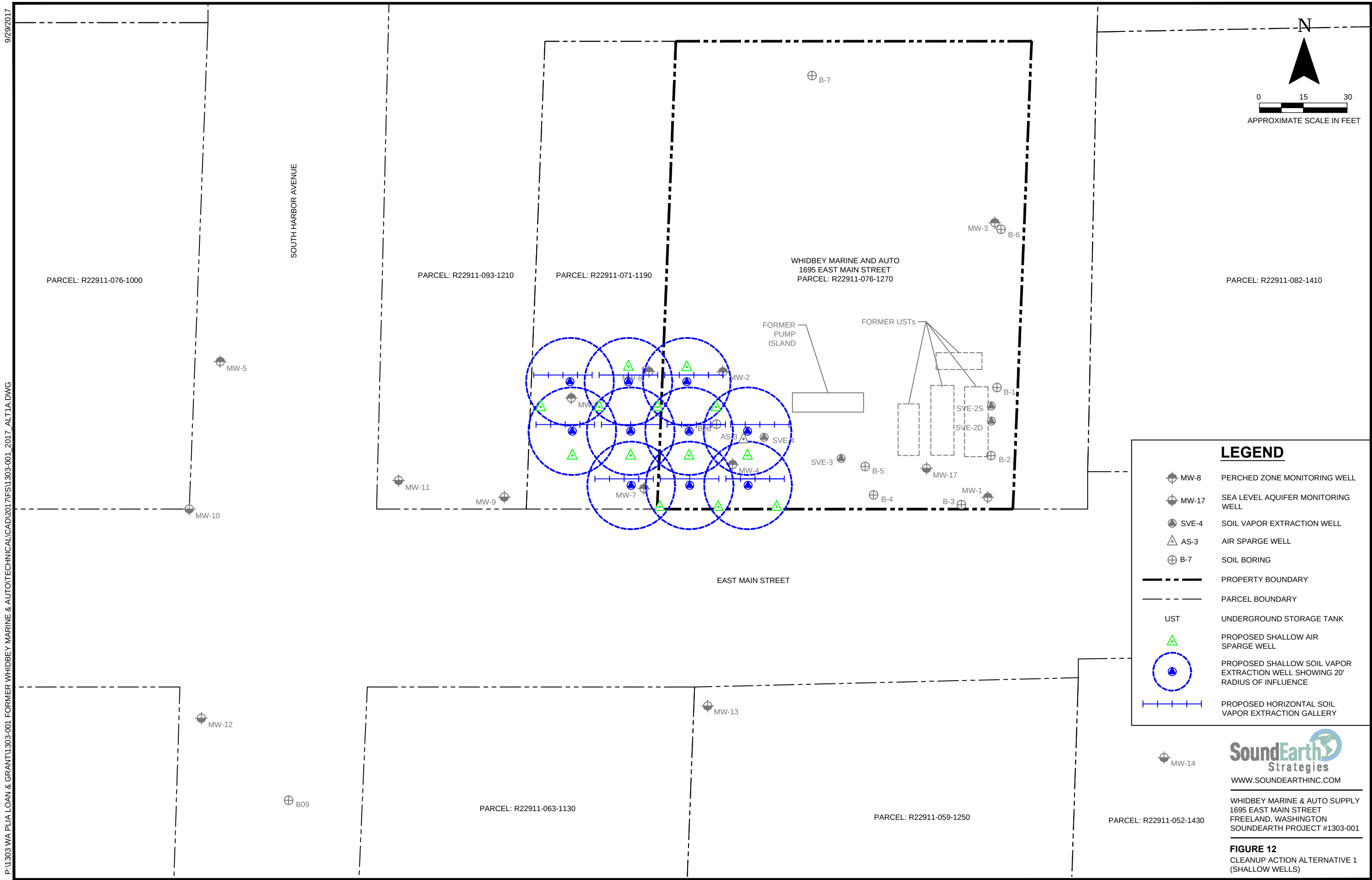


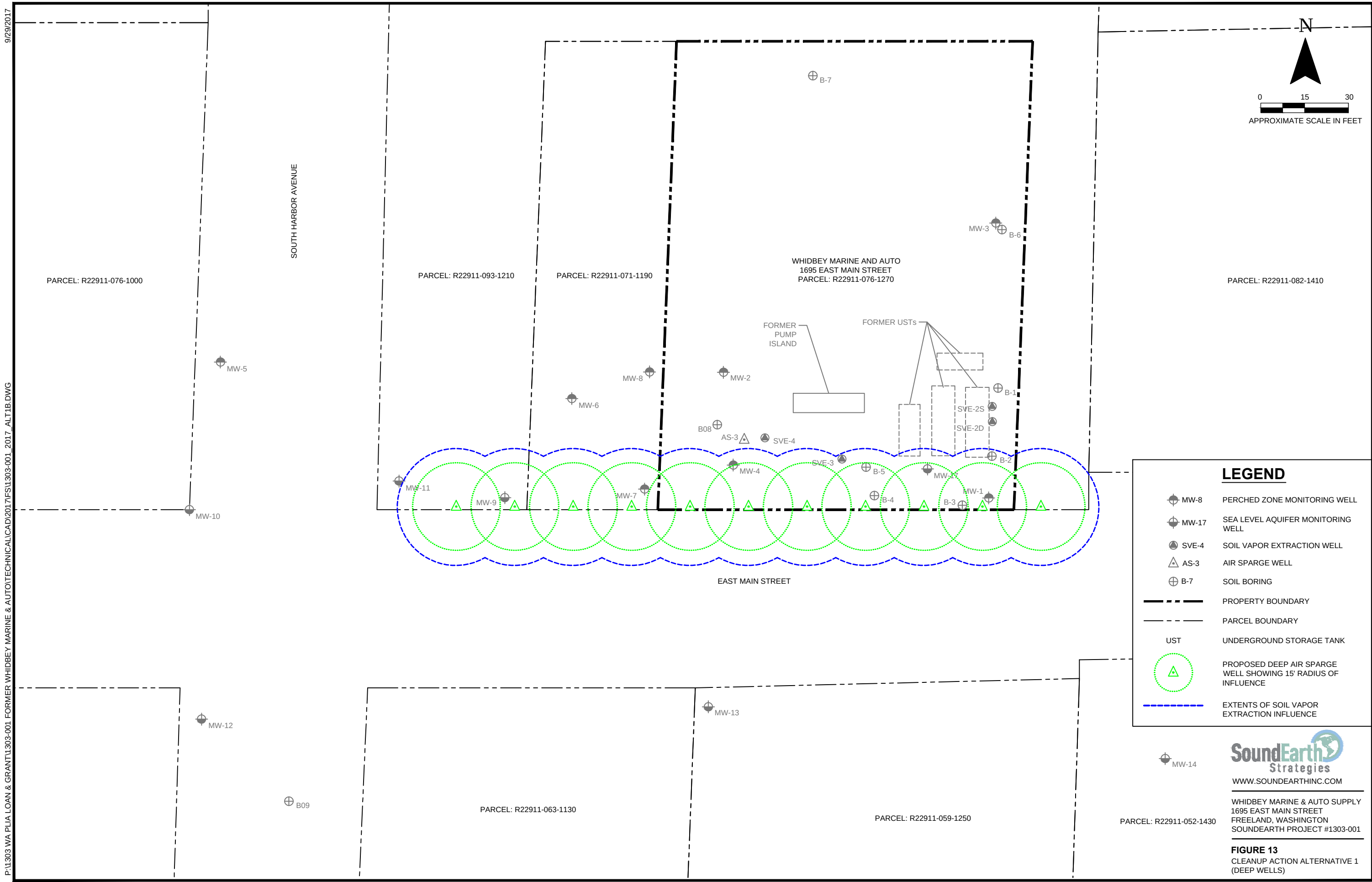


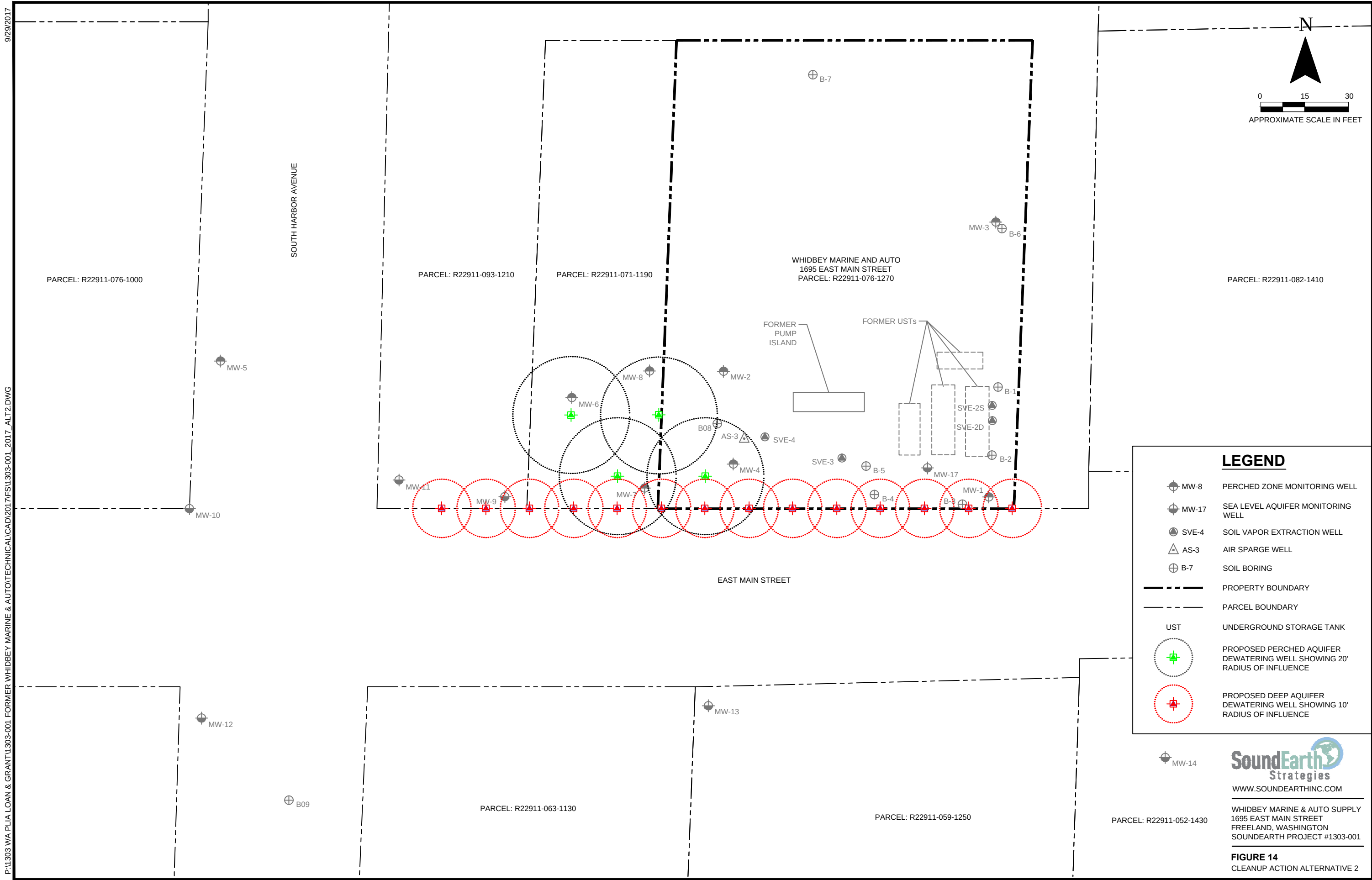
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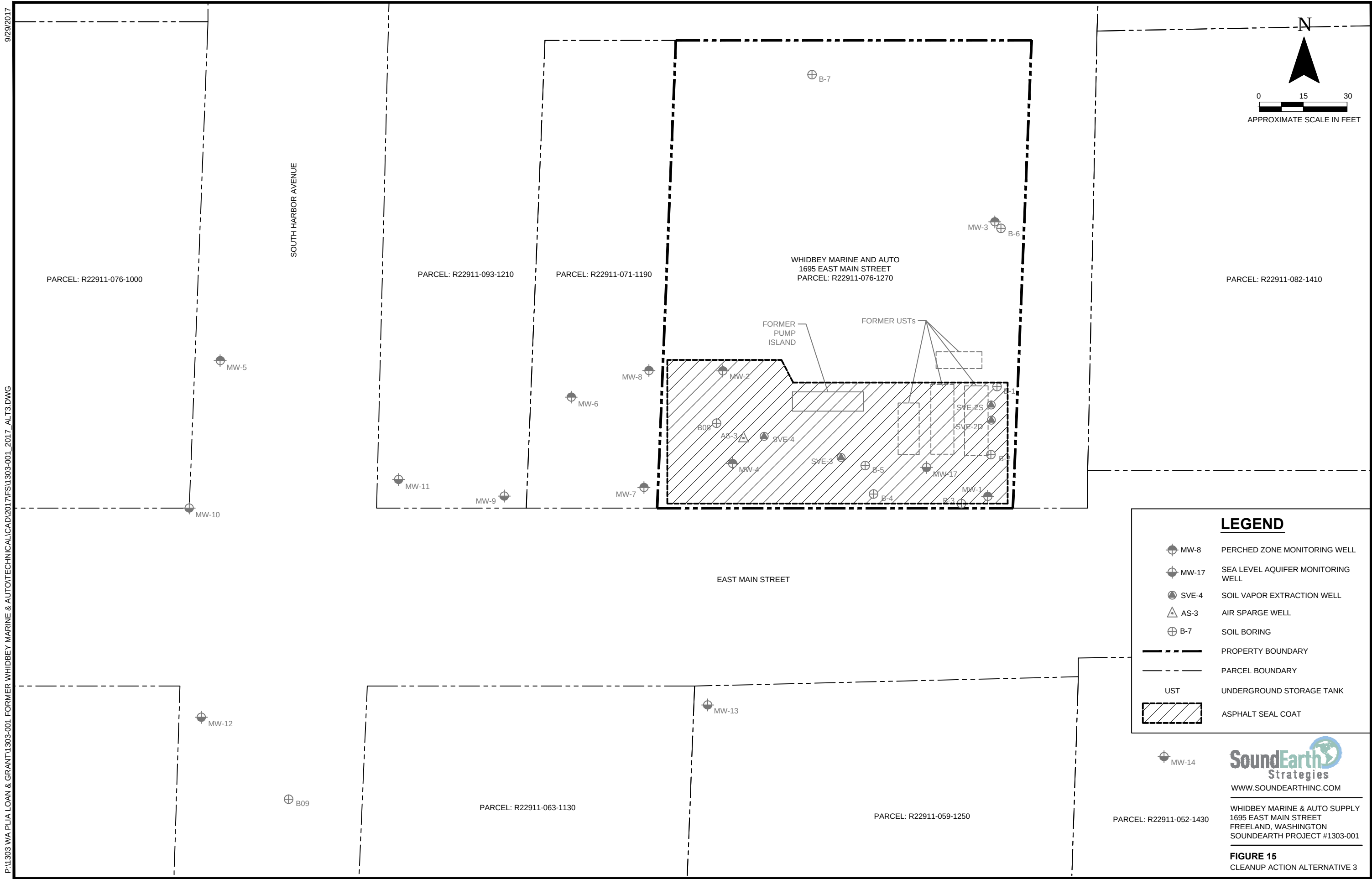
WHIDBEY MARINE & AUTO SUPPLY
1695 EAST MAIN STREET
FREELAND, WASHINGTON
SOUNDEARTH PROJECT #1303-001

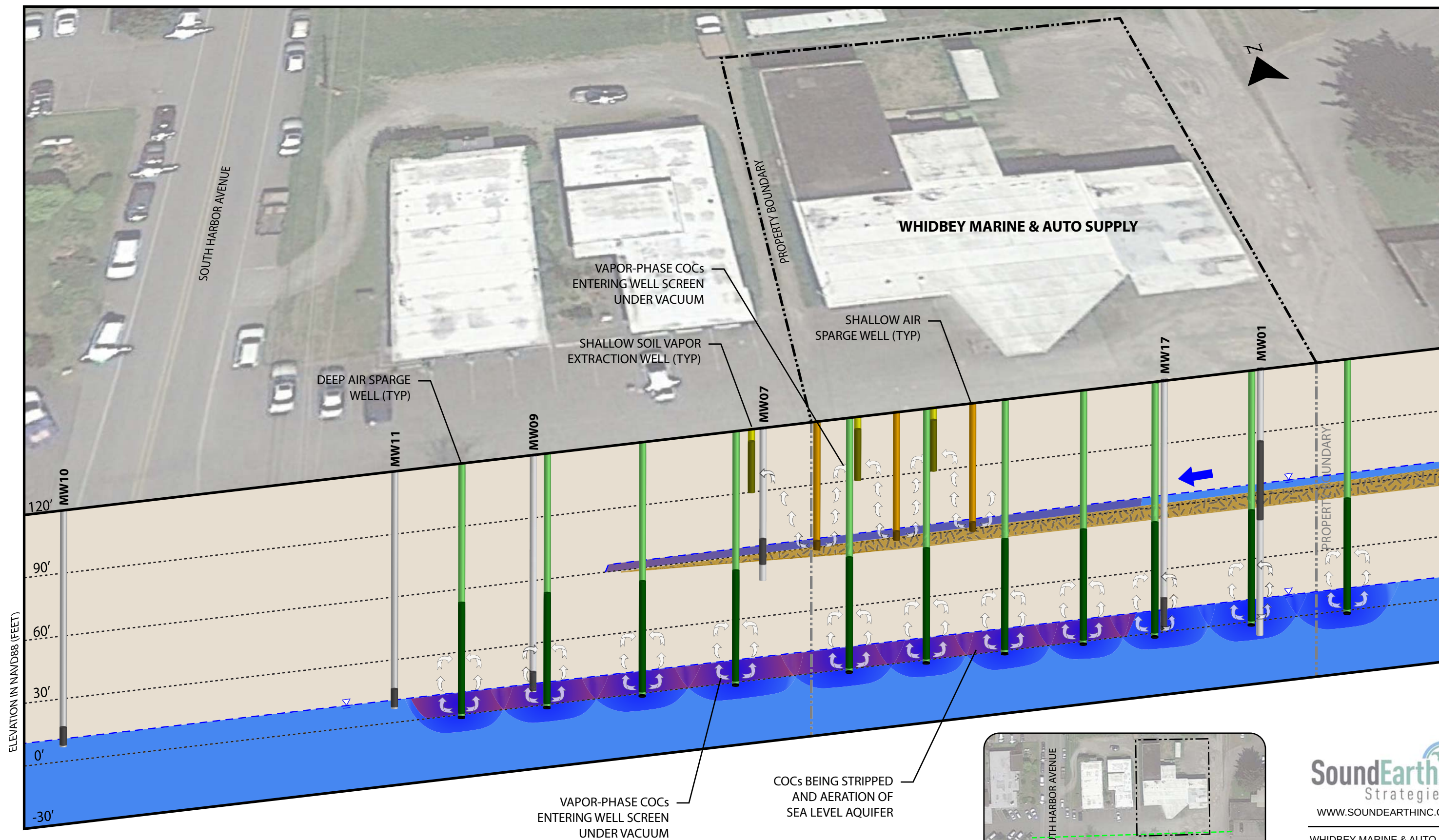
FIGURE 11
CONCEPTUAL SITE MODEL
ILLUSTRATION











THE FIGURE IS BASED ON A CONCEPTUAL MODEL AND IS NOT DRAWN TO SCALE



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WHIDBEY MARINE & AUTO SUPPLY
1695 EAST MAIN STREET
FREELAND, WASHINGTON
SOUNDEARTH PROJECT #1303-001

FIGURE 16
CONCEPTUAL CLEANUP ACTION
ALTERNATIVE IMPLEMENTATION

TABLES



Table 1
Soil Analytical Results for TPH and BTEX
Former Whidbey Marine Auto
Freeland, Washington

Well/Boring ID	Sample ID	Sampled By	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)						
					GRPH ⁽¹⁾	DRPH ⁽²⁾	ORPH ⁽²⁾	Benzene ⁽³⁾	Toluene ⁽³⁾	Ethylbenzene ⁽³⁾	Total Xylenes ⁽³⁾
Farallon											
B-1	B-1 20-24	Farallon	10/17/05	20-24	<9.73	--	--	<0.0584	<0.0973	<0.0973	<0.195
B-2	B-2 12-16	Farallon	10/17/05	12-16	8,030	--	--	91.9	607	166	807
	B-2 28-32	Farallon	10/17/05	28-32	9,440	--	--	83.6	839.0	96	916
B-3	B-3 16-20	Farallon	10/17/05	16-20	<9.82	--	--	0.225	0.721	0.128	0.609
	B-3 27-28	Farallon	10/17/05	27-28	<9.50	--	--	0.185	0.645	0.121	0.587
B-4	B-4 19-20	Farallon	10/17/05	19-20	<8.63	--	--	0.126	0.373	<0.0863	0.310
B-5	B-5 23-24	Farallon	10/17/05	23-24	4,780	--	--	9.22	279	109	558
	B-5 27-28	Farallon	10/17/05	27-28	<9.59	--	--	0.199	0.805	0.135	0.632
B-6	B-6 23-24	Farallon	10/17/05	23-24	<12.1	--	--	<0.0725	<0.121	<0.121	<0.242
MW-1	MW-1 14.5-15	Farallon	11/22/05	14.5-15	<6.0	--	--	0.049	0.2	<0.060	<0.120
	MW-1 31.5-32	Farallon	11/22/05	31.5-32	<5.3	--	--	0.17	0.42	0.065	0.344
	MW-1 51-51.5	Farallon	11/22/05	51-51.5	14,000	--	--	250	990	270	1,140
	MW-1 61-61.5	Farallon	11/22/05	61-61.5	26	--	--	0.38	1.7	0.42	2.13
	MW-1 91.5-92	Farallon	11/22/05	91.5-92	<5.2	--	--	<0.020	<0.052	<0.052	<0.104
	MW-1 118-118.5	Farallon	11/23/05	118-118.5	<5.7	--	--	<0.020	<0.057	<0.057	<0.114
MW-2	MW-2 41-41.5	Farallon	11/23/05	41-41.5	<6.1	--	--	0.026	<0.061	<0.061	<0.122
	MW-2 56-56.5	Farallon	11/23/05	56-56.5	75	--	--	3.0	6.7	1.4	6.4
	MW-3 51-51.5	Farallon	11/23/05	51-51.5	<7.3	--	--	<0.020	<0.073	<0.073	<0.146
MW-4	MW-4 46-46.5	Farallon	11/23/05	46-46.5	<5.9	--	--	<0.020	<0.059	<0.059	<0.118
	MW-4 71-71.5	Farallon	11/23/05	71-71.5	<5.9	--	--	<0.020	<0.059	<0.059	<0.118
SVE2D	SVE2D 31-31.5	Farallon	11/23/05	31-31.5	4,800	--	--	20	230	83	370
	SVE2D 41-41.5	Farallon	11/23/05	41-41.5	5,200	--	--	44	290	89	410
	SVE2D 65-65.5	Farallon	11/23/05	65-65.5	<5.8	--	--	<0.020	<0.058	<0.058	<0.116
SVE3	SVE3-37.5	Farallon	11/23/05	37.5	<5.3	--	--	0.08	0.28	<0.053	0.236
	SVE3-40	Farallon	11/23/05	40	<5.2	--	--	0.13	0.4	0.059	0.292
	SVE3-47	Farallon	11/23/05	47	2,600	--	--	14	120	43	199
MW-6	MW6-55	Farallon	03/24/08	55	<3	--	--	<0.03	<0.05	<0.05	<0.2
	MW6-58	Farallon	03/24/08	58	9	--	--	<0.03	0.3	0.1	0.8
	MW6-59.5	Farallon	03/24/08	59.5	45	--	--	1.3	4.8	0.8	4.3
AS-3	AS3-55	Farallon	03/24/08	55	58	--	--	0.4	10	0.6	6.2
	AS3-57.2	Farallon	03/24/08	57.2	<3	--	--	<0.03	<0.05	<0.05	<0.2
MW-7	MW7-56.5	Farallon	03/25/08	56.5	580	--	--	1.3	9.9	1.8	17
	MW7-64.5	Farallon	03/25/08	64.5	12	--	--	2.2	0.08	0.4	1.9
MTCA Cleanup Level for Soil ⁽⁴⁾					30	2,000	2,000	0.03	7	6	9



Table 1
Soil Analytical Results for TPH and BTEX
Former Whidbey Marine Auto
Freeland, Washington

Well/Boring ID	Sample ID	Sampled By	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)						
					GRPH ⁽¹⁾	DRPH ⁽²⁾	ORPH ⁽²⁾	Benzene ⁽³⁾	Toluene ⁽³⁾	Ethylbenzene ⁽³⁾	Total Xylenes ⁽³⁾
MW-8	MW8-57	Farallon	03/26/08	57	<3	--	--	<0.03	<0.05	<0.05	<0.2
	MW8-75	Farallon	03/26/08	75	3	--	--	0.05	0.1	0.07	0.4
MW-9	MW-9-62.5-041309	Farallon	04/13/09	62.5	<3	--	--	<0.03	0.1	0.05	0.3
	MW-9-68-041309	Farallon	04/13/09	68	2,600	--	--	1.4	19	19	160
	MW-9-85-041309	Farallon	04/13/09	85	<3	--	--	<0.03	<0.05	<0.05	<0.2
MW-10	MW10-58-041409	Farallon	04/14/09	58	<3	--	--	<0.03	<0.05	<0.05	<0.2
	MW10-99-041409	Farallon	04/14/09	99	<3	--	--	<0.03	<0.05	<0.05	<0.2
MW-11	MW11-68-041409	Farallon	04/14/09	68	<3	--	--	<0.03	<0.05	<0.05	<0.2
	MW11-99-041509	Farallon	04/15/09	99	<3	--	--	0.06	0.3	0.09	0.3
MW-12	MW12-45-041509	Farallon	04/15/09	45	35	<25	<50	<0.03	0.9	0.7	4.1
	MW12-56-041509	Farallon	04/15/09	56	10	--	--	<0.03	<0.05	<0.06	0.3
	MW12-65-041509	Farallon	04/15/09	65	990	--	--	<0.3	3.7	12	69
	MW12-85-041509	Farallon	04/15/09	85	1,700 ^A	1,300	<50	<0.3	<0.5	0.6	5.1
	MW12-99-041509	Farallon	04/15/09	99	2,800	--	--	<0.3	4.8	22	150
MW-13	MW13-65.0	Farallon	12/02/13	65.0	<3.0	<25	<50	<0.030	<0.050	<0.050	<0.20
	MW13-106.0	Farallon	12/02/13	106.0	1,900 ^B	490	<50	2.9	72	15	75
MW-14	MW14-60.0	Farallon	12/03/13	60.0	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
	MW14-105.0	Farallon	12/03/13	105.0	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
MW-15	MW15-65.0	Farallon	12/04/13	65.0	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
	MW15-100.00	Farallon	12/04/13	100.0	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
MW-16	MW16-65.0	Farallon	12/05/13	65.0	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
	MW16-105.0	Farallon	12/05/13	105.0	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
MTCA Cleanup Level for Soil ⁽⁴⁾					30	2,000	2,000	0.03	7	6	9



Table 1
Soil Analytical Results for TPH and BTEX
Former Whidbey Marine Auto
Freeland, Washington

Well/Boring ID	Sample ID	Sampled By	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)						
					GRPH ⁽¹⁾	DRPH ⁽²⁾	ORPH ⁽²⁾	Benzene ⁽³⁾	Toluene ⁽³⁾	Ethylbenzene ⁽³⁾	Total Xylenes ⁽³⁾
SoundEarth 2017											
B08 / B-8	B08-55	SoundEarth	07/26/17	54.5-55.5	1,870	113 ^{F-18}	<50.0	<0.236	<1.18	15.9	70.9
	B08-60	SoundEarth	07/26/17	59.5-60.5	<5.32	<25.0	<50.0	<0.0106	<0.0532	<0.0266	<0.0798
MW-17	MW17-30	SoundEarth	07/26/17	29.5-30.5	<5.02	<25.0	<50.0	<0.0100	<0.0502	<0.0251	<0.0753
	MW17-54	SoundEarth	07/27/17	53.5-54.5	8,850	357 ^{F-18}	<50.0	<0.203	<1.01	<0.507	<1.52
	MW17-61	SoundEarth	07/27/17	60.5-61.5	<5.74	<25.0	<50.0	<0.0115	<0.0574	<0.0287	<0.0861
	MW17-105	SoundEarth	07/27/17	104.5-105.5	3,820	244 ^{F-18}	<50.0	1.03	50.0	30.9	165
	MW17-116	SoundEarth	07/27/17	115.5-116	30.4	<25.0	<50.0	0.0481	0.792	0.300	1.40
MW-18	MW18-55	SoundEarth	08/14/17	55	<5.18	<25.0	<50.0	<0.0104	<0.0518	<0.0259	<0.0777
	MW18-105	SoundEarth	08/14/17	105	<5.00	<25.0	<50.0	<0.0100	<0.0500	<0.0250	<0.0750
B09 / B-9	B09-45	SoundEarth	08/15/17	45	<5.76	<25.0	<50.0	<0.0115	<0.0576	<0.0288	<0.0865
	B09-65	SoundEarth	08/15/17	65	<5.11	<25.0	<50.0	<0.0102	<0.0511	<0.0255	<0.0766
MTCA Cleanup Level for Soil ⁽⁴⁾					30	2,000	2,000	0.03	7	6	9

NOTES:

Red denotes concentration exceeds MTCA cleanup level for soil.

Bold indicates the laboratory reporting limit exceeded the MTCA cleanup level.

Sample analyses conducted by ALS Environmental of Everett, Washington, and Apex Labs of Tigard, Oregon.

⁽¹⁾Analyzed by Method NWTPH-Gx.

⁽²⁾Analyzed by Method NWTPH-Dx.

⁽³⁾Analyzed by EPA Method 8021B.

⁽⁴⁾MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Cleanup Levels for Soil, Unrestricted Land Uses, revised November 2007.

Laboratory Notes:

^ALaboratory report indicates reporting limit elevated due to semivolatle range product overlap.

^BLaboratory report indicates GRO result biased high due to semivolatle range product overlap.

^{F-18}Result for Diesel (Diesel Range Organics, C12-C24) is due to overlap from Gasoline or a Gasoline Range product.

-- = not analyzed/not applicable

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

bgs = below ground surface

BTEX = benzene, toluene, ethylbenzene, and total xylenes

DRPH = diesel-range petroleum hydrocarbons

EPA = U.S. Environmental Protection Agency

Farallon = Farallon Consulting, LLC.

GRO = gasoline-range organics

GRPH = gasoline-range petroleum hydrocarbons

MTCA = Washington State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbons

SouthEarth = SoundEarth Strategies, Inc.

TPH = total petroleum hydrocarbons

WAC = Washington Administrative Code



Table 2
Soil Analytical Results for TPH and BTEX - UST Closure and Remedial Excavation
Former Whidbey Marine Auto
Freeland, Washington

Sample Location	Sample ID	Sampled By	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)						
					GRPH ⁽¹⁾	DRPH ⁽²⁾	ORPH ⁽²⁾	Benzene ⁽³⁾	Toluene ⁽³⁾	Ethylbenzene ⁽³⁾	Total Xylenes ⁽³⁾
Farallon											
UST 1 - Bottom	T1-BTM-012711	Farallon	01/27/11	12	--	<25	<50	--	--	--	--
UST 2 - Bottom	T2-BTM-012611	Farallon	01/26/11	12	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
UST 3 - Bottom	T3-BTM-012611	Farallon	01/26/11	12	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
UST 4 - Bottom	T4-BTM-012611	Farallon	01/26/11	12	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
West Sidewall	SW-5-012611	Farallon	01/26/11	8.0	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
South Sidewall	SW-2-012611	Farallon	01/26/11	9.0	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
Piping for UST 1	P5-012711	Farallon	01/27/11	3.0	--	<25	<50	--	--	--	--
Piping for UST 2	P1-012611	Farallon	01/26/11	3.0	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
Piping for UST 2	P2-012611	Farallon	01/26/11	3.0	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
Piping for UST 3	P3-012611	Farallon	01/26/11	3.0	11	--	--	<0.030	<0.050	<0.050	<0.20
Piping for UST 4	P4-012611	Farallon	01/26/11	3.0	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
Pump 1	PUMP-1-012711	Farallon	01/27/11	1.5	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
Pump 2	PUMP-2-012711	Farallon	01/27/11	1.5	--	31,000	<1,200	--	--	--	--
Pump 3	PUMP-3-012711	Farallon	01/27/11	1.5	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
Pump 4	PUMP-4-012711	Farallon	01/27/11	1.5	<3.0	--	--	<0.030	<0.050	<0.050	<0.20
MTCA Cleanup Level for Soil ⁽⁴⁾					30	2,000	2,000	0.03	7	6	9

NOTES:

Red denotes concentration exceeds MTCA cleanup level for soil.

Sample analyses conducted by ALS Environmental of Everett, Washington, and Apex Labs of Tigard, Oregon.

⁽¹⁾ Analyzed by Method NWTPH-Gx.

⁽²⁾ Analyzed by Method NWTPH-Dx.

⁽³⁾ Analyzed by EPA Method 8021B.

⁽⁴⁾ MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Cleanup Levels for Soil, Unrestricted Land Uses, revised November 2007.

-- = not analyzed/not applicable

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

bgs = below ground surface

BTEX = benzene, toluene, ethylbenzene, and total xylenes

DRPH = diesel-range petroleum hydrocarbons

EPA = U.S. Environmental Protection Agency

Farallon = Farallon Consulting, LLC.

GRPH = gasoline-range petroleum hydrocarbons

MTCA = Washington State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbons

TPH = total petroleum hydrocarbons

UST = underground storage tank

WAC = Washington Administrative Code

Table 3
Summary of Groundwater Elevations
Former Whidbey Marine Auto
Freeland, Washington

Soil Boring/ Well Identification	Groundwater Zone	Date	Top of Casing Elevation ^(1,2) (feet above MSL)	Depth to LNAPL ^(2,3) (feet below TOC)	Depth to Groundwater ^(2,3) (feet below TOC)	LNAPL Thickness (feet)	Groundwater Elevation ^(1,2) (feet above MSL)
MW-1	Perched Groundwater Zone	12/05/05	116.64	NM	52.54	--	64.10
		06/07/06		NM	52.67	--	63.97
		10/09/06		NM	51.93	--	64.71
		01/09/07		NM	51.80	--	64.84
		03/27/07		NM	51.50	--	65.14
		06/19/07		NM	51.66	--	64.98
		12/07/07		NM	51.98	--	64.66
		04/17/08		NM	51.10	--	65.54
		06/30/08		NM	51.24	--	65.40
		08/14/08		NM	51.36	--	65.28
		09/09/08		NM	51.45	--	65.19
		10/21/08		NM	51.63	--	65.01
		01/15/09		NM	51.63	--	65.01
		05/12/09		NM	51.29	--	65.35
		08/05/09		NM	51.46	--	65.18
		02/10/10		NM	51.13	--	65.51
		10/21/10		NM	51.28	--	65.36
		05/18/11		NM	50.20	--	66.44
		11/17/11		NM	49.98	--	66.66
		05/15/12		NM	51.05	--	65.59
		12/18/13		NM	51.16	--	65.48
		03/27/14		NM	50.88	--	65.76
		07/28/14		NM	50.85	--	65.79
		07/20/15		NM	50.50	--	66.14
		02/02/16		NM	50.29	--	66.35
MW-2	Perched Groundwater Zone	08/21/17	117.49	ND	50.51	--	66.13
		12/05/05		NM	55.06	--	62.43
		06/07/06		NM	55.56	--	61.93
		10/09/06		NM	54.69	--	62.80
		01/09/07		NM	54.60	--	62.89
		03/27/07		NM	54.44	--	63.05
		06/19/07		NM	54.50	--	62.99
		12/07/07		NM	54.81	--	62.68
		04/17/08		NM	54.06	--	63.43
		06/30/08		NM	54.12	--	63.37
		08/14/08		NM	54.21	--	63.28
		09/09/08		NM	54.26	--	63.23
		10/21/08		NM	54.44	--	63.05
		01/15/09		NM	54.40	--	63.09
		05/12/09		NM	54.08	--	63.41
		08/05/09		NM	54.19	--	63.30
		02/10/10		NM	53.92	--	63.57
		10/21/10		NM	54.11	--	63.38
		05/18/11		NM	53.22	--	64.27
		11/17/11		NM	53.80	--	63.69
		05/15/12		NM	53.75	--	63.74
		07/22/13		ND	53.64	--	63.85
		12/18/13		NM	53.69	--	63.80
		03/27/14		NM	53.68	--	63.81
		07/28/14		NM	53.53	--	63.96
		07/20/15		NM	53.45	--	64.04
		02/02/16		NM	53.15	--	64.34
		08/21/17		ND	53.44	--	64.05

Table 3
Summary of Groundwater Elevations
Former Whidbey Marine Auto
Freeland, Washington

Soil Boring/ Well Identification	Groundwater Zone	Date	Top of Casing Elevation ^(1,2) (feet above MSL)	Depth to LNAPL ^(2,3) (feet below TOC)	Depth to Groundwater ^(2,3) (feet below TOC)	LNAPL Thickness (feet)	Groundwater Elevation ^(1,2) (feet above MSL)
MW-3	Perched Groundwater Zone	12/05/05	117.47	NM	53.48	--	63.99
		06/07/06		NM	53.96	--	63.51
		10/09/06		NM	53.26	--	64.21
		01/09/07		NM	53.02	--	64.45
		03/27/07		NM	52.82	--	64.65
		06/19/07		NM	52.70	--	64.77
		12/07/07		NM	53.33	--	64.14
		04/17/08		NM	52.50	--	64.97
		06/30/08		NM	52.66	--	64.81
		08/14/08		NM	52.76	--	64.71
		09/09/08		NM	52.84	--	64.63
		10/21/08		NM	52.99	--	64.48
		01/15/09		NM	53.01	--	64.46
		05/12/09		NM	52.64	--	64.83
		08/05/09		NM	52.79	--	64.68
		02/10/10		NM	52.50	--	64.97
		10/21/10		NM	52.63	--	64.84
		05/18/11		NM	51.63	--	65.84
		11/17/11		NM	52.28	--	65.19
		05/15/12		NM	52.31	--	65.16
		12/18/13		NM	52.49	--	64.98
		03/27/14		NM	52.22	--	65.25
		07/28/14		NM	52.22	--	65.25
		07/20/15		NM	51.90	--	65.57
		02/02/16		NM	51.70	--	65.77
MW-4	Perched Groundwater Zone	08/21/17	117.27	ND	51.91	--	65.56
		03/27/07		NM	53.94	--	63.33
		06/19/07		NM	54.02	--	63.25
		12/07/07		NM	54.28	--	62.99
		04/17/08		NM	53.58	--	63.69
		06/30/08		NM	53.64	--	63.63
		08/14/08		NM	53.71	--	63.56
		09/09/08		NM	53.76	--	63.51
		10/21/08		NM	53.89	--	63.38
		01/15/09		NM	53.88	--	63.39
		05/12/09		NM	53.50	--	63.77
		08/05/09		NM	53.65	--	63.62
		02/10/10		NM	53.44	--	63.83
		10/21/10		NM	53.58	--	63.69
		05/18/11		NM	52.76	--	64.51
		11/17/11		NM	53.28	--	63.99
		05/15/12		NM	53.31	--	63.96
		07/22/13		NM	53.14	--	64.13
		12/18/13		NM	53.39	--	63.88
		03/27/14		NM	53.10	--	64.17
		07/28/14		NM	53.11	--	64.16
		07/20/15		NM	52.84	--	64.43
		02/02/16		NM	52.63	--	64.64
		08/21/17		ND	52.83	--	64.44
MW-5	Perched Groundwater Zone	08/21/17	--	ND	62.92 (dry)	--	--
MW-6	Perched Groundwater Zone	04/17/08	116.56	NM	59.84	--	56.72
		06/30/08		NM	60.07	--	56.49
		08/14/08		NM	60.26	--	56.30
		09/09/08		NM	60.35	--	56.21
		10/21/08		NM	60.47	--	56.09
		01/15/09		NM	60.50	--	56.06
		05/12/09		NM	60.34	--	56.22
		08/05/09		NM	60.49	--	56.07
		10/21/10		NM	59.45	--	57.11
		05/18/11		NM	57.76	--	58.80
		11/17/11		NM	57.75	--	58.81
		05/15/12		NM	57.10	--	59.46
		07/22/13		ND	57.68	--	58.88
		12/18/13		ND	57.90	--	58.66
		03/27/14		ND	57.86	--	58.70
		07/28/14		ND	57.74	--	58.82
		07/20/15		ND	57.23	--	59.33
		02/02/16		NM	56.90	--	59.66
		08/21/17		ND	57.25	--	59.31



Table 3
Summary of Groundwater Elevations
Former Whidbey Marine Auto
Freeland, Washington

Soil Boring/ Well Identification	Groundwater Zone	Date	Top of Casing Elevation ^(1,2) (feet above MSL)	Depth to LNAPL ^(2,3) (feet below TOC)	Depth to Groundwater ^(2,3) (feet below TOC)	LNAPL Thickness (feet)	Groundwater Elevation ^(1,2) (feet above MSL)
MW-7	Perched Groundwater Zone	04/17/08	116.82	NM	56.98	--	59.84
		06/30/08		NM	57.42	--	59.40
		08/14/08		NM	57.87	--	58.95
		09/09/08		NM	58.25	--	58.57
		10/21/08		NM	58.34	--	58.48
		01/15/09		NM	DRY	--	DRY
		05/12/09		NM	57.43	--	59.39
		08/05/09		NM	58.32	--	58.50
		02/10/10		NM	58.24	--	58.58
		10/21/10		NM	58.30	--	58.52
		05/18/11		NM	58.05	--	58.77
		11/17/11		NM	58.72	--	58.10
		05/15/12		NM	58.73	--	58.09
		07/22/13		ND	58.24	--	58.58
		12/18/13		ND	58.22	--	58.60
		03/27/14		ND	58.25	--	58.57
		07/28/14		ND	57.59	--	59.23
		07/20/15		ND	57.02	--	59.80
		02/02/16		NM	56.21	--	60.61
		08/21/17		ND	57.04	--	59.78
MW-8	Perched Groundwater Zone	07/28/14	117.23	NM	55.29	--	61.94
		06/30/08		NM	55.34	--	61.89
		08/14/08		NM	55.33	--	61.90
		09/09/08		NM	55.36	--	61.87
		10/21/08		NM	55.47	--	61.76
		01/15/09		NM	55.37	--	61.86
		05/12/09		NM	55.09	--	62.14
		08/05/09		NM	55.21	--	62.02
		02/10/10		NM	54.93	--	62.30
		10/21/10		NM	55.08	--	62.15
		05/18/11		NM	54.47	--	62.76
		11/17/11		NM	54.83	--	62.40
		05/15/12		NM	54.83	--	62.40
		12/18/13		ND	54.87	--	62.36
		03/27/14		ND	54.78	--	62.45
		07/28/14		ND	54.64	--	62.59
		07/20/15		ND	54.40	--	62.83
		02/02/16		NM	54.15	--	63.08
		08/21/17		ND	54.40	--	62.83
MW-9	Sea Level Aquifer	05/12/09	114.79	NM	103.54	--	11.25
		08/05/09		NM	103.85	--	10.94
		02/10/10		NM	103.79	--	11.00
		10/21/10		NM	103.77	--	11.02
		05/18/11		NM	103.12	--	11.67
		11/17/11		NM	NM	--	NM
		05/15/12		NM	103.05	--	11.74
		09/05/12		102.03	103.01	0.98	12.56
		11/08/12		102.15	102.97	0.82	12.48
		02/08/13		102.13	103.05	0.92	12.48
		05/10/13		101.77	101.78	0.01	13.02
		06/11/13		ND	101.67	--	13.12
		07/22/13		ND	101.76	--	13.03
		10/16/13		101.88	102.18	0.30	12.85
		11/20/13		101.74	102.23	0.49	12.95
		12/18/13		101.85	102.36	0.51	12.84
		02/20/14		102.10	103.02	0.92	12.51
		03/27/14		102.05	102.43	0.38	12.66
		07/28/14		102.15	102.50	0.35	12.57
		10/24/14		102.50	102.75	0.25	12.24
		02/10/15		102.70	102.71	0.01	12.09
		03/25/15		102.35	102.37	0.02	12.44
		04/30/15		ND	102.24	--	12.55
		06/05/15		102.14	102.19	0.05	12.64
		07/20/15		ND	102.30	--	12.49
		09/04/15		102.41	102.47	0.06	12.37
		10/15/15		102.30	102.36	0.06	12.48
		02/02/16		102.20	102.32	0.12	12.57
		08/21/17		ND	101.09	--	13.70

Table 3
Summary of Groundwater Elevations
Former Whidbey Marine Auto
Freeland, Washington

Soil Boring/ Well Identification	Groundwater Zone	Date	Top of Casing Elevation ^(1,2) (feet above MSL)	Depth to LNAPL ^(2,3) (feet below TOC)	Depth to Groundwater ^(2,3) (feet below TOC)	LNAPL Thickness (feet)	Groundwater Elevation ^(1,2) (feet above MSL)
MW-10	Sea Level Aquifer	05/12/09	113.45	NM	102.02	--	11.43
		08/05/09		NM	102.29	--	11.16
		02/10/10		NM	102.25	--	11.20
		10/21/10		NM	101.95	--	11.50
		05/18/11		NM	101.47	--	11.98
		11/17/11		NM	100.30	--	13.15
		05/15/12		NM	100.83	--	12.62
		09/05/12		ND	100.70	--	12.75
		11/08/12		ND	100.82	--	12.63
		02/08/13		ND	100.82	--	12.63
		05/10/13		ND	100.29	--	13.16
		06/11/13		ND	100.21	--	13.24
		07/22/13		ND	100.30	--	13.15
		10/16/13		ND	100.48	--	12.97
		11/20/13		ND	100.36	--	13.09
		12/18/13		ND	100.56	--	12.89
		02/20/14		NM	100.74	--	12.71
		03/27/14		ND	100.67	--	12.78
		07/28/14		ND	100.75	--	12.70
		02/10/15		NM	101.13	--	12.32
		03/25/15		NM	100.89	--	12.56
		07/20/15		ND	100.79	--	12.66
		02/02/16		NM	100.65	--	12.80
		08/21/17		ND	99.66	--	13.79
MW-11	Sea Level Aquifer	05/12/09	114.24	NM	102.82	--	11.42
		08/05/09		NM	103.09	--	11.15
		02/10/10		NM	103.09	--	11.15
		10/21/10		NM	102.82	--	11.42
		05/18/11		NM	102.31	--	11.93
		11/17/11		NM	NM	--	NM
		05/15/12		NM	101.64	--	12.60
		09/05/12		ND	101.54	--	12.70
		11/08/12		ND	101.66	--	12.58
		02/08/13		ND	101.65	--	12.59
		05/10/13		ND	101.14	--	13.10
		06/11/13		ND	101.06	--	13.18
		07/22/13		ND	101.41	--	12.83
		10/16/13		ND	101.31	--	12.93
		11/20/13		ND	101.20	--	13.04
		12/18/13		ND	101.31	--	12.93
		02/20/14		ND	101.62	--	12.62
		03/27/14		ND	101.50	--	12.74
		07/28/14		ND	101.59	--	12.65
		02/10/15		NM	101.99	--	12.25
		03/25/15		NM	101.70	--	12.54
		07/20/15		ND	101.65	--	12.59
		02/02/16		NM	101.43	--	12.81
		08/21/17		ND	100.47	--	13.77
MW-12	Sea Level Aquifer	05/12/09	114.23	NM	103.96	--	10.27
		08/05/09		NM	103.24	--	10.99
		02/10/10		NM	103.36	--	10.87
		10/21/10		NM	102.90	--	11.33
		05/18/11		NM	103.37	--	10.86
		11/17/11		NM	NM	--	NM
		05/15/12		NM	101.69	--	12.54
		09/05/12		ND	101.60	--	12.63
		11/08/12		ND	101.72	--	12.51
		02/08/13		ND	101.72	--	12.51
		05/10/13		ND	101.21	--	13.02
		06/11/13		ND	101.11	--	13.12
		07/22/13		ND	100.21	--	14.02
		10/16/13		ND	101.39	--	12.84
		11/20/13		ND	101.27	--	12.96
		12/18/13		ND	101.4	--	12.83
		02/20/14		ND	101.70	--	12.53
		03/27/14		ND	101.55	--	12.68
		07/28/14		ND	101.67	--	12.56
		02/10/15		ND	102.10	--	12.13
		03/25/15		ND	101.78	--	12.45
		04/30/15		ND	101.69	--	12.54
		06/05/15		ND	101.60	--	12.63
		07/20/15		ND	101.73	--	12.50
		02/02/16		ND	101.65	--	12.58
		08/21/17		ND	100.61	--	13.62

Table 3
Summary of Groundwater Elevations
Former Whidbey Marine Auto
Freeland, Washington

Soil Boring/ Well Identification	Groundwater Zone	Date	Top of Casing Elevation ^(1,2) (feet above MSL)	Depth to LNAPL ^(2,3) (feet below TOC)	Depth to Groundwater ^(2,3) (feet below TOC)	LNAPL Thickness (feet)	Groundwater Elevation ^(1,2) (feet above MSL)
MW-13	Sea Level Aquifer	12/18/13	116.34	ND	103.56	--	12.78
		02/20/14		ND	103.90	--	12.44
		03/27/14		ND	103.75	--	12.59
		07/28/14		ND	103.84	--	12.50
		02/10/15		ND	104.35	--	11.99
		03/25/15		ND	103.97	--	12.37
		04/30/15		ND	103.89	--	12.45
		06/05/15		ND	103.82	--	12.52
		02/02/16		ND	103.93	--	12.41
		07/20/15		ND	103.96	--	12.38
MW-14	Sea Level Aquifer	12/18/13	116.22	NM	103.61	--	12.61
		02/20/14		NM	103.73	--	12.49
		03/27/14		NM	103.54	--	12.68
		07/28/14		NM	103.80	--	12.42
		02/10/15		NM	104.05	--	12.17
		03/25/15		NM	103.90	--	12.32
		07/20/15		ND	103.84	--	12.38
		02/02/16		NM	103.75	--	12.47
		08/21/17		ND	102.76	--	13.46
MW-15	Sea Level Aquifer	12/18/13	116.73	NM	104.23	--	12.50
		02/20/14		NM	104.45	--	12.28
		03/27/14		NM	104.21	--	12.52
		07/28/14		NM	104.45	--	12.28
		02/10/15		NM	104.91	--	11.82
		03/25/15		NM	104.60	--	12.13
		07/20/15		ND	104.54	--	12.19
		02/02/16		NM	104.45	--	12.28
		08/21/17		ND	103.45	--	13.28
MW-16	Sea Level Aquifer	12/18/13	116.92	NM	104.46	--	12.46
		02/20/14		NM	104.68	--	12.24
		03/27/14		NM	104.40	--	12.52
		07/28/14		NM	104.71	--	12.21
		02/10/15		NM	105.08	--	11.84
		03/25/15		NM	104.80	--	12.12
		07/20/15		ND	104.77	--	12.15
		02/02/16		NM	104.67	--	12.25
		08/21/17		ND	103.71	--	13.21
MW-17	Sea Level Aquifer	08/21/17	115.60	ND	102.03	--	13.57
MW-18	Sea Level Aquifer	08/21/17	115.68	ND	102.30	--	13.38

NOTES:

⁽¹⁾Elevation survey of monitoring wells MW-1 through MW-16 completed by Farallon Consulting, and based on North American Vertical Datum of 1988. Groundwater elevation is corrected for LNAPL thickness, if present. The specific gravity for LNAPL is estimated at 0.80 for petroleum hydrocarbon mixtures.

⁽²⁾Elevation survey of monitoring wells MW-17 and MW-18 completed by SoundEarth Strategies, Inc., and based on North American Vertical Datum of 1988.

⁽³⁾As measured from a fixed spot on the well casing rim.

-- = not applicable/not measured

LNAPL = light nonaqueous-phase liquid

MSL = mean sea level

TOC = top of casing

NM = not measured

ND = none detected



Table 4
Groundwater Analytical Results for TPH and BTEX
Former Whidbey Marine Auto
Freeland, Washington

Well ID	Sample ID	Sampled By	Date Sampled	Analytical Results (micrograms per liter)						
				GRPH ⁽¹⁾	DRPH ⁽²⁾	ORPH ⁽²⁾	Benzene ⁽³⁾	Toluene ⁽³⁾	Ethylbenzene ⁽³⁾	Total Xylenes ⁽³⁾
MW-1	MW1-120505	Farallon	12/05/05	4,200	--	--	480	770	65	318
	MW1-060706		06/07/06	5,800	--	--	500	1,000	70	780
	MW1-100906		10/09/06	17,000	--	--	2,400	3,800	270	2,200
	MW1-010907		01/09/07	1,500	--	--	14	6	11	120
	QA/QC-010907		01/09/07	1,500	--	--	11	6	10	110
	MW1-032707		03/27/07	290	--	--	1	1	<1	17
	QA/QC-032707		03/27/07	320	--	--	1	<1	<1	19
	MW1-061907		06/19/07	73	--	--	<1	<1	<1	<3
	MW1-120707		12/07/07	110	--	--	<1	<1	<1	<3
	MW1-041808		04/18/08	74	--	--	<1	<1	<1	<3
	MW1-090908		09/09/08	68	--	--	<1	<1	<1	<3
	MW1-051409		05/14/09	<50	--	--	<1	<1	<1	<3
	MW1-021110		02/11/10	<50	--	--	<1	<1	<1	<3
	MW1-102110		10/21/10	<50	--	--	<1	<1	<1	<3
	MW1-051811		05/18/11	<50	--	--	<1	<1	<1	<3
	MW1-111711		11/17/11	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW1-051512		05/15/12	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW1-121913		12/19/13	<50	<130	<250	<1.0	<1.0	<1.0	<3.0
	MW1-072914		07/29/14	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW01-20170821	SoundEarth	08/21/17	<100	<198	<396	<0.200	<1.00	<0.500	<1.50
MW-2	MW2-120505	Farallon	12/05/05	570	--	--	110	110	2.8	50
	MW2-060706		06/07/06	2,800	--	--	440	540	15	430
	MW2-100906		10/09/06	370	--	--	20	44	1	77
	MW2-010907		01/09/07	730	--	--	35	69	11	150
	MW2-032707		03/27/07	610	--	--	6	9	<1	150
	MW2-061907		06/19/07	1,000	--	--	17	52	22	200
	MW2-120707		12/07/07	2,300	--	--	7	310	36	270
	MW2-041808		04/18/08	3,700	--	--	<1	57	33	890
	MW2-090908		09/09/08	20,000	--	--	<50	3,100	470	4,200
	MW2-051309		05/13/09	4,300	--	--	<5	380	130	1,100
	MW2-021110		02/11/10	15,000	--	--	<10	160	590	3,800
	MW2-102210		10/22/10	12,000	--	--	50	15	420	2,400
	MW2-032111		03/21/11	7,000	--	--	<10	1.9	31	1,400
	MW2-111711		11/17/11	130	--	--	<1.0	1.5	1.3	10
	MW2-051512		05/15/12	210	--	--	1.9	<1.0	1.1	13
	MW2-121913		12/19/13	82	5,400	11,000	<1.0	<1.0	<1.0	<3.0
	MW2-032814		03/28/14	--	<650	12,000	--	--	--	--
	MW2-072115		07/21/15	<50	<1,000 ^A	6,800	1.3	<1.0	<1.0	<3.0
	MW02-20170822	SoundEarth	08/22/17	112	--	--	<0.280	<1.18	<0.500	<1.50
MTCA Cleanup Level for Groundwater ⁽⁴⁾				800	500	500	5	1,000	700	1,000



Table 4
Groundwater Analytical Results for TPH and BTEX
Former Whidbey Marine Auto
Freeland, Washington

Well ID	Sample ID	Sampled By	Date Sampled	Analytical Results (micrograms per liter)						
				GRPH ⁽¹⁾	DRPH ⁽²⁾	ORPH ⁽²⁾	Benzene ⁽³⁾	Toluene ⁽³⁾	Ethylbenzene ⁽³⁾	Total Xylenes ⁽³⁾
MW-3	MW3-120505	Farallon	12/05/05	<100	--	--	<1.0	<1.0	<1.0	<2.0
	FD-120505		12/05/05	<100	--	--	<1.0	<1.0	<1.0	<2.0
	MW3-060706		06/07/06	<50	--	--	<1	<1	<1	<3
	MW3-100906		10/09/06	<50	--	--	<1	<1	<1	<3
	MW3-010907		01/09/07	<50	--	--	<1	<1	<1	<3
	MW3-032707		03/27/07	<50	--	--	<1	<1	<1	<3
	MW3-061907		06/19/07	<50	--	--	<1	<1	<1	<3
	QA/QC-061907		06/19/07	<50	--	--	<1	<1	<1	<3
	MW3-120707		12/07/07	<50	--	--	<1	<1	<1	<3
	MW3-041808		04/18/08	<50	--	--	<1	<1	<1	<3
	MW3-090908		09/09/08	<50	--	--	<1	<1	<1	<3
	MW3-051409		05/14/09	<50	--	--	<1	<1	<1	<3
	MW3-021110		02/11/10	<50	--	--	<1	<1	<1	<3
	MW3-102110		10/21/10	<50	--	--	<1	<1	<1	<3
	MW3-051811		05/18/11	<50	--	--	<1	1.1	<1	<3
	MW-3-111711		11/17/11	<50	--	--	<1.0	<1	<1.0	<3.0
	MW-3-051512		05/15/12	<50	--	--	<1.0	<1	<1.0	<3.0
	MW-3-121913		12/19/13	<50	<130	<250	<1.0	<1.0	<1.0	<3.0
	MW-3-072914		07/29/14	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW03-20170821	SoundEarth	08/21/17	<100	<192	<385	<0.200	<1.00	<0.500	<1.50
MW-4	MW4-032707	Farallon	03/27/07	99,000	--	--	31,000	32,000	970	6,000
	MW4-061907		06/19/07	110,000	--	--	22,000	36,000	1,600	8,200
	MW4-120707		12/07/07	39,000	--	--	7,600	12,000	300	2,400
	QA/QC-120707		12/07/07	60,000	--	--	9,500	18,000	710	4,700
	MW4-041808		04/18/08	140,000	--	--	530	42,000	1,600	9,400
	MW4-090908		09/09/08	120,000	--	--	150	40,000	2,000	11,000
	QA/QC-1-090908		09/09/08	120,000	--	--	150	43,000	1,900	11,000
	MW4-051409		05/14/09	83,000	680 ^B	<250	<50	30,000	1,100	6,600
	MW4-021110		02/11/10	71,000	--	--	<50	20,000	940	5,900
	MW4-102110		10/21/10	32,000	--	--	<10	4,200	1,100	6,600
	MW4-032111		03/21/11	32,000	--	--	<10	160	870	6,900
	MW4-051811		05/18/11	33,000	--	--	<10	550	840	6,700
	MW-4-111811		11/18/11	2,300	--	--	<5.0	20	110	610
	MW-4-051612		05/16/12	5,200	--	--	<10	12	77	1,500
	MW-4-121913		12/19/13	41,000	<630 ^C	<250	<25	<25	280	11,000
	MW-4-072914		07/29/14	37,000	--	--	<50	<50	63	9,200
	MW-4-072115		07/21/15	1,400	2,900	<250	5.3	3.9	1.3	370
	MW04-20170822	SoundEarth	08/22/17	14,200	939 ^{F-18}	<388	0.250	1.21	2.18	310
MTCA Cleanup Level for Groundwater ⁽⁴⁾				800	500	500	5	1,000	700	1,000



Table 4
Groundwater Analytical Results for TPH and BTEX
Former Whidbey Marine Auto
Freeland, Washington

Well ID	Sample ID	Sampled By	Date Sampled	Analytical Results (micrograms per liter)						
				GRPH ⁽¹⁾	DRPH ⁽²⁾	ORPH ⁽²⁾	Benzene ⁽³⁾	Toluene ⁽³⁾	Ethylbenzene ⁽³⁾	Total Xylenes ⁽³⁾
MW-6	MW6-041708	Farallon	04/18/08	23,000	--	--	260	1,500	530	3,600
	MW6-090908		09/09/08	42,000	--	--	450	8,500	1,300	7,800
	MW6-051409		05/14/09	17,000	--	--	29	3,200	250	3,100
	MW6-021110		02/11/10	89,000	--	--	<100	16,000	1,800	14,000
	MW6-102210		10/22/10	39,000	--	--	<10	1,800	1,200	7,800
	MW6-032111		03/21/11	37,000	--	--	<20	350	650	9,200
	MW6-051811		05/18/11	49,000	--	--	<25	270	690	11,000
	MW-6-111711		11/17/11	22,000	--	--	<20	1,200	520	5,400
	MW-6-051512		05/15/12	17,000	--	--	<20	220	210	3,700
	MW-6-121913		12/19/13	8,900	<250 ^C	<250	<5.0	<5.0	120	1,700
	MW-6-073014		07/30/14	9,700	--	--	<10	<10	290	1,800
	MW-6-072115	07/21/15	660	--	--	7.8	<1.0	32	86	
MW06-20170822	SoundEarth	08/22/17	16,200	513 ^{F-18}	<400	<2.00	<10.0	690	2,100	
MW-7	MW7-041808	Farallon	04/18/08	54,000	--	--	13,000	17,000	420	3,700
	MW7-051409		05/14/09	13,000	--	--	2,500	3,700	180	1,700
	MW07-20170822	SoundEarth	08/22/17	6,380	--	--	262	944	61.5	423
MW-8	MW8-041808	Farallon	04/18/08	5,400	--	--	<1	57	57	890
	QA/QC-1-041808		04/18/08	5,600	--	--	<1	42	55	930
	MW8-090908		09/09/08	34,000	--	--	<50	3,500	670	6,700
	MW8-051309		05/13/09	60,000	--	--	<50	9,000	1,800	9,500
	QA/QC-051309		05/13/09	57,000	--	--	<50	8,900	1,700	9,400
	MW8-021110		02/11/10	54,000	--	--	<50	3,900	2,000	12,000
	MW8-102210		10/22/10	58,000	--	--	<10	770	2,200	15,000
	MW8-032111		03/21/11	17,000	--	--	<10	<10	600	2,900
	MW8-051811		05/18/11	2,900	--	--	<1	2.3	23	320
	MW-8-111711		11/17/11	47,000	--	--	<50	<50	1,200	12,000
	DUP-1-111711		11/17/11	47,000	--	--	<50	<50	1,200	12,000
	MW-8-051512		05/15/12	46,000	--	--	<50	<50	930	10,000
	DUP-1-051512		05/15/12	42,000	--	--	<50	<50	900	9,700
	MW-8-121913		12/119/13	24,000	<630 ^C	<250	<25	<25	150	4,200
	MW-8-073014		07/30/14	10,000	--	--	<10	<10	13	1,300
	MW-8-072115		07/21/15	2,900	--	--	40	<5.0	<5.0	260
	MW08-20170822	SoundEarth	08/22/17	14,200	876 ^{F-18}	<388	<2.00	<10.0	27.3	777
MW-9	MW9-051309	Farallon	05/13/09	94,000	800 ^B	<250	18,000	32,000	1,500	7,600
	MW9-021010		02/10/10	32,000	--	--	10,000	9,800	390	1,800
	MW9-102210		10/22/10	160,000	--	--	15,000	42,000	2,700	14,000
	MW9-032111		03/21/11	260,000	--	--	13,000	55,000	5,300	27,000
	MW9-051811		05/18/11	230,000	--	--	18,000	55,000	4,000	21,000
	MW9-111811		11/18/11	240,000	--	--	19,000	68,000	4,400	23,000
	MW9-051612		05/16/12	280,000	--	--	13,000	59,000	4,700	25,000
	MW09-20170823	SoundEarth	08/23/17	70,200	2,530 ^{F-18}	<396	<10.0	2,640	909	7,420
	MW99-20170823 (Duplicate)		08/23/17	65,300	1,750 ^{F-18}	<400	<2.0	2,870	845	6,740
MTCA Cleanup Level for Groundwater ⁽⁴⁾				800	500	500	5	1,000	700	1,000



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Former Whidbey Marine Auto
Freeland, Washington

Well ID	Sample ID	Sampled By	Date Sampled	Analytical Results (micrograms per liter)						
				GRPH ⁽¹⁾	DRPH ⁽²⁾	ORPH ⁽²⁾	Benzene ⁽³⁾	Toluene ⁽³⁾	Ethylbenzene ⁽³⁾	Total Xylenes ⁽³⁾
MW-10	MW10-051309	Farallon	05/19/09	<50	<130	<250	<1	2	<1	<3
	MW10-021010		02/10/10	140	--	--	<1	3.3	1.5	7.3
	MW10-102210		10/22/10	<50	--	--	<1	4	<1	3.2
	MW10-051811		05/18/11	69	--	--	<1	2.6	<1	<3
	MW10-111711		11/17/11	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW10-051512		05/15/12	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW10-121913		12/19/13	<50	<130	<250	<1.0	<1.0	<1.0	<3.0
	MW10-032714		03/27/14	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW10-072914		07/29/14	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW10-20170821	SoundEarth	08/21/17	117 ^{F-12}	<196	<392	<0.200	<1.00	<0.500	<1.50
MW-11	MW11-051309	Farallon	05/13/09	2,300	<130	<250	500	530	19	230
	MW11-021010		02/10/10	23,000	--	--	4,000	7,000	340	1,600
	MW11-102210		10/22/10	29,000	--	--	2,400	7,400	790	2,800
	MW11-051811		05/18/11	70,000	--	--	3,100	15,000	1,500	7,200
	MW11-111811		11/18/11	24,000	--	--	670	3,700	820	3,000
	MW11-051612		05/16/12	19,000	--	--	700	2,200	700	2,700
	MW11-122013		12/20/13	2,800	<130	<250	8	64	26	440
	MW11-032814		03/28/14	1,200	--	--	4.7	13	3	150
	MW11-073014		07/30/14	540	--	--	3.1	1.1	1.1	32
	MW11-021015		02/10/15	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW11-072015		07/20/15	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW11-20170821	SoundEarth	08/21/17	<100	<194	<388	<0.200	<1.00	<0.500	<1.50
MW-12	MW12-051309	Farallon	05/13/09	55,000	<1,300 ^C	<250	200	8,900	1,700	9,700
	MW12-021010		02/10/10	52,000	2600 ^B	310	92	3,900	1,300	8,400
	MW12-102210		10/22/10	81,000	--	--	120	5,300	2,100	14,000
	MW12-051811		05/18/11	69,000	--	--	83	4,400	1,700	11,000
	MW12-111711		11/17/11	68,000	--	--	82	4,700	1,500	11,000
	MW12-051512		05/15/12	77,000	--	--	<100	5,100	1,700	13,000
	MW12-122013		12/20/13	78,000	2,500 ^B	790	38	3,300	1,200	11,000
	MW12-032814		03/28/14	75,000	2,500 ^B	<250	29	4,200	1,500	10,000
	MW12-073014		07/30/14	75,000	2,200 ^B	<250	<50	4,500	1,800	11,000
	MW12-021015		02/10/15	94,000	10,000 ^B	1,100 ^D	<100	5,600	2,500	15,000
	MW12-072015		07/20/15	47,000	4,200 ^B	320	<200	2,600	1,200	7,600
	MW12-20170823	SoundEarth	08/23/17	61,800	1,530 ^{F-18}	<381	<6.80 ^{R-06}	3,840	1,300	9,440
MW-13	MW13-121913	Farallon	12/19/13	120,000	1,000 ^B	<250	2,500	30,000	1,100	5,700
	QAQC-1-121913		12/19/13	110,000	820 ^B	290	2,500	28,000	1,100	5,600
	MW13-032814		03/28/14	140,000	780 ^B	<250	1,600	33,000	2,000	9,900
	QA/QC-032814		03/28/14	140,000	830 ^B	<250	1,600	31,000	1,900	9,600
	MW13-073014		07/30/14	150,000	1,300 ^B	<250	1,400	37,000	2,300	11,000
	QA/QC-1-072914		07/30/14	160,000	1,400 ^B	<250	1,400	37,000	2,200	11,000
	MW13-021015		02/10/05	190,000	4,800 ^B	<500	980	45,000	3,400	17,000
	MW13-072015		07/20/15	120,000	860 ^B	<250	680	29,000	1,900	9,700
	DUP1-072015		07/20/15	190,000	1,800 ^B	290	820	42,000	3,500	18,000
	MW13-20170823	SoundEarth	08/23/17	83,000	870 ^{F-18}	<388	23.3	1,730	11,100	13,000
MTCA Cleanup Level for Groundwater ⁽⁴⁾				800	500	500	5	1,000	700	1,000



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Former Whidbey Marine Auto
Freeland, Washington

Well ID	Sample ID	Sampled By	Date Sampled	Analytical Results (micrograms per liter)						
				GRPH ⁽¹⁾	DRPH ⁽²⁾	ORPH ⁽²⁾	Benzene ⁽³⁾	Toluene ⁽³⁾	Ethylbenzene ⁽³⁾	Total Xylenes ⁽³⁾
MW-14	MW-14-121813	Farallon	12/18/13	<50	<130	<250	<1.0	<1.0	<1.0	<3.0
	MW-14-032714		03/27/14	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW-14-072914		07/29/14	62	--	--	<1.0	17	<1.0	<3.0
	MW-14-021015		02/10/15	<50	--	--	<1.0	<1.0	<1.0	<3.0
	DUP1-021015		02/10/15	<50	--	--	<1.0	1.2	<1.0	<3.0
	MW-14-072015		07/20/15	<50	--	--	<1.0	15	<1.0	<3.0
	MW14-20170822	SoundEarth	08/22/17	<100	<202	<404	<0.200	<1.00	<0.500	<1.50
MW-15	MW-15-121813	Farallon	12/18/13	<50	<130	<250	<1.0	<1.0	<1.0	<3.0
	MW-15-032714		03/27/14	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW-15-072914		07/29/14	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW-15-021015		02/10/15	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW-15-072015		07/20/15	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW15-20170822	SoundEarth	08/22/17	<100	<192	<385	<0.200	<1.00	<0.500	<1.50
MW-16	MW-16-121813	Farallon	12/18/13	<50	<130	<250	<1.0	<1.0	<1.0	<3.0
	MW-16-032714		03/27/14	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW-16-072914		07/29/14	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW-16-021015		02/10/15	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW-16-072015		07/20/15	<50	--	--	<1.0	<1.0	<1.0	<3.0
	MW16-20170822	SoundEarth	08/22/17	<100	<192	<385	<0.200	<1.00	<0.500	<1.50
MW-17	MW17-20170823	SoundEarth	08/23/17	6,360	<194	<388	271	345	146	392
MW-18	MW18-20170822	SoundEarth	08/22/17	<100	<198	<396	<0.200	<1.00	<0.500	<1.50
MTCA Cleanup Level for Groundwater ⁽⁴⁾				800	500	500	5	1,000	700	1,000

NOTES:

Red denotes concentration exceeds MTCA cleanup level for groundwater.

Sample analyses conducted by ALS Environmental of Everett, WA and Apex Labs of Tigard, Oregon.

⁽¹⁾ Analyzed by Method NWTPH-Gx.

⁽²⁾ Analyzed by Method NWTPH-Dx.

⁽³⁾ Analyzed by EPA Method 8021B.

⁽⁴⁾ MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Levels for Groundwater, revised November 2007.

Laboratory Notes:

^A Laboratory report narrative indicates reporting limit for DRO is elevated due to ORO overlap.

^B Laboratory report narrative indicates DRO result is biased high due to GRO overlap.

^C Laboratory report narrative indicates reporting limit for DRO is elevated due to GRO overlap.

^D Laboratory report narrative indicates ORO result is biased high due to DRO overlap.

^{F-12} The result for this hydrocarbon range is primarily due to the presence of individual analyte peaks in the quantitation range. No fuel pattern detected.

^{F-18} Result for Diesel (Diesel Range Organics, C12-C24) is due to overlap from Gasoline or a Gasoline Range product.

^{R-06} Reporting level raised due to possible carryover from previous sample.

-- = not analyzed/not applicable

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

BTEX = benzene, toluene, ethylbenzene, and total xylenes

DRPH/DRO = diesel-range petroleum hydrocarbons

EPA = U.S. Environmental Protection Agency

Farallon = Farallon Consulting, LLC.

GRPH/GRO = gasoline-range petroleum hydrocarbons

MTCA = Washington State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH/ORO = oil-range petroleum hydrocarbons

SoundEarth = SoundEarth Strategies, Inc.

TPH = total petroleum hydrocarbons

WAC = Washington Administrative Code



Table 5
Slug Test Results Summary
Former Whidbey Marine Auto
Freeland, Washington

Slug Test Parameters and Results (08/08/17)											
Well Identification	Well Diameter ⁽¹⁾ (feet)	Diameter of the Drilled Hole (inches)	Screen Length (feet)	Screen Top Depth ⁽²⁾	Gravel Pack Porosity ⁽³⁾ (unitless)	Aquifer Thickness ⁽⁴⁾ (feet)	Slug Dimensions (diameter, inches x length, feet)	Soil Profile	Test Number	Hydraulic Conductivity ⁽⁵⁾ (feet per day)	Hydraulic Conductivity ⁵ (centimeter per second)
MW11	2.00	8.00	10.00	0.00	0.30	100.00	1 x 5.2	Fine to coarse sand with trace silt	1	102.90	3.6E-02
MW16	2.00	8.00	10.00	0.00	0.30	100.00	1 x 3.0	Fine to coarse sand with trace silt interbedded with silty sand	1	15.11	5.3E-03
									2	15.34	5.4E-03
									3	17.12	6.0E-03
									4	29.62	1.0E-02
									Average of Test 1 -4	19.30	6.81E-03

NOTES:

Testing procedure used was Rising Head.

Analytical Method used was Bouwer and Rice, 1976.

Bouwer 1989. The Bouwer and Rice Slug Test - An Update. *Groundwater* 27 no 3: 304-309.

⁽¹⁾The inner diameter of the well casing.

⁽²⁾The depth to top of the well screen relative to the top of the aquifer.

⁽³⁾Assumed program default for gravel pack porosity of 0.30.

⁽⁴⁾Assumed program default for aquifer thickness of 100 feet.

⁽⁵⁾The sand-pack recovery correction in the Bouwer and Rice analysis was used. Following Bouwer (1989), the first semi-log linear slope in the recovery data was assumed to represent sand pack drainage, and the immediately following curved portion of the data was interpreted to represent an intermediate transition into drainage from native material. The subsequent middle-time semi-log linear slope in the recovery data was used to estimate aquifer hydraulic conductivity.

Average of MW11 and MW16	61.10	2.16E-02
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Table 6
Remedial Component Screening Matrix
Former Whidbey Marine Auto Supply
1695 East Main Street
Freeland, Washington

Component Group	Component Options	Retained for Inclusion in Cleanup Action Alternatives?	Rationale for Inclusion or Exclusion
Passive Remediation			
	No Further Action	No	Excluded because it is not protective of human health or the environment.
	Monitored Natural Attenuation	Yes	Retained as a remedial alternative.
	Impermeable Membrane	No	Excluded because it is not protective of human health or the environment.
	Containment Cap	Yes	Retained as a component of monitored natural attenuation.
	Environmental Covenant	Yes	Retained as a component of cleanup alternatives. Excluded for use as the sole administrative or engineering control.
	Permeable Reactive Barrier	No	Excluded because it is not cost effective at the depths of contaminated soil and groundwater on the Site.
In Situ Physical Treatment			
	SVE	Yes	Retained as components of a cleanup action to treat impacted soil and groundwater.
	Air Sparging	Yes	
	Biosparging	No	Excluded because air sparge is the preferred technology.
	Surfactant Washing	No	Excluded because these technologies have the potential to mobilize contaminants and accelerate their migration from the saturated zone towards the downgradient drinking water supply well.
	Cosolvent Washing	No	
	Pump and Treat	Yes	Retained as a means of hydraulic containment of impacted groundwater.
	DPE	No	Excluded because it is not cost competitive when compared to AS/SVE.
In Situ Thermal			
	Resistive Thermal with SVE	No	Excluded because these components are not cost-competitive with other technologies at this scale.
	Conductive Thermal with SVE	No	
	Radio Frequency/Electromagnetic Thermal with SVE	No	
	Steam Injection with SVE and Groundwater Extraction	No	
	Hot Air Injection with SVE	No	
	Hot Water Injection with SVE and Groundwater Extraction	No	
Source Removal			
	Excavation Dewatering	No	Excluded because excavation is not a component of the chosen remedial options.
	Excavation on-Property without Shoring	No	Excluded because source removal is not feasible given the depths of impacted soil.
	Excavation on-Property with Shoring	No	Excluded because source removal is not feasible given the depths of impacted soil.
	Secant Pile Wall - Impervious Wall	No	
	Sheet Pile Wall - Impervious Wall	No	
	Soil Nail Wall - Non-Impervious Wall	No	
	Soldier Pile Wall - Non-Impervious Wall	No	
	Excavation off-Property with Shoring	No	Excluded because source removal is not feasible given the depths of impacted soil.
	Secant Pile Wall - Impervious Wall	No	
	Sheet Pile Wall - Impervious Wall	No	
	Soil Nail Wall - Non-Impervious Wall	No	
	Soldier Pile Wall - Non-Impervious Wall	No	
Ex Situ Source Treatment			
	Surfactant Washing	No	Excluded because these components are not cost-competitive with other technologies at this scale and would result in another waste stream requiring disposal.
	Cosolvent Washing	No	
	Chemical Oxidation	No	Excluded because these components are not cost-competitive with other technologies at this scale.
	Thermal Desorption	No	
	Landfill Disposal	No	Excluded because source removal is not feasible given the depths of impacted soil.



Table 6
Remedial Component Screening Matrix
Former Whidbey Marine Auto Supply
1695 East Main Street
Freeland, Washington

Component Group	Component Options	Retained for Inclusion in Cleanup Action Alternatives?	Rationale for Inclusion or Exclusion
In Situ Chemical Oxidation			
	Activated Sodium Persulfate	No	Excluded because this technology does not address impacts in soil.
	Hydrogen Peroxide	No	
	Fenton's Reagent	No	
	RegenOx (Catalyzed Sodium Percarbonate)	No	
	Permanganate	No	
Containment/Immobilization			
	Bituminization	No	Excluded because these technologies reduce the mobility of hazardous substances but not their toxicity or volume. The technologies are typically implemented ex situ.
	Emulsified Asphalt	No	
	Modified Sulfur Cement	No	
	Polyethylene Extrusion	No	Excluded because this technology is not well developed.
	Pozzolan/Portland Cement	No	Excluded because these technologies reduce the mobility of hazardous substances but not their toxicity or volume.
	Vitrification/Molten Glass	No	Excluded because it is not cost-competitive with our technologies in this group and is difficult to implement. This technology also presents an increased short-term risk of injury during installation and operation.
	Slurry Wall Containment	No	Excluded because these technologies reduce the mobility of hazardous substances but not their toxicity or volume.
	Sheet Pile Wall Containment	No	Excluded as the preferred shoring option.
	Pump and Treat for Hydraulic Containment	No	Retained as a means of hydraulic containment of impacted groundwater.
Phytoremediation			
	Hydraulic Control	No	Excluded because implementation of these technologies are not compatible with the future land use at the Property; nor do these components result in a reasonable restoration time frame.
	Phyto-Degradation	No	
	Phyto-Volatilization	No	
	Phyto-Accumulation	No	
	Phyto-Stabilization	No	
	Enhanced Rhizosphere Biodegradation	No	
In Situ Bioremediation			
	Aerobic Bioremediation	Yes	Retained as a component of a cleanup action to treat impacted soil and groundwater.
	Anaerobic Bioremediation	No	Excluded due to chemical properties of the COCs.

NOTES:

AS = air sparge

COC = chemical of concern

DPE = dual-phase extraction

ROW = right-of-way

SVE = soil vapor extraction



Table 7
Feasibility Level Cost Estimate
Cleanup Action Alternative 1
Air Sparge and Soil Vapor Extraction System
Former Whidbey Marine Auto Supply
1695 East Main Street
Freeland, Washington

CAPITAL COST ITEM	QTY	UNIT	UNIT PRICE	COST	TOTALS
Direct Capital					
Permitting (NWCAA, etc.)	1	lump sum	\$ 5,000	\$ 5,000	
Street Use Permit and Traffic Control Plan	1	lump sum	\$ 4,000	\$ 4,000	
Power Drop and Electrical Connection	1	lump sum	\$ 10,000	\$ 10,000	
Subtotal Permitting					\$ 19,000
Remedial System Installation					
Pilot Test (including install of 1 deep, 1 shallow AS Test Well)	1	lump sum	\$ 35,000	\$ 35,000	
Drilling Shallow AS Wells	7	each	\$ 6,000	\$ 42,000	
Drilling Shallow SVE Wells	5	each	\$ 2,500	\$ 12,500	
Drilling Deep AS/SVE Wells	10	each	\$ 14,000	\$ 140,000	
Utility Clearing - Vactor Truck	1	lump sum	\$ 6,000	\$ 6,000	
Site Security and Controls	1	lump sum	\$ 3,000	\$ 3,000	
Trenching and Installed HSVE and AS Lines	1	lump sum	\$ 90,000	\$ 90,000	
Transportation and Disposal of PCS (Class 2)	200	ton	\$ 65	\$ 13,000	
Import of Clean Backfill place and compact	200	ton	\$ 30	\$ 6,000	
Remediation Equipment	1	lump sum	\$ 80,000	\$ 80,000	
Subtotal Remedial Excavation					\$ 427,500
Subtotal Direct Capital					\$ 446,500
Indirect Capital					
Design, Permitting, and Work Plans	8.0%			\$ 35,720	
Mobilization/Demobilization	4.0%			\$ 17,860	
Professional Labor for Cleanup Action Implementation (6 weeks oversight)	15.0%			\$ 66,975	
Field Equipment and Laboratory Testing	3.5%			\$ 15,628	
Regulatory Reporting	5.0%			\$ 22,325	
Subtotal Indirect Capital					\$ 158,500
TOTAL CAPITAL COST					\$ 605,000
FUTURE O&M AND OTHER DIRECT COST ITEMS ⁽¹⁾		ANNUAL COST ⁽²⁾		PRESENT WORTH OF ANNUAL AND FUTURE CAPITAL COST	
n = 5 years					
Monthly O&M and Annual Reporting (3 years)	\$ 55,000	Discount Rate = 0.5%	\$ 163,364		
Quarterly Groundwater Monitoring and Semiannual Reporting (1 year)	\$ 45,000	Discount Rate = 0.5%	\$ 44,776		
Semiannual Groundwater Monitoring and Semiannual Reporting (years 2-3)	\$ 30,000	Discount Rate = 0.3%	\$ 59,374		
Annual Groundwater Monitoring and Semiannual Reporting (years 4-5)	\$ 15,000	Discount Rate = 0.3%	\$ 29,598		
Quarterly Groundwater Monitoring and Semiannual Reporting (year 6)	\$ 45,000	Discount Rate = 0.5%	\$ 43,673		
Compliance Well and Soil Boring Installation (year 6)	\$ 50,000	Discount Rate = 0.5%	\$ 48,526		
- Includes Deep and Shallow Well Installation, and Deep and Shallow Soil Borings, and disposal of Class 2 PCS					
TOTAL PRESENT WORTH MONITORING COST					\$ 389,300
TOTAL PRESENT WORTH COST OF CLEANUP ACTION ALTERNATIVE 2					\$ 994,000

NOTES:

Unit rates for excavation and disposal include trucking, and disposal fees.

This feasibility level cost should not be considered a guaranteed cost.

This estimate assumes all drilling cuttings pass requirements for disposal as Class 2 soil.

This estimate assumes all trenching spoils pass requirements for disposal as Class 2 soil.

Unit rates for excavation and disposal assume that the Property owner pays these costs directly. If not, a mark up will apply. Please note that disposal rates are subject to annual inflation.

Cost rounded up to nearest \$1,000.

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

⁽²⁾ Annual cost is Year 2017 cost.

% = percentage

AS = air sparge

n = number of years of compliance monitoring and O&M

NWCAA = Northwest Clean Air Agency

O&M = operation and maintenance

PCS = petroleum-contaminated soil

QTY = quantity

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

HSVE = horizontal soil vapor extraction



Table 8
Feasibility Level Cost Estimate
Cleanup Action Alternative 2
Groundwater Extraction and Treatment System
Former Whidbey Marine Auto Supply
1695 East Main Street
Freeland, Washington

CAPITAL COST ITEM	QTY	UNIT	UNIT PRICE	COST	TOTALS
Direct Capital					
Permitting (Ecology, etc.)	1	lump sum	\$ 5,000	\$ 5,000	
Street Use Permit and Traffic Control Plan	1	lump sum	\$ 4,000	\$ 4,000	
Power Drop and Electrical Connection	1	lump sum	\$ 10,000	\$ 10,000	
<i>Subtotal Permitting</i>					\$ 19,000
Dewatering System Installation					
Pilot Test (1 Deep, 1 Shallow Dewatering Test Well)	1	lump sum	\$ 35,000	\$ 35,000	
Drilling Deep Dewatering Wells	13	each	\$ 15,000	\$ 195,000	
Drilling Shallow Dewatering Wells	3	each	\$ 5,500	\$ 16,500	
Utility Clearing - Vactor Truck	1	lump sum	\$ 6,000	\$ 6,000	
Site Security and Controls	1	lump sum	\$ 3,000	\$ 3,000	
Transportation and Disposal of PCS (Class 2)	240	ton	\$ 65	\$ 15,600	
Import of Clean Backfill	180	ton	\$ 30	\$ 5,400	
Remediation Equipment	1	lump sum	\$ 100,000	\$ 100,000	
Trenching and Remediation Equipment Installation	1	lump sum	\$ 100,000	\$ 100,000	
<i>Subtotal Remedial Excavation</i>					\$ 476,500
<i>Subtotal Direct Capital</i>					\$ 495,500
Indirect Capital					
Design, Permitting, and Work Plans	10.0%			\$ 49,550	
Mobilization/Demobilization	6.0%			\$ 29,730	
Professional Labor for Cleanup Action Implementation (3 weeks oversight)	12.0%			\$ 59,460	
Field Equipment and Laboratory Testing	3.5%			\$ 17,343	
Regulatory Reporting	8.0%			\$ 39,640	
<i>Subtotal Indirect Capital</i>					\$ 195,700
TOTAL CAPITAL COST					\$ 691,000
FUTURE O&M AND OTHER DIRECT COST ITEMS⁽¹⁾		ANNUAL COST⁽²⁾	PRESENT WORTH OF ANNUAL AND FUTURE CAPITAL COST		
			n = 20 years		
Monthly O&M and annual reporting (19 years)		\$ 100,000	Discount Rate = 0.5%	\$ 1,808,236	
Quarterly Groundwater Monitoring and Semiannual Reporting (years 1-2)		\$ 45,000	Discount Rate = 0.5%	\$ 89,329	
Semiannual Groundwater Monitoring and Semiannual Reporting (year 3-5)		\$ 30,000	Discount Rate = 0.3%	\$ 88,928	
Annual Groundwater Monitoring and Reporting (years 6-19)		\$ 15,000	Discount Rate = 0.3%	\$ 202,297	
Quarterly Groundwater Monitoring and Semiannual Reporting (year 20)		\$ 45,000	Discount Rate = 0.5%	\$ 40,728	
Compliance Well and Soil Boring Installation (year 20)		\$ 50,000	Discount Rate = 0.5%	\$ 45,253	
- Includes Deep and Shallow Well Installation, and Deep and Shallow Soil Borings, and disposal of Class II soil cuttings					
TOTAL PRESENT WORTH MONITORING COST					\$ 2,274,800
TOTAL PRESENT WORTH COST OF CLEANUP ACTION ALTERNATIVE 2					\$ 2,966,000

NOTES:

Unit rates for excavation and disposal include trucking, and disposal fees.

This feasibility level cost should not be considered a guaranteed cost.

This estimate assumes all drilling cuttings pass requirements for disposal as Class 3 soil.

This estimate assumes all trenching spoils pass requirements for disposal as Class 2 soil.

Unit rates for excavation and disposal assume that the Property owner pays these costs directly. If not, a mark up will apply. Please note that disposal rates are subject to annual inflation.

Cost rounded up to nearest \$1,000.

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

⁽²⁾ Annual cost is Year 2017 cost.

% = percentage

n = number of years of compliance monitoring and O&M

O&M = operation and maintenance

PCS = petroleum-contaminated soil

QTY = quantity

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



Table 9
Feasibility Level Cost Estimate
Cleanup Action Alternative 3
Monitored Natural Attenuation with an Environmental Covenant
Former Whidbey Marine Auto Supply
1695 East Main Street
Freeland, Washington

CAPITAL COST ITEM	QTY	UNIT	UNIT PRICE	COST	TOTALS
Containment Cap					
Asphalt Seal Coat	1	lump sum	\$ 16,830	\$ 16,830	
<i>Subtotal Remedial Excavation</i>					\$ 16,830
<i>Subtotal Direct Capital</i>					\$ 16,800
Indirect Capital					
Professional Labor for Construction Oversight	1	lump sum	\$ 6,000	\$ 6,000	
Environmental Covenant	1	lump sum	\$ 7,500	\$ 7,500	
Regulatory Reporting	1	lump sum	\$ 30,000	\$ 30,000	
<i>Subtotal Indirect Capital</i>					\$ 43,500
TOTAL CAPITAL COST					\$ 60,000
FUTURE O&M AND OTHER DIRECT COST ITEMS ⁽¹⁾	ANNUAL COST ⁽²⁾		PRESENT WORTH OF ANNUAL AND FUTURE CAPITAL COST		
			n =20 years		
Containment Cap Annual Inspection and Reporting	\$	7,000	Discount Rate = 0.1%	\$	138,541
Quarterly Groundwater Monitoring and Quarterly Reporting (years 1-2)	\$	72,000	Discount Rate = 0.5%	\$	142,927
Annual Groundwater Monitoring and Semiannual Reporting (year 3-5)	\$	18,000	Discount Rate = 0.1%	\$	53,785
Groundwater Monitoring and Reporting every 5 years(years 10,15,20,25)	\$	3,600	Discount Rate = 0.1%	\$	84,904
- Groundwater monitoring costs include added cost of monitoring geochemical parameters					
TOTAL PRESENT WORTH MONITORING COST					\$ 420,200
TOTAL PRESENT WORTH COST OF CLEANUP ACTION ALTERNATIVE 4					\$ 480,000

NOTES:

This feasibility level cost should not be considered a guaranteed cost.

Cost rounded up to nearest \$1,000.

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

% = percentage

n = number of years of compliance monitoring and O&M

QTY = quantity



Table 10
Cleanup Action Alternatives Screening Summary
Former Whidbey Marine Auto Supply
1695 East Main Street
Freeland, Washington

Cleanup Action Alternatives	Remedial Details	Remedial Cost	Washington State Department of Ecology Evaluation Criteria/Relative Ranking (1 = Low 10 = High)						Ranking Score ⁽¹⁾
			Weighting Factors for Evaluation Criteria						
			15%	20%	15%	20%	20%	10%	
			Protectiveness	Permanence	Effectiveness over the Long Term	Management of Short-Term Risks	Technical and Administrative Implementability	Consideration of Public Concerns	
1. Air Sparge and Soil Vapor Extraction Remediation System	Installation of an AS/SVE system, operation of the system until soil and groundwater are complaint with MTCA.	\$994,000	8	7	7	8	8	8	7.7
2. Groundwater Extraction and Treatment System	Installation of dewatering wells in perched groundwater zone and Sea Level Aquifer, treatment and reinfiltration of water stream.	\$2,966,000	8	5	6	7	8	7	6.8
3. Monitored Natural Attenuation with Environmental Covenant	Areas with impacted soil will be capped with an asphalt seal coat. Groundwater conditions will be monitored for environmental quality and movement.	\$480,000	1	1	1	5	4	1	2.4

NOTES:

Monitored natural attenuation of COCs is retained for all cleanup action alternatives.

⁽¹⁾The ranking score for each alternative is the average of the weighted score for five of the six evaluation criteria.

% = percentage

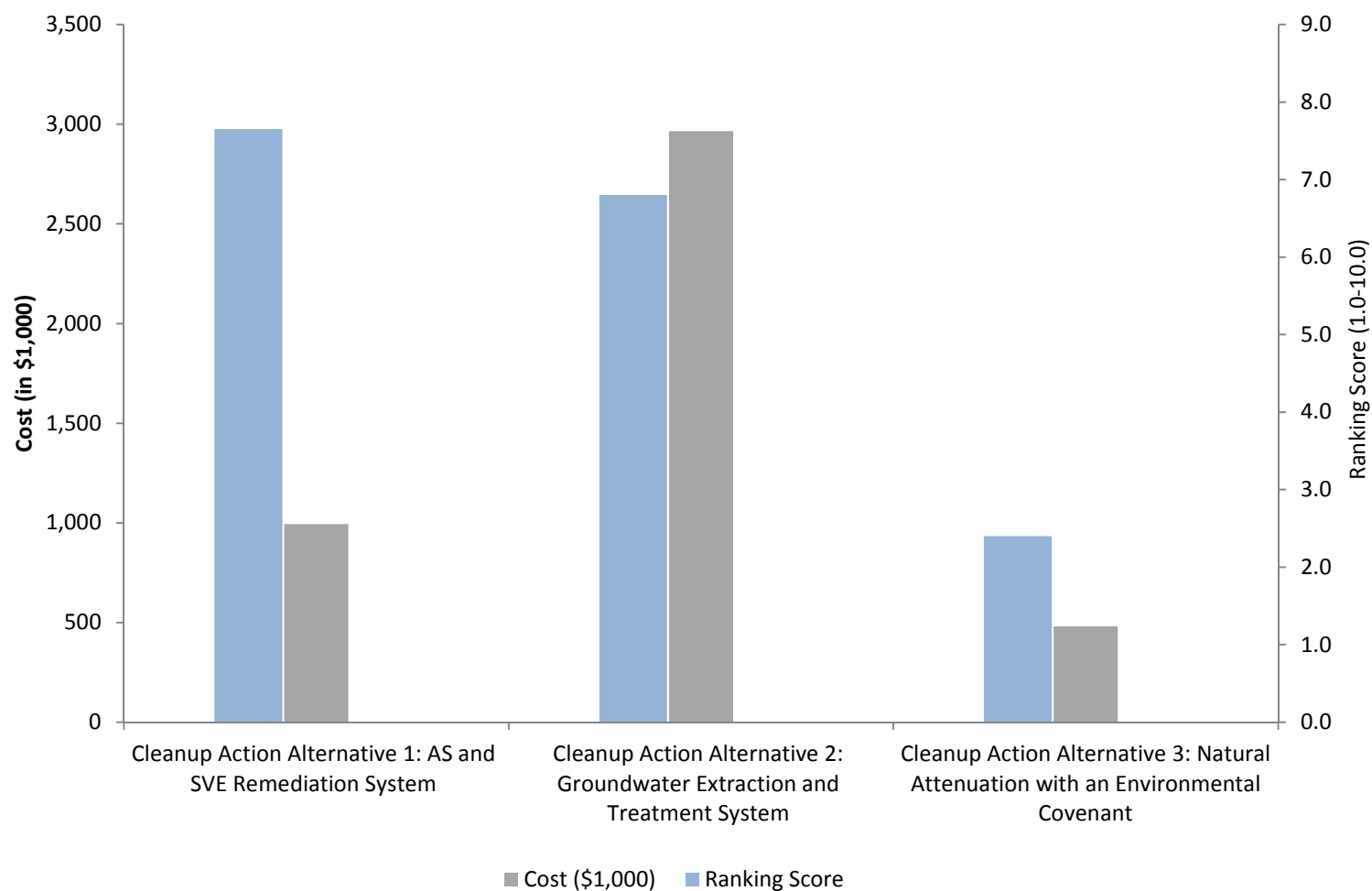
AS/SVE = air sparge/soil vapor extraction

COC = chemical of concern

MTCA = Washington State Model Toxics Control Act

CHART

Chart 1
Cost to Benefit Ratio
Former Whidbey Marine Auto Supply
Freeland, Washington



SITE PHOTOGRAPHS



Photograph 1. View of the property, looking west.



Photograph 2. Sonic drill rig advancing boring B08.



Photograph 3. Sonic drill rig advancing monitoring well MW-17.



Photograph 4. Soil cuttings recovered from 110 feet below ground surface from MW-17.



Photograph 5. Hollow-stem auger drill rig at MW-18 along South Harbor Avenue right-of-way.



Photograph 6. Field setup during slug testing at monitoring well MW-11.

APPENDIX A

HISTORICAL INFORMATION



Whidbey Marine and Auto

1695 Main Street

Freeland, WA 98249

Inquiry Number: 4988633.9

July 11, 2017

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

07/11/17

Site Name:

Whidbey Marine and Auto
1695 Main Street
Freeland, WA 98249
EDR Inquiry # 4988633.9

Client Name:

Sound Earth Strategies
2811 Fairview Avenue East
Seattle, WA 98102
Contact: Kevin Bartelt



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<i>Year</i>	<i>Scale</i>	<i>Details</i>	<i>Source</i>
2011	1"=500'	Flight Year: 2011	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1990	1"=500'	Acquisition Date: July 10, 1990	USGS/DOQQ
1981	1"=500'	Flight Date: July 26, 1981	USDA
1971	1"=750'	Flight Date: September 19, 1971	USGS
1968	1"=500'	Flight Date: September 02, 1968	USGS
1954	1"=500'	Flight Date: July 01, 1954	USGS
1951	1"=500'	Flight Date: September 01, 1951	USGS
1941	1"=500'	Flight Date: July 09, 1941	USDA

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INQUIRY #: 4988633.9

YEAR: 2011

— = 500'





INQUIRY #: 4988633.9

YEAR: 2009

— = 500'





INQUIRY #: 4988633.9

YEAR: 2006

— = 500'





INQUIRY #: 4988633.9

YEAR: 2005

— = 500'





INQUIRY #: 4988633.9

YEAR: 1990

— = 500'



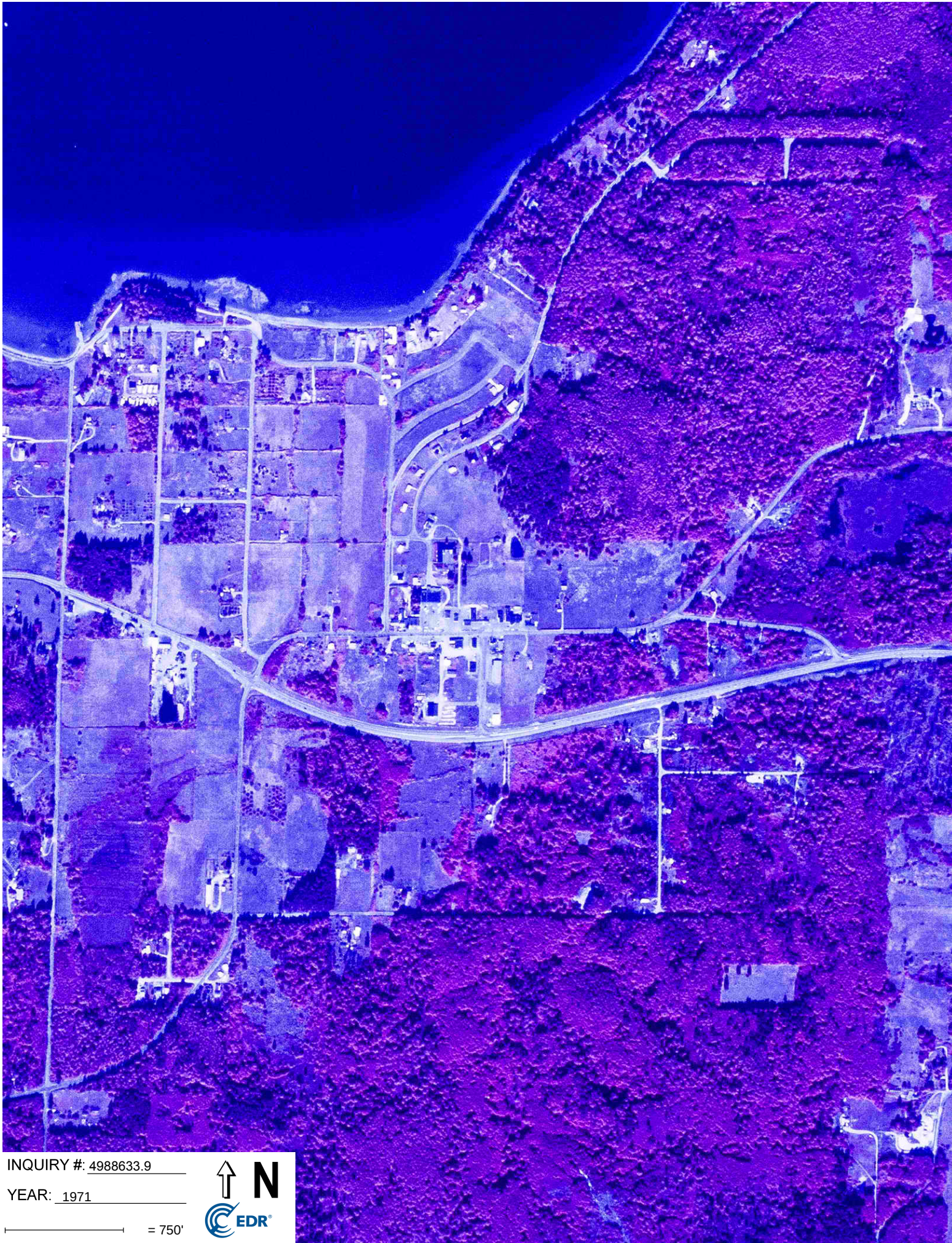


INQUIRY #: 4988633.9

YEAR: 1981

— = 500'





INQUIRY #: 4988633.9

YEAR: 1971

1" = 750'





INQUIRY #: 4988633.9

YEAR: 1968

— = 500'





INQUIRY #: 4988633.9

YEAR: 1954

— = 500'





INQUIRY #: 4988633.9

YEAR: 1951

— = 500'





INQUIRY #: 4988633.9

YEAR: 1941

— = 500'



Whidbey Marine and Auto

1695 Main Street
Freeland, WA 98249

Inquiry Number: 4988633.5
July 11, 2017

The EDR-City Directory Image Report

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2013	☒	☒	Cole Information Services
2008	☒	☒	Cole Information Services
2003	☒	☒	Cole Information Services
1999	☒	☒	Cole Information Services
1995	☒	☒	Cole Information Services
1992	☒	☐	Cole Information Services

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FINDINGS

TARGET PROPERTY STREET

1695 Main Street
Freeland, WA 98249

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

E MAIN

2013	pg A1	Cole Information Services
2008	pg A4	Cole Information Services
1999	pg A9	Cole Information Services
1995	pg A14	Cole Information Services
1992	pg A18	Cole Information Services

E MAIN ST

1999	pg A10	Cole Information Services
1995	pg A15	Cole Information Services
1992	pg A19	Cole Information Services

MAIN ST

2013	pg A3	Cole Information Services
2008	pg A6	Cole Information Services
2003	pg A8	Cole Information Services
1999	pg A13	Cole Information Services
1995	pg A17	Cole Information Services
1992	pg A20	Cole Information Services

FINDINGS

CROSS STREETS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

HARBOR AVE

2013	pg. A2	Cole Information Services	
2008	pg. A5	Cole Information Services	
2003	pg. A7	Cole Information Services	
1999	pg. A12	Cole Information Services	
1995	pg. A16	Cole Information Services	
1992	-	Cole Information Services	Target and Adjoining not listed in Source

City Directory Images

E MAIN 2013

1638	BAY BOOK
1665	HAMERSLEY WRIGHT

HARBOR AVE 2013

5486	KEITH BECKER WHIDBEY COMMUNITY PHYSICIANS
5508	FAMILY CARE PHYSICAL THERAPY HARBOR PHYSICAL THERAPY & WELLNESS C KENNETH CARLIN
5523	DAVID PARENT
5529	ALL ABOUT HEALTH ISLAND HOME NURSING
5536	PAT HALLIGAN
5560	US BANK
5570	LAND TITLE OF ISLAND COUNTY MICHELE GALLERY
5575	HARBOR PIZZA LANES FREELAND
5588	WELLS FARGO
5589	RANDY ENBERG RANDY ENBERG INSURANCE AGENCY
5595	PORTERWHIDBEY INSURANCE INC SENIORS INSURANCE SERVICES WINDEMERE FARRAR WINDERMERE REAL ESTATE

MAIN ST 2013

424	OCCUPANT UNKNOWN
1561	CHASE BANK
	JPMORGAN CHASE & CO
1592	FREELAND BARBER & SALON
	GLENN JOLLEY
	SKAGIT FARMERS SUPPLY
1594	THE BEACH CABIN
1609	ACE FREELAND HOME CENTER
	FLOWERS BY THE BAY
	LINDS COUPEVILLE PHARMACY
	LINDS FREELAND PHARMACY
	LINDS JEWELRY
	PAYLESS FOODS
1659	FREELAND VIDEO ETC
1664	BATHSHEBA SPA GIFTS
1665	TERRY SMITH
1690	CARBONE JAMES LAW OFFICE
	WHIDBEY VISION CARE INC
1694	ANGELIC SKIN CARE
1705	CHIROPRACTIC ZONE
1794	BILLYS BAKERY
	PUGET SOUND ENERGY
1796	SHEILA DELONG STATE FARM INSURANCE
	THATCHER & MORRISON INC
1800	FRONTIER BUILDING SUPPLY
1812	CITY OF LAKE STEVENS
	DISH NETWORK



E MAIN 2008

1638 BAY BOOK
1675 TERIYAKI KATTEES

HARBOR AVE 2008

5486	BRIAN WAITE LIFELINE SOUTH WHIDBEY HEALTHCARE SOUTH WHIDBEY OTOLARYNGOLOGY WHIBBY GENERAL HOSPITAL ZRINKO G PETRAK MD
5492	CHARLES EDWARDS EDWARDS & ASSOCIATES FREELAND WATER DISTRICT PETER MOOTE LAW FIRM PORT OF SOUTH WHIDBEY RAYNER & ASSOCIATES INC
5495	BAYVIEW BEACH WATER DISTRICT
5649	H STONEBRIDGE
5661	WATER WASTE WATER MAINTENANCE MANAGE

MAIN ST 2008

1592	L JOHN
1609	ACE FREELAND HOME CENTER
	ACE HARDWARE
	FLOWERS BY THE BAY
	ISLAND FABRICS ETC
	PAYLESS FOODS
	SARATOGA ENTERPRISES INC
	VIDEO PLACE
	WHIDBEYS COFFEE CAFE
1619	UNITED STATES POSTAL SERVICE
1794	BILLYS BAKERY
1796	D C DESIGNS
	DAVID O CONSULTING GROUP
	DENNIS BOHLING FINE WOODWORKING
	STATE FARM INSURANCE
	THATCHER & MORRISTOWN INC
1800	FRONTIER INDUSTRIES

HARBOR AVE 2003

5486	BRIAN G WAITE MD LIFELINE SOUTH WHIDBEY SPECIALTY CLINIC WAITE BRIAN G MD WHIDBEY COMMUNITY PHYSICIANS
5492	EDWARDS & MOORE PLLC CPAS FREELAND WATER DIST MOOTE PETER LAW FIRM PORT OF SOUTH WHIDBEY RAYNER & ASSOCS INC WHIDBEY ISLAND MLS INC
5495	BAYVIEW BEACH WATER DIST
5570	MICHELE GALLERY
5595	LARRY MIKKELSON
5649	H STONEBRIDGE

MAIN ST 2003

1592	PETER MOOTE
1618	JEAN BEERS
1635	DEBRA CALKINS
1638	JANE SEYMOUR
1796	ALUMINUM RAILING SOURCE
	DEBORAH STARK
	STATE FARM INSURANCE
	THATCHER & MORRISON INC
1800	FRONTIER INDUSTRIES INC

E MAIN 1999

1561	WILLIAM FINANCIAL SERVICES
1592	JUDITH GORMAN
1606	HARBOUR INN MOTEL
1609	FREELAND TRAVEL SERVICE
	PAYLESS FOODS
	PAYLESS FOODS VIDEO
	VIDEO PLACE
1614	ABC CLEANERS
	WASHINGTON STATE OF LIQUOR CONTROL BOARD
1635	TOWN & COUNTRY CONSIGNMENTS
1638	BAY BOOK
1665	HAMERSLEY SWRIGHT
	LEE WRIGHT
	WRIGHT LEE ATTORNEY
1675	RADIO SHACK DEALER COMPUTRONICS
1685	HANSEN TERRY M DDS OFFICE
	TERRY MHANSEN
1690	SCOTTYS SERVICE GARAGE
1705	GLENN JOLLEY

E MAIN ST 1999

1561 WASHINGTON MUTUAL BANK LOCATIONS LOAN SERVICING
 1592 BELANGER SHEILA COUNSELOR
 BENSON BOYD H CPA
 BEST MARIA J DC
 BOYD H BENSON
 FAMILY CHIROPRACTIC CENTER OF SOUTH WHIDBEY ISLAND
 JANNA ROME
 MARIA J BEST
 NORTHSOUND INSURANCE GROUP
 ROBILLARD JERRY & NORTHSOUND INSURANCE GROUP
 ROEHL T J & ASSOCIATES
 WHITE JADE ACUPUNCTURE
 1609 ACE HARDWARE
 FLOWERS BY THE BAY INCORPORATED
 FREELAND PHARMACY
 HALLMARK LINDS FREELAND PHARMACY
 ISLAND FABRICS
 ISLAND FABRICS ETC
 PAYLESS FOODS PHARMACY
 PAYLESS FOODS PHARMACY PRESCRIPTION DEPARTMENT
 1614 BARRETT ESCROW INCORPORATED
 POT BELLY DELI HOUSE OF FINE MEATS
 1618 BROWN GARRY INSURANCE
 CARLSON FUNK & ASSOCIATES
 DATA REALTY
 RICREE ENGINEERING & CONSULTING
 SAFE HARBOR AGENCY
 1635 CHRISTOPHER BALDWIN DESIGN
 DEBS HARE TODAY
 MAXWELTON SOFTWARE SOLUTIONS
 SCATTERED THREADS
 1638 APPRAISAL ASSOCIATES OF WHIDBEY ISLAND
 GREGORY MBANKS
 LEE TERRY J MD
 SEYMOUR JANE ATTORNEY
 TERRY J LEE
 WHIDBEY ISLAND KARATE
 1640 WHIDBEY TRADER INCORPORATED
 1642 FREELAND CAFE
 1651 IRON HORSE ANTIQUES
 MAIN STREET COUNTRY ANTIQUES
 1657 ISLAND AUTO SUPPLY
 NAPA AUTO PARTS
 1659 VIDEO SOUTH TOO
 1664 FREELAND FLOWER & PARTY SHOP
 1679 WEBBS DEPARTMENT STORE
 1685 ISLAND TAX & FINANCIAL SERVICES
 1689 FINNISHING TOUCH THE
 FREELAND CHIROPRACTIC HEALTH CENTER
 THOMPSON JEFF DR

E MAIN ST

1999

(Cont'd)

1692	CARQUEST AUTO PARTS
	MCQUEEN'S WHIDBEY MARINE & AUTO SUPPLY
1694	FAR MOR COUNTRY SCHOOL THE
1705	CLINIC ON MAIN STREET
	ISLAND RADIOLOGY & NUC MED PS LIMITED
	LLOYD RITA MD
	PUGET SOUND BUSINESS SYSTEMS INCORPORATED
	RITA LLOYD
1715	INTERSTATE LABEL COMPANY
6115	BLOCK H & R

HARBOR AVE 1999

5492 FREELAND WATER DISTRICT
MOOTE PETER & ASSOCIATES
PORT OF SOUTH WHIDBEY ISLAND
TIM WAKENSHAW
WAKENSHAW TIM ATTORNEY
WHIDBEY ISLAND MLS INCORPORATED
5523 PARENT DAVID DVM
USELESS BAY ANIMAL CLINIC
5536 A FAMILY DENTAL CENTER
HALLIGAN PAT DDS
PAT HALLIGAN
5570 SOUTH WHIDBEY SPORTS &CUSTOMIZED APPAREL

MAIN ST 1999

326	BUSH POINT RESORT
1592	ELISE POTTER
1594	SFOGLIA FINE PASTAS
1638	PAUL'S & COMPANY
1651	BLOCK H & R FREELAND OFFICE
1664	THEE PET STORE
1685	DICK VESQUE & COUNSELING
1686	ISLAND CHRISTIAN RESOURCES
1694	BUILDING SOURCE INCORPORATED
	JOSELYN GROUP
1705	L & L WOODCRAFT INCORPORATED
	PEAK MANUFACTURING
6115	WHIDBEY ANIMALS IMPROVEMENT FOUNDATION

E MAIN 1995

1592	PETER MOOTE & ASSOC
1638	RANDELL W WILLIAMS
	RANDELL WILLIAMS ARCHITECT
	SPORTABILIA
	WILLIAMS, RANDALL W
1685	RED CROSS
1689	THOMPSON, JEFFREY
1694	PEACOCK CLEANERS & LAUNDROMAT
6115	MINDYS

E MAIN ST

1995

238	TELEVIEW CORP
257	VANIK, THERESA L
1592	BENSON, BOYD H
	BEST, MARIA J
	FARMERS INSURANCE GROUP
	PUGET POWER
	ROBINSON, G
1614	FREELAND LIBRARY
1638	IBS INTL INC
	SOFTWARE & TIMESHARE ETC
1640	S O S SECRETARIAL SVC
1642	FREELAND GROOMING & PET
1657	ISLAND AUTO SUPPLY
1659	SEARS AUTHORIZED CATALOG
1689	FREELAND CHIROPRACTIC CTR
	JEFF M THOMPSON DC
1690	SCOTTYS SERVICE GARAGE
1692	MC QUEEN WHIDBEY MARINE & AUTO
1715	INTERSTATE LABEL CO

HARBOR AVE 1995

0 GRETCHENS HAIRWORKS
5523 PARENT, DAVID
5570 FREELAND BARBER SHARE
SOUTH WHIDBEY SPORT & T SHIRTS

MAIN ST 1995

1592	PORT OF SOUTH WHIDBEY ISLAND
	POTTER, ELISE M
1600	PAULS & CO
1614	PACIFIC NORTHWEST ESCROW
1619	US POST OFFICE
1638	ROBERT D WAGNER MD
1650	FREELAND AUTO SVC
1675	ROBERT JANGAARD
1679	JAYNE, C
6115	BRASS RING



-

E MAIN 1992

1665 WRIGHT, H S

E MAIN ST

1992

1685 RHODES, RUTH

MAIN ST**1992**

141	FARMER, ROBERT W
237	AUSTIN, WALLACE O
238	FLETCHER, RALPH
424	RAYMOND, A G

Whidbey Marine and Auto

1695 Main Street

Freeland, WA 98249

Inquiry Number: 4988633.2s

July 14, 2017

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1695 MAIN STREET
FREELAND, WA 98249

COORDINATES

Latitude (North):	48.0099080 - 48° 0' 35.66"
Longitude (West):	122.5235560 - 122° 31' 24.80"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	535534.9
UTM Y (Meters):	5317292.5
Elevation:	119 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	6005579 FREELAND, WA
Version Date:	2014
Northeast Map:	6005617 LANGLEY, WA
Version Date:	2014
Southeast Map:	6005203 MAXWELTON, WA
Version Date:	2014
South Map:	6005193 HANSVILLE, WA
Version Date:	2014

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20150819
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1695 MAIN STREET
FREELAND, WA 98249

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	WHIDBEY MARINE & AUT	1695 E MAIN ST	UST		TP
A2	WHIDBEY MARINE & AUT	1695 E MAIN ST	RGA LUST		TP
A3	WHIDBEY MARINE & AUT	1692 E MAIN ST	RGA LUST		TP
A4	WHIDBEY MARINE AND A	1692 E MAIN ST	UIC		TP
A5	WHIDBEY MARINE & AUT	1692 E MAIN ST	RGA HWS		TP
A6	WHIDBEY MARINE & AUT	1692 MAIN ST	CSCSL, LUST, VCP, ALLSITES, Financial Assurance		TP
A7	WHIDBEY MARINE & AUT	1692 MAIN ST	FINDS		TP
A8	WHIDBEY MARINA & AUT	<	EDR Hist Auto		TP
A9	WHIDBEY MARINA & AUT	HARBOR CENTER	EDR Hist Auto		TP
A10	WHIDBEY MARINA & AUT	MAIN ST HARBOR CENTE	EDR Hist Auto		TP
A11	WHIDBEY MARINA & AUT	MIAN ST	EDR Hist Auto		TP
A12	WHIDBEY MARINE & AUT	1692 E MAIN ST	RGA LUST		TP
A13	WHIDBEY MARINE & AUT	1692 MAIN ST	EDR Hist Auto		TP
A14	WHIDBEY MARINE & AUT	1692 E MAIN ST	EDR Hist Auto		TP
A15	PEACOCK DRYCLEANERS	1694 E MAIN	ALLSITES, RCRA NonGen / NLR, FINDS, ECHO, Inactive...	Lower	41, 0.008, South
A16	SCOTTYS SERVICE	1690 E MAIN ST	EDR Hist Auto	Lower	42, 0.008, SSW
A17	SCOTTYS SERVICE	1690 E MAIN ST	UST	Lower	42, 0.008, SSW
A18	SCOTTYS SERVICE	1690 E MAIN ST	ALLSITES, FINDS	Lower	42, 0.008, SSW
19	WHIDBEY ISLAND GAME	WHIDBEY ISLAND	UST, ALLSITES	Lower	447, 0.085, WNW
B20	COREY OIL CARDLOCK U	1650 MAIN ST	ALLSITES, SPILLS	Lower	536, 0.102, WSW
B21	COREY OIL CARDLOCK &	1650 MAIN ST	UST	Lower	536, 0.102, WSW
B22	FREELAND SERVICE STA	1650 MAIN ST	EDR Hist Auto	Lower	536, 0.102, WSW
23	FREELAND WATER DISTR	5492 HARBOR AVE	ALLSITES, FINDS	Higher	612, 0.116, NNW
C24	RITE AID 6722	1609 E MAIN ST	SWRCY, ALLSITES, MANIFEST	Lower	852, 0.161, West
C25		1609 E MAIN ST	RCRA-CESQG	Lower	852, 0.161, West
26	PUGET SOUND ENERGY	1794 MAIN STREET	SWRCY	Higher	970, 0.184, ESE
27	AMERIGAS VILLAGE AT	1967 ALLIANCE AVE	ALLSITES	Lower	1129, 0.214, ENE
28	SKAGIT FARMERS SUPPL	1584 E MAIN ST	ALLSITES, FINDS	Lower	1491, 0.282, West
D29	NORTHERN ENERGY FREE	1518 SR 525	ALLSITES, FINDS	Lower	1791, 0.339, WSW
D30	RAY & DELORES LAFAYE	326 S MAIN ST	UST, ALLSITES	Lower	1814, 0.344, WSW
D31	FREELAND SHELL STATI	5618 FISH RD	ALLSITES, Financial Assurance, MANIFEST	Lower	1985, 0.376, WSW
32	SUNNY VIEW VILLAGE	1667 SCENIC AVE	ALLSITES	Higher	2027, 0.384, South
33	VERIZON WIRELESS FRE	1730 SCENIC AVE	ALLSITES, FINDS	Higher	2098, 0.397, SSE
E34	SHORT STOP FREELAND	1504 E HWY 525	CSCSL, LUST, UST, ALLSITES, FINDS	Lower	2531, 0.479, West
E35	TEXACO FREELAND	18205 SR 525	ALLSITES, FINDS, Financial Assurance	Lower	2531, 0.479, West

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
WHIDBEY MARINE & AUT 1695 E MAIN ST FREELAND, WA 98249	UST Site Id: 8917 Facility ID: 17222251	N/A
WHIDBEY MARINE & AUT 1695 E MAIN ST FREELAND, WA	RGA LUST Facility ID: 8917	N/A
WHIDBEY MARINE & AUT 1692 E MAIN ST FREELAND, WA	RGA LUST Facility ID: 17222251	N/A
WHIDBEY MARINE AND A 1692 E MAIN ST FREELAND, WA 98249	UIC Well Status: Active	N/A
WHIDBEY MARINE & AUT 1692 E MAIN ST FREELAND, WA	RGA HWS Facility ID: 17222251	N/A
WHIDBEY MARINE & AUT 1692 MAIN ST FREELAND, WA 98249	CSCSL Site Status: Cleanup Started Facility ID: 17222251 Clean Up Siteid: 5610 LUST Database: LUST, Date of Government Version: 05/16/2017 Facility Status: Awaiting Cleanup Cleanup Site ID: 5610 Facility ID: 17222251 VCP Facility ID: 17222251 Cleanup Siteid: 5610 ALLSITES Facility Id: 17222251 Financial Assurance Database: Financial Assurance 1, Date of Government Version: 02/24/2012 DOE Site ID: 8917	N/A
WHIDBEY MARINE & AUT 1692 MAIN ST FREELAND, WA 98249	FINDS	N/A

EXECUTIVE SUMMARY

Registry ID:: 110015517038

WHIDBEY MARINA & AUT < FREELAND, WA 98249	EDR Hist Auto	N/A
WHIDBEY MARINA & AUT HARBOR CENTER FREELAND, WA 98249	EDR Hist Auto	N/A
WHIDBEY MARINA & AUT MAIN ST HARBOR CENTE FREELAND, WA 98249	EDR Hist Auto	N/A
WHIDBEY MARINA & AUT MIAN ST FREELAND, WA 98249	EDR Hist Auto	N/A
WHIDBEY MARINE & AUT 1692 E MAIN ST FREELAND, WA	RGA LUST Facility ID: 8917	N/A
WHIDBEY MARINE & AUT 1692 MAIN ST FREELAND, WA 98249	EDR Hist Auto	N/A
WHIDBEY MARINE & AUT 1692 E MAIN ST FREELAND, WA 98249	EDR Hist Auto	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List

EXECUTIVE SUMMARY

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

HSL..... Hazardous Sites List

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Facility Database

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
AST..... Aboveground Storage Tank Locations

EXECUTIVE SUMMARY

INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

INST CONTROL..... Institutional Control Site List

State and tribal voluntary cleanup sites

ICR..... Independent Cleanup Reports

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

SWTIRE..... Solid Waste Tire Facilities

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

ODI..... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

CDL..... Clandestine Drug Lab Contaminated Site List

HIST CDL..... List of Sites Contaminated by Clandestine Drug Labs

CSCSL NFA..... Confirmed & Contaminated Sites - No Further Action

US CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System

SPILLS..... Reported Spills

SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS..... Formerly Used Defense Sites

DOD..... Department of Defense Sites

SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing

US FIN ASSUR..... Financial Assurance Information

EPA WATCH LIST..... EPA WATCH LIST

EXECUTIVE SUMMARY

2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
ECHO.....	Enforcement & Compliance History Information
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
UXO.....	Unexploded Ordnance Sites
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
AIRS.....	Washington Emissions Data System
COAL ASH.....	Coal Ash Disposal Site Listing
DRYCLEANERS.....	Drycleaner List
NPDES.....	Water Quality Permit System Data

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner.....	EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF.....	Recovered Government Archive Solid Waste Facilities List
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SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 12/12/2016 has revealed that there is 1 RCRA-CESQG site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	1609 E MAIN ST	W 1/8 - 1/4 (0.161 mi.)	C25	33

State- and tribal - equivalent CERCLIS

CSCSL: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Ecology's Confirmed & Suspected Contaminated Sites List.

A review of the CSCSL list, as provided by EDR, and dated 04/18/2017 has revealed that there is 1 CSCSL site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>SHORT STOP FREELAND</i> Site Status: Awaiting Cleanup Facility ID: 52297857 Clean Up Siteid: 11976	<i>1504 E HWY 525</i>	<i>W 1/4 - 1/2 (0.479 mi.)</i>	<i>E34</i>	<i>44</i>

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Ecology's Leaking Underground Storage Tanks Site List.

A review of the LUST list, as provided by EDR, has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SHORT STOP FREELAND Database: LUST, Date of Government Version: 05/16/2017 Facility Status: Awaiting Cleanup Cleanup Site ID: 11976 Facility ID: 52297857	1504 E HWY 525	W 1/4 - 1/2 (0.479 mi.)	E34	44

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Ecology's Statewide UST Site/Tank Report.

A review of the UST list, as provided by EDR, and dated 01/31/2017 has revealed that there are 3 UST sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SCOTTYS SERVICE Site Id: 619218 Facility ID: 2242550	1690 E MAIN ST	SSW 0 - 1/8 (0.008 mi.)	A17	20
WHIDBEY ISLAND GAME Site Id: 518231 Facility ID: 21272468	WHIDBEY ISLAND	WNW 0 - 1/8 (0.085 mi.)	19	24
COREY OIL CARDLOCK & Site Id: 2969 Facility ID: 41898821	1650 MAIN ST	WSW 0 - 1/8 (0.102 mi.)	B21	26

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling center locations.

A review of the SWRCY list, as provided by EDR, and dated 04/26/2017 has revealed that there are 2 SWRCY sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PUGET SOUND ENERGY	1794 MAIN STREET	ESE 1/8 - 1/4 (0.184 mi.)	26	36
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
RITE AID 6722	1609 E MAIN ST	W 1/8 - 1/4 (0.161 mi.)	C24	29

EXECUTIVE SUMMARY

Local Lists of Hazardous waste / Contaminated Sites

ALLSITES: Information on facilities and sites of interest to the Department of Ecology.

A review of the ALLSITES list, as provided by EDR, and dated 05/05/2017 has revealed that there are 15 ALLSITES sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FREELAND WATER DISTR Facility Id: 2911173	5492 HARBOR AVE	NNW 0 - 1/8 (0.116 mi.)	23	29
SUNNY VIEW VILLAGE Facility Id: 15145	1667 SCENIC AVE	S 1/4 - 1/2 (0.384 mi.)	32	43
VERIZON WIRELESS FRE Facility Id: 4023143	1730 SCENIC AVE	SSE 1/4 - 1/2 (0.397 mi.)	33	44
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PEACOCK DRYCLEANERS Facility Id: 31398959	1694 E MAIN	S 0 - 1/8 (0.008 mi.)	A15	16
SCOTTYS SERVICE Facility Id: 2242550	1690 E MAIN ST	SSW 0 - 1/8 (0.008 mi.)	A18	23
WHIDBEY ISLAND GAME Facility Id: 21272468	WHIDBEY ISLAND	WNW 0 - 1/8 (0.085 mi.)	19	24
COREY OIL CARDLOCK U Facility Id: 41898821	1650 MAIN ST	WSW 0 - 1/8 (0.102 mi.)	B20	25
RITE AID 6722 Facility Id: 8351	1609 E MAIN ST	W 1/8 - 1/4 (0.161 mi.)	C24	29
AMERIGAS VILLAGE AT Facility Id: 1746	1967 ALLIANCE AVE	ENE 1/8 - 1/4 (0.214 mi.)	27	37
SKAGIT FARMERS SUPPL Facility Id: 51128753	1584 E MAIN ST	W 1/4 - 1/2 (0.282 mi.)	28	37
NORTHERN ENERGY FREE Facility Id: 55874738	1518 SR 525	WSW 1/4 - 1/2 (0.339 mi.)	D29	38
RAY & DELORES LAFAYE Facility Id: 75879898	326 S MAIN ST	WSW 1/4 - 1/2 (0.344 mi.)	D30	38
FREELAND SHELL STATI Facility Id: 6999163	5618 FISH RD	WSW 1/4 - 1/2 (0.376 mi.)	D31	39
SHORT STOP FREELAND Facility Id: 52297857	1504 E HWY 525	W 1/4 - 1/2 (0.479 mi.)	E34	44
TEXACO FREELAND Facility Id: 4671872	18205 SR 525	W 1/4 - 1/2 (0.479 mi.)	E35	48

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA)

EXECUTIVE SUMMARY

of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/12/2016 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PEACOCK DRYCLEANERS	1694 E MAIN	S 0 - 1/8 (0.008 mi.)	A15	16

Inactive Drycleaners: A listing of inactive drycleaner facility locations.

A review of the Inactive Drycleaners list, as provided by EDR, and dated 12/31/2015 has revealed that there is 1 Inactive Drycleaners site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PEACOCK DRYCLEANERS EPA I: WA0000100511 Facility ID: WA0000100511	1694 E MAIN	S 0 - 1/8 (0.008 mi.)	A15	16

MANIFEST: Hazardous waste manifest information.

A review of the MANIFEST list, as provided by EDR, and dated 12/31/2016 has revealed that there is 1 MANIFEST site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
RITE AID 6722 Facility Site ID Number: 8351 Gen Status CD: SQG EPA ID: WAH000048271	1609 E MAIN ST	W 1/8 - 1/4 (0.161 mi.)	C24	29

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

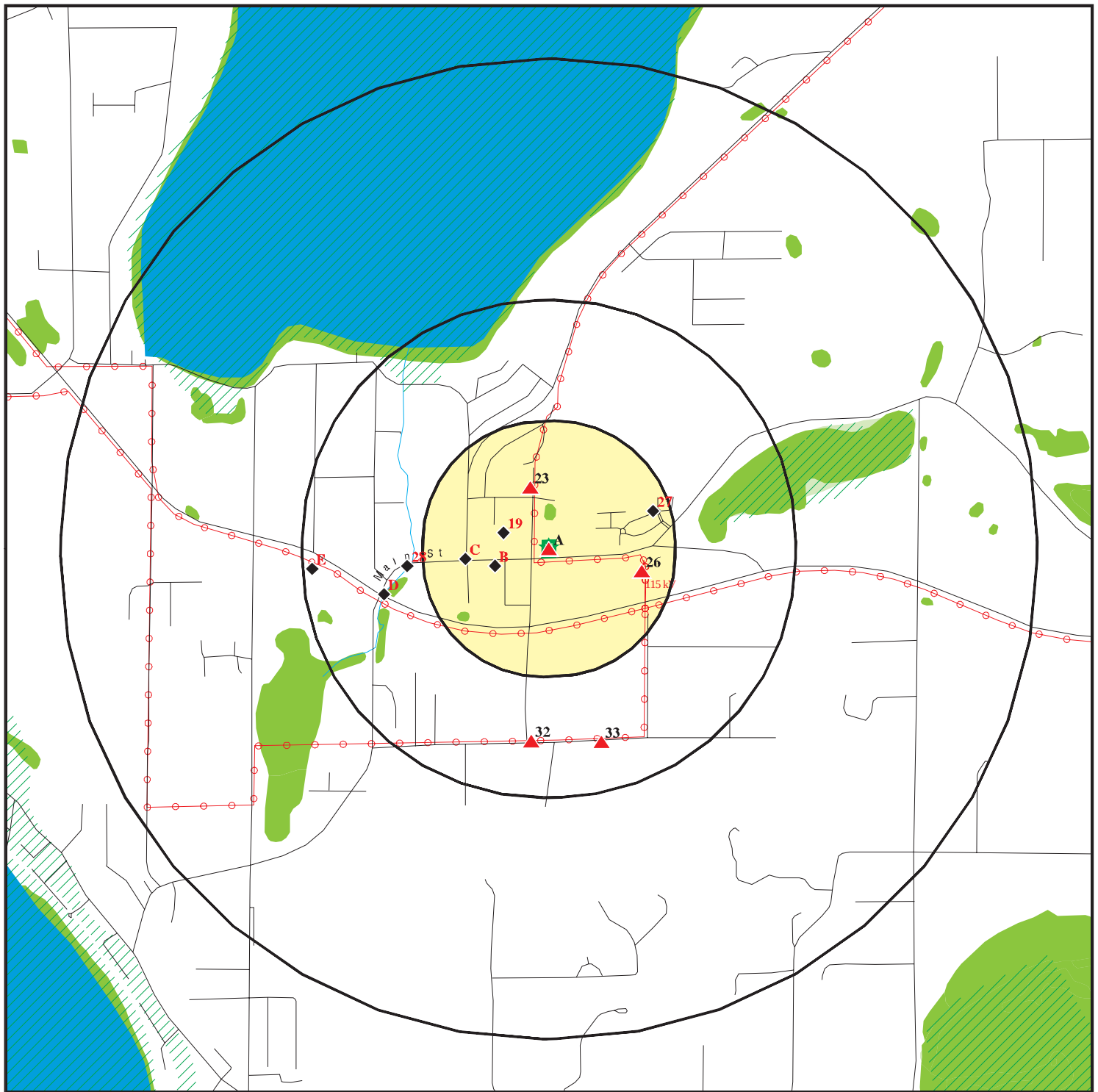
EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SCOTTYS SERVICE	1690 E MAIN ST	SSW 0 - 1/8 (0.008 mi.)	A16	20
FREELAND SERVICE STA	1650 MAIN ST	WSW 0 - 1/8 (0.102 mi.)	B22	28

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 4988633.2S



 Target Property

 Sites at elevations higher than or equal to the target property

 Sites at elevations lower than the target property

 Manufactured Gas Plants

 National Priority List Sites

 Dept. Defense Sites

 Indian Reservations BIA

 Power transmission lines

 100-year flood zone

 500-year flood zone

 National Wetland Inventory

 State Wetlands

 Upgradient Area

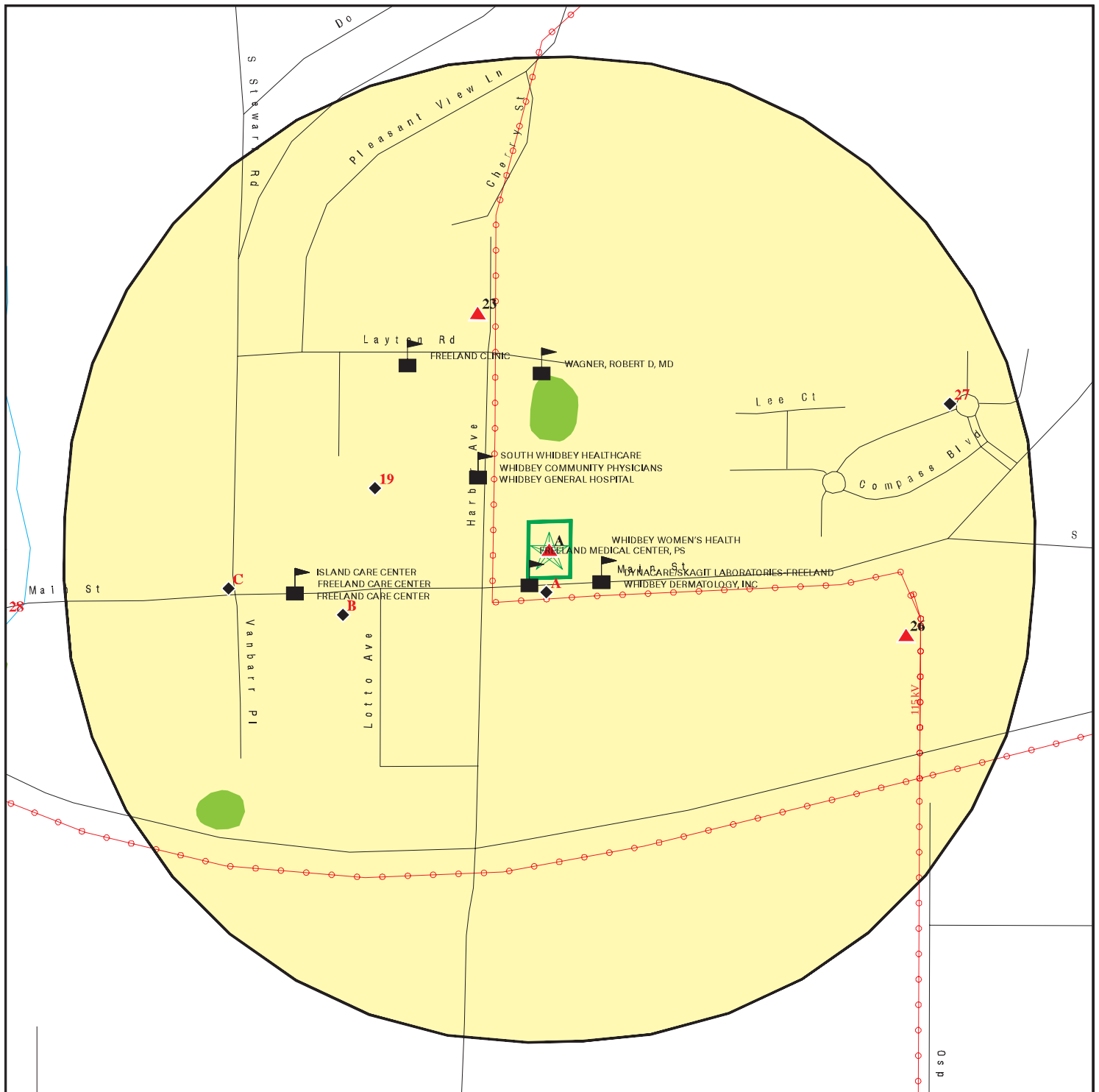
0 1/4 1/2 1 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Whidbey Marine and Auto
ADDRESS: 1695 Main Street
Freeland WA 98249
LAT/LONG: 48.009908 / 122.523556

CLIENT: Sound Earth Strategies
CONTACT: Kevin Bartelt
INQUIRY #: 4988633.2s
DATE: July 14, 2017 9:18 am

DETAIL MAP - 4988633.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites
-  Indian Reservations BIA
-  Power transmission lines
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
-  State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Whidbey Marine and Auto
 ADDRESS: 1695 Main Street
 Freeland WA 98249
 LAT/LONG: 48.009908 / 122.523556

CLIENT: Sound Earth Strategies
 CONTACT: Kevin Bartelt
 INQUIRY #: 4988633.2s
 DATE: July 14, 2017 9:21 am

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
HSL	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
CSCSL	1.000	1	0	0	1	0	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500	1	0	0	1	NR	NR	2

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250	1	0	0	NR	NR	NR	0
UST	0.250		3	0	NR	NR	NR	4
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
ICR	0.500	1	0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	1
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		0	2	0	NR	NR	2
SWTIRE	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001	1	0	NR	NR	NR	NR	0
ALLSITES	0.500		5	2	8	NR	NR	16
CDL	0.001		0	NR	NR	NR	NR	0
HIST CDL	0.001		0	NR	NR	NR	NR	0
CSCSL NFA	0.500		0	0	0	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
SPILLS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	0	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001	1	0	NR	NR	NR	NR	1
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	0.001	1	0	NR	NR	NR	NR	1
Inactive Drycleaners	0.250		1	0	NR	NR	NR	1
MANIFEST	0.250		0	1	NR	NR	NR	1
NPDES	0.001		0	NR	NR	NR	NR	0
UIC	0.001	1	0	NR	NR	NR	NR	1

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
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MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
EDR Hist Auto	0.125	6	2	NR	NR	NR	NR	8
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
<u>EDR RECOVERED GOVERNMENT ARCHIVES</u>								
<i>Exclusive Recovered Govt. Archives</i>								
RGA HWS	0.001	1	0	NR	NR	NR	NR	1
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001	3	0	NR	NR	NR	NR	3
- Totals --		18	12	6	10	0	0	46

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A1
Target
Property

WHIDBEY MARINE & AUTO
1695 E MAIN ST
FREELAND, WA 98249

UST **U003294924**
N/A

Site 1 of 18 in cluster A

Actual:
119 ft.

UST:

Facility ID: 17222251
Site Id: 8917
UBI: Not reported
Phone Number: Not reported
Decimal Latitude: 48.0095568498633
Decimal Longitude: -122.52364115339

Tank Name: 1
Tag Number: A4836, A8167
Tank Status: Removed
Tank Status Date: 08/06/1996
Tank Install Date: 00/15/1982
Tank Closure Date: 01/27/2011
Capacity Range: 2,001 to 4,999 Gallons
Tank Permit Expiration Date: 12/31/2008
Tank Upgrade Date: Not reported
Tank Spill Prevention: None
Tank Overfill Prevention: None
Tank Material: Not reported
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Sacrificial Anode
Tank Manifold: Not reported
Tank Release Detection: Manual Inventory Control (daily)
Tank SFC Type: Not reported
Pipe Material: Not reported
Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Automatic Line Leak Detector (ALLD)
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Sacrificial Anode
Pipe Pumping System: Pressurized System
Responsible Unit: NORTHWEST
Dispenser/Pump SFC Type: Not reported

Tank Name: 2
Tag Number: A4836, A8167
Tank Status: Removed
Tank Status Date: 08/06/1996
Tank Install Date: 00/15/1986
Tank Closure Date: 01/27/2011
Capacity Range: 10,000 to 19,999 Gallons
Tank Permit Expiration Date: 12/31/2008
Tank Upgrade Date: 12/16/1998
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Ball Float Valve (vent line)
Tank Material: Dielectric Coated Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Every 5 Years
Tank Corrosion Protection: Sacrificial Anode
Tank Manifold: Not reported
Tank Release Detection: Manual Inventory Control (daily)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WHIDBEY MARINE & AUTO (Continued)

U003294924

Tank SFC Type: Not reported
Pipe Material: Coated Steel
Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Automatic Line Leak Detector (ALLD)
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Sacrificial Anode
Pipe Pumping System: Pressurized System
Responsible Unit: NORTHWEST
Dispencer/Pump SFC Type: Not reported

Tank Name: 3
Tag Number: A4836, A8167
Tank Status: Removed
Tank Status Date: 08/06/1996
Tank Install Date: 00/15/1986
Tank Closure Date: 01/27/2011
Capacity Range: 10,000 to 19,999 Gallons
Tank Permit Expiration Date: 12/31/2008
Tank Upgrade Date: 12/16/1998
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Ball Float Valve (vent line)
Tank Material: Dielectric Coated Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Every 5 Years
Tank Corrosion Protection: Sacrificial Anode
Tank Manifold: Not reported
Tank Release Detection: Manual Inventory Control (daily)
Tank SFC Type: Not reported
Pipe Material: Coated Steel
Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Automatic Line Leak Detector (ALLD)
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Sacrificial Anode
Pipe Pumping System: Pressurized System
Responsible Unit: NORTHWEST
Dispencer/Pump SFC Type: Not reported

Tank Name: 4
Tag Number: A4836, A8167
Tank Status: Removed
Tank Status Date: 08/06/1996
Tank Install Date: 00/15/1986
Tank Closure Date: 01/27/2011
Capacity Range: 5,000 to 9,999 Gallons
Tank Permit Expiration Date: 12/31/2008
Tank Upgrade Date: 12/16/1998
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Ball Float Valve (vent line)
Tank Material: Dielectric Coated Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Every 5 Years
Tank Corrosion Protection: Sacrificial Anode
Tank Manifold: Not reported
Tank Release Detection: Manual Inventory Control (daily)
Tank SFC Type: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WHIDBEY MARINE & AUTO (Continued)

U003294924

Pipe Material: Coated Steel
Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Automatic Line Leak Detector (ALLD)
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Sacrificial Anode
Pipe Pumping System: Pressurized System
Responsible Unit: NORTHWEST
Dispenser/Pump SFC Type: Not reported

A2
Target
Property
WHIDBEY MARINE & AUTO
1695 E MAIN ST
FREELAND, WA

RGA LUST **S115447617**
N/A

Site 2 of 18 in cluster A

Actual:
119 ft.

RGA LUST:

2010 WHIDBEY MARINE & AUTO 1695 E MAIN ST
2009 WHIDBEY MARINE & AUTO 1695 E MAIN ST

A3
Target
Property
WHIDBEY MARINE & AUTO SUPPLY
1692 E MAIN ST
FREELAND, WA

RGA LUST **S115447615**
N/A

Site 3 of 18 in cluster A

Actual:
119 ft.

RGA LUST:

2012 WHIDBEY MARINE & AUTO SUPPLY 1692 E MAIN ST
2011 WHIDBEY MARINE & AUTO SUPPLY 1692 E MAIN ST

A4
Target
Property
WHIDBEY MARINE AND AUTO SUPPLY SITE
1692 E MAIN ST
FREELAND, WA 98249

UIC **S116549254**
N/A

Site 4 of 18 in cluster A

Actual:
119 ft.

UIC:

Site Number: 31045
Owner Name: na
Well Status: Active
EPA Well Type: 5B6 - Aquifer remediation
Latitude: 48.009916
Longitude: 122.523536
Well Name: Jan-84
Registration Type: Voluntary or Independent Cleanup Sites
Construction Date: 06/01/2010
Construction Type: Not reported
Depth: 55

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A5
Target
Property

WHIDBEY MARINE & AUTO SUPPLY
1692 E MAIN ST
FREELAND, WA

RGA HWS **S115348108**
N/A

Site 5 of 18 in cluster A

Actual:
119 ft.

RGA HWS:

2012	WHIDBEY MARINE & AUTO SUPPLY	1692 E MAIN ST
2011	WHIDBEY MARINE & AUTO SUPPLY	1692 E MAIN ST
2010	WHIDBEY MARINE & AUTO SUPPLY	1692 E MAIN ST
2009	WHIDBEY MARINE & AUTO SUPPLY	1692 E MAIN ST
2008	WHIDBEY MARINE & AUTO SUPPLY	1692 E MAIN ST
2007	WHIDBEY MARINE & AUTO SUPPLY	1692 E MAIN ST
2006	WHIDBEY MARINE & AUTO SUPPLY	1692 E MAIN ST

A6
Target
Property

WHIDBEY MARINE & AUTO SUPPLY
1692 MAIN ST
FREELAND, WA 98249

CSCSL **S108024786**
LUST **N/A**
VCP
ALLSITES
Financial Assurance

Site 6 of 18 in cluster A

Actual:
119 ft.

CSCSL:

Facility ID: 17222251
Region: Northwest
Lat/Long: 48.00955685 / -122.52364115
Brownfield Status: Not reported
Rank Status: N
Clean Up Siteid: 5610
Site Status: Cleanup Started
PSI?: Yes
Contaminant Name: Petroleum Products-Unspecified
Ground Water: Suspected
Surface Water: Not reported
Soil: Not reported
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Northwest

Facility ID: 17222251
Region: Northwest
Lat/Long: 48.00955685 / -122.52364115
Brownfield Status: Not reported
Rank Status: N
Clean Up Siteid: 5610
Site Status: Cleanup Started
PSI?: Yes
Contaminant Name: Petroleum-Gasoline
Ground Water: Not reported
Surface Water: Not reported
Soil: Confirmed Above Cleanup Level
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Northwest

LUST:

Facility ID: 17222251
Lust Status Type: Awaiting Cleanup
Cleanup Site ID: 5610

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WHIDBEY MARINE & AUTO SUPPLY (Continued)

S108024786

Cleanup Unit Type: Upland
Process Type: Voluntary Cleanup Program
Cleanup Unit Name: Whidbey Marine & Auto Supply
Lust Status Date: 09/28/2005
Response Section: Northwest
Lat/Long: 48.0095568 / -122.52364

VCP:

edr_fstat: WA
edr_fzip: 98249
edr_fcnty: ISLAND
edr_zip: Not reported
Facility ID: 17222251
VCP Status: Not reported
VCP: Yes
Ecology Status: Not reported
NFA Type: Not reported
Date NFA: Not reported
Rank: N
Cleanup Siteid: 5610

edr_fstat: WA
edr_fzip: 98249
edr_fcnty: ISLAND
edr_zip: Not reported
Facility ID: 17222251
VCP Status: Not reported
VCP: Yes
Ecology Status: Not reported
NFA Type: Not reported
Date NFA: Not reported
Rank: N
Cleanup Siteid: 5610

ALLSITES:

Facility Name: WHIDBEY MARINE & AUTO SUPPLY
Facility Id: 17222251

Interaction: 29812
Interaction 1: I
Interaction 2: UST
Ecology Program: TOXICS
Program Data: UST
Facility Alt.: Not reported
Program ID: 8917
Date Interaction: 1982-07-15 00:00:00
Date Interaction 3: Underground Storage Tank
Latitude: 48.009552749000001
Longitude: -122.52360978599999

Interaction: 29814
Interaction 1: A
Interaction 2: LUST
Ecology Program: TOXICS
Program Data: ISIS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WHIDBEY MARINE & AUTO SUPPLY (Continued)

S108024786

Facility Alt.: Not reported
Program ID: 8917
Date Interaction: 2005-09-28 00:00:00
Date Interaction 3: LUST Facility
Latitude: 48.009552749000001
Longitude: -122.52360978599999

Interaction: 29813
Interaction 1: A
Interaction 2: TIER2
Ecology Program: HAZWASTE
Program Data: EPCRA
Facility Alt.: Not reported
Program ID: CRK000040530
Date Interaction: 1995-01-01 00:00:00
Date Interaction 3: Emergency/Haz Chem Rpt TI
Latitude: 48.009552749000001
Longitude: -122.52360978599999

Interaction: 29815
Interaction 1: A
Interaction 2: VOLCLNST
Ecology Program: TOXICS
Program Data: ISIS
Facility Alt.: WHIDBEY MARINE & AUTO SUPPLY
Program ID: NW1529
Date Interaction: 2005-12-07 00:00:00
Date Interaction 3: Voluntary Cleanup Sites
Latitude: 48.009552749000001
Longitude: -122.52360978599999

WA Financial Assurance 1:
DOE Site ID: 8917
Site Type: PLIA
Financial Resp Type: Colony (GUS)
Inception Date: 02/01/2008
Expiration Date: 02/01/2009

A7
Target
Property

WHIDBEY MARINE & AUTO SUPPLY
1692 MAIN ST
FREELAND, WA 98249

FINDS 1007075059
N/A

Site 7 of 18 in cluster A

Actual:
119 ft.

FINDS:

Registry ID: 110015517038

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WHIDBEY MARINE & AUTO SUPPLY (Continued)

1007075059

Quality Programs.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

**A8
Target
Property**

**WHIDBEY MARINA & AUTO SUPPLIES
<
FREELAND, WA 98249**

EDR Hist Auto

**1021385209
N/A**

Site 8 of 18 in cluster A

**Actual:
119 ft.**

EDR Hist Auto

Year: Name:
1971 WHIDBEY MARINA & AUTO SUPPLIES

Type:
Auto And Home Supply Stores

**A9
Target
Property**

**WHIDBEY MARINA & AUTO SUPPLIES
HARBOR CENTER
FREELAND, WA 98249**

EDR Hist Auto

**1021197710
N/A**

Site 9 of 18 in cluster A

**Actual:
119 ft.**

EDR Hist Auto

Year: Name:
1973 WHIDBEY MARINA & AUTO SUPPLIES
1974 WHIDBEY MARINA & AUTO SUPPLIES

Type:
Auto And Home Supply Stores
Auto And Home Supply Stores

**A10
Target
Property**

**WHIDBEY MARINA & AUTO SUPPLIES
MAIN ST HARBOR CENTER
FREELAND, WA 98249**

EDR Hist Auto

**1020713960
N/A**

Site 10 of 18 in cluster A

**Actual:
119 ft.**

EDR Hist Auto

Year: Name:
1976 WHIDBEY MARINA & AUTO SUPPLIES
1977 WHIDBEY MARINA & AUTO SUPPLIES
1978 WHIDBEY MARINA & AUTO SUPPLIES

Type:
Auto And Home Supply Stores
Auto And Home Supply Stores
Auto And Home Supply Stores

**A11
Target
Property**

**WHIDBEY MARINA & AUTO SUPPLIES
MIAN ST
FREELAND, WA 98249**

EDR Hist Auto

**1020192674
N/A**

Site 11 of 18 in cluster A

**Actual:
119 ft.**

EDR Hist Auto

Year: Name:
1972 WHIDBEY MARINA & AUTO SUPPLIES

Type:
Auto And Home Supply Stores

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A12
Target
Property **WHIDBEY MARINE & AUTO**
1692 E MAIN ST
FREELAND, WA

RGA LUST

S115447616
N/A

Site 12 of 18 in cluster A

Actual:
119 ft.

RGA LUST:

2008	WHIDBEY MARINE & AUTO	1692 E MAIN ST
2007	WHIDBEY MARINE & AUTO	1692 E MAIN ST
2006	WHIDBEY MARINE & AUTO	1692 E MAIN ST

A13
Target
Property **WHIDBEY MARINE & AUTO SUPPLIES**
1692 MAIN ST
FREELAND, WA 98249

EDR Hist Auto

1022224980
N/A

Site 13 of 18 in cluster A

Actual:
119 ft.

EDR Hist Auto

Year:	Name:	Type:
2011	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
2012	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
2013	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
2014	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores

A14
Target
Property **WHIDBEY MARINE & AUTO SUPPLIES**
1692 E MAIN ST
FREELAND, WA 98249

EDR Hist Auto

1020484972
N/A

Site 14 of 18 in cluster A

Actual:
119 ft.

EDR Hist Auto

Year:	Name:	Type:
1980	WHIDBEY MARINE & AUTO SUPPLIES	Auto And Home Supply Stores
1982	WHIDBEY MARINE & AUTO SUPPLIES	Auto And Home Supply Stores
1983	WHIDBY MRN & AUTO SUPP	Auto And Home Supply Stores
1985	WHIDBY MRN & AUTO SUPP	Auto And Home Supply Stores
1986	WHIDBEY MARINE & AUTO SUPPLIES	Auto And Home Supply Stores
1987	WHIDBEY MARINE & AUTO SUPPLIES	Auto And Home Supply Stores
1988	WHIDBEY MARINE & AUTO SUPPLIES	Grocery Stores
1989	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
1990	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
1991	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
1992	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
1993	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
1994	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
1995	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
1996	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
1999	TIMS AUTO SVC	General Automotive Repair Shops
2000	TIMS AUTO SVC	General Automotive Repair Shops
2000	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
2001	WINN MARINE AND AUTO	Gasoline Service Stations
2002	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
2002	WINN MARINE AND AUTO	Gasoline Service Stations
2003	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
2003	WINN MARINE AND AUTO	Gasoline Service Stations
2004	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
2004	WINN MARINE AND AUTO	Gasoline Service Stations

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WHIDBEY MARINE & AUTO SUPPLIES (Continued)

1020484972

2005	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
2005	WINN MARINE AND AUTO	Gasoline Service Stations
2006	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
2006	WINN MARINE AND AUTO	Gasoline Service Stations
2007	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
2007	WINN MARINE AND AUTO	Gasoline Service Stations
2008	WINN MARINE AND AUTO	Gasoline Service Stations
2008	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
2009	WINN MARINE AND AUTO	Gasoline Service Stations
2009	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores
2010	WHIDBEY MARINE & AUTO SUPPLIES	Convenience Stores

A15
South
< 1/8
0.008 mi.
41 ft.

PEACOCK DRYCLEANERS
1694 E MAIN
FREELAND, WA 98249

Site 15 of 18 in cluster A

ALLSITES
RCRA NonGen / NLR
FINDS
ECHO
Inactive Drycleaners

1000878600
WA0000100511

Relative:
Lower

ALLSITES:

Facility Name: PEACOCK DRYCLEANERS
Facility Id: 31398959

Actual:
117 ft.

Interaction: 37290
Interaction 1: I
Interaction 2: HWG
Ecology Program: HAZWASTE
Program Data: TURBOWASTE
Facility Alt.: Not reported
Program ID: WA0000100511
Date Interaction: 1994-01-24 00:00:00
Date Interaction 3: Hazardous Waste Generator
Latitude: 48.032914390999998
Longitude: -122.60431495900001

RCRA NonGen / NLR:

Date form received by agency: 07/07/1997
Facility name: Not reported
Facility address: 1694 E MAIN
FREELAND, WA 98249
EPA ID: WA0000100511
Mailing address: PO BOX 243
FREELAND, WA 98249-0243
Contact: PEACOCK DRYCLEA PEACOCK DRYCLEA
Contact address: PO BOX 243
FREELAND, WA 98249-0243
Contact country: US
Contact telephone: (000)000-0000
Contact email: Not reported
EPA Region: Not reported
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: ABC CLEANERS A
Owner/operator address: 239 NE MIDWAY BLVD
OAK HARBOR, WA 98277

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PEACOCK DRYCLEANERS (Continued)

1000878600

Owner/operator country: US
Owner/operator telephone: (360)679-0719
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 07/07/1997
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 07/07/1997
Site name: PEACOCK DRYCLEANERS
Classification: Not a generator, verified

Violation Status: No violations found

FINDS:

Registry ID: 110005263669

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000878600
Registry ID: 110005263669
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110005263669>

INACTIVE DRYCLEANERS:

EPA I: WA0000100511
FS Id: 3778
Facility ID: WA0000100511

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PEACOCK DRYCLEANERS (Continued)

1000878600

NAICS Code:	81232
Fed Waste Code Desc:	Not reported
State Waste Code Desc:	Not reported
TAX REG NBR:	Not reported
BUSINESS TYPE:	Not reported
MAIL NAME:	Not reported
MAIL LINE1:	Not reported
MAIL LINE2:	Not reported
MAIL CITY:	Not reported
MAIL STATE:	Not reported
MAIL ZIP:	Not reported
MAIL COUNTRY:	Not reported
LEGAL ORG NAME:	Not reported
LEGAL PERSON FIRST NAME:	Not reported
LEGAL PERSON MIDDLE INIT:	Not reported
LEGAL PERSON LAST NAME:	Not reported
LEGAL LINE1:	Not reported
LEGAL LINE2:	Not reported
LEGAL CITY:	Not reported
LEGAL STATE:	Not reported
LEGAL ZIP:	Not reported
LEGAL COUNTRY:	Not reported
LEGAL PHONE NBR:	Not reported
LEGAL EFFECTIVE DATE:	Not reported
LEGAL ORGANIZATION TYPE:	Not reported
LAND ORG NAME:	Not reported
LAND PERSON FIRST NAME:	Not reported
LAND PERSON MIDDLE INIT:	Not reported
LAND PERSON LAST NAME:	Not reported
LAND LINE1:	Not reported
LAND LINE2:	Not reported
LAND CITY:	Not reported
LAND STATE:	Not reported
LAND ZIP:	Not reported
LAND COUNTRY:	Not reported
LAND PHONE NBR:	Not reported
LAND ORGANIZATION TYPE:	Not reported
OPERATOR ORG NAME:	Not reported
OPERATOR PERSON FIRST NAME:	Not reported
OPERATOR PERSON MIDDLE INIT:	Not reported
OPERATOR PERSON LAST NAME:	Not reported
OPERATOR LINE1:	Not reported
OPERATOR LINE2:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR COUNTRY:	Not reported
OPERATOR PHONE NBR:	Not reported
OPERATOR EFFECTIVE DATE:	Not reported
OPERATOR ORGANIZATION TYPE:	Not reported
SITE CONTACT FIRST NAME:	Not reported
SITE CONTACT MIDDLE INIT:	Not reported
SITE CONTACT LAST NAME:	Not reported
SITE CONTACT LINE1:	Not reported
SITE CONTACT LINE2:	Not reported
SITE CONTACT CITY:	Not reported
SITE CONTACT STATE:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PEACOCK DRYCLEANERS (Continued)

1000878600

SITE CONTACT ZIP:	Not reported
SITE CONTACT COUNTRY:	Not reported
SITE CONTACT PHONE NBR:	Not reported
SITE CONTACT EMAIL:	Not reported
FORM CONTACT FIRST NAME:	Not reported
FORM CONTACT MIDDLE INIT:	Not reported
FORM CONTACT LAST NAME:	Not reported
FORM CONTACT LINE1:	Not reported
FORM CONTACT LINE2:	Not reported
FORM CONTACT CITY:	Not reported
FORM CONTACT STATE:	Not reported
FORM CONTACT ZIP:	Not reported
FORM CONTACT COUNTRY:	Not reported
FORM CONTACT PHONE NBR:	Not reported
FORM CONTACT EMAIL:	Not reported
GEN STATUS CD:	Not reported
MONTHLY GENERATION:	Not reported
BATCH GENERATION:	Not reported
ONE TIME GENERATION:	Not reported
TRANSPORTS OWN WASTE:	Not reported
TRANSPORTS OTHERS WASTE:	Not reported
RECYCLER ONSITE:	Not reported
TRANSFER FACILITY:	Not reported
PBR:	Not reported
TBG:	Not reported
MIXED RADIOACTIVE:	Not reported
IMPORTER:	Not reported
TSDR FACILITY:	Not reported
IMMEDIATE RECYCLER:	Not reported
GEN DANG FUEL:	Not reported
GEN MARKET TO BURNER:	Not reported
GEN OTHER MARKETERS:	Not reported
UTILITY BOILER BURNER:	Not reported
INDUSTRY BOILER BURNER:	Not reported
FURNACE BURNER:	Not reported
SMELTER DEFERRAL:	Not reported
SMALL QTY EXEMPTION:	Not reported
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	Not reported
UW THERMOSTATS GEN:	Not reported
UW MERCURY GEN:	Not reported
UW LAMPS GEN:	Not reported
UW BATTERY ACCUM:	Not reported
UW THERMOSTATS ACCUM:	Not reported
UW MERCURY ACCUM:	Not reported
UW LAMPS ACCUM:	Not reported
UW DESTINATION FACILITY:	Not reported
OFF SPEC UTILITY BOILER:	Not reported
OFF SPEC INDUSTRY BOILER:	Not reported
OFF SPEC FURNACE:	Not reported
USED OIL TRANSPORTER:	Not reported
USED OIL TRANSFER FACILITY:	Not reported
USED OIL PROCESSOR:	Not reported
USED OIL REREFINER:	Not reported
USED OIL FUEL MARKETER DIR SHIPMENTS:	Not reported
USED OIL FUEL MARKETER MEETS SPECS:	Not reported
Comments:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

A16
SSW
< 1/8
0.008 mi.
42 ft.

SCOTTYS SERVICE
1690 E MAIN ST
FREELAND, WA 98249

Site 16 of 18 in cluster A

EDR Hist Auto **1021519976**
N/A

Relative:
Lower

EDR Hist Auto

Actual:
117 ft.

Year:	Name:	Type:
1994	SCOTTYS SERVICE	General Automotive Repair Shops
1995	SCOTTYS SERVICE	General Automotive Repair Shops
1996	SCOTTYS SERVICE	General Automotive Repair Shops
1997	SCOTTYS SERVICE	General Automotive Repair Shops
1998	SCOTTYS SERVICE	General Automotive Repair Shops
1999	SCOTTYS SERVICE	General Automotive Repair Shops
2000	SCOTTYS SERVICE	General Automotive Repair Shops
2001	SCOTTYS SERVICE	General Automotive Repair Shops
2001	PERFORMANCE MUFFLER & BRAKE	General Automotive Repair Shops
2002	SCOTTYS TOWING	General Automotive Repair Shops
2003	SCOTTYS TOWING	General Automotive Repair Shops
2003	PERFORMANCE MUFFLER & BRAKE	General Automotive Repair Shops
2004	RC EDWARDS INC	General Automotive Repair Shops
2004	SCOTTYS TOWING	General Automotive Repair Shops
2005	RC EDWARDS INC	General Automotive Repair Shops
2005	SCOTTYS TOWING	General Automotive Repair Shops
2006	SCOTTYS TOWING	General Automotive Repair Shops
2006	RC EDWARDS INC	General Automotive Repair Shops
2007	RC EDWARDS INC	General Automotive Repair Shops
2007	SCOTTYS TOWING	General Automotive Repair Shops
2008	RC EDWARDS INC	General Automotive Repair Shops
2008	SCOTTYS TOWING	General Automotive Repair Shops
2009	SCOTTYS TOWING	General Automotive Repair Shops

A17
SSW
< 1/8
0.008 mi.
42 ft.

SCOTTYS SERVICE
1690 E MAIN ST
FREELAND, WA 98249

Site 17 of 18 in cluster A

UST **U004040699**
N/A

Relative:
Lower

UST:

Actual:
117 ft.

Facility ID:	2242550
Site Id:	619218
UBI:	Not reported
Phone Number:	Not reported
Decimal Latitude:	48.009363
Decimal Longitude:	-122.528522
Tank Name:	1
Tag Number:	Not reported
Tank Status:	Removed
Tank Status Date:	04/19/2005
Tank Install Date:	Not reported
Tank Closure Date:	04/19/2005
Capacity Range:	111 TO 1,100 Gallons
Tank Permit Expiration Date:	Not reported
Tank Upgrade Date:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Steel
Tank Construction:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SCOTTYS SERVICE (Continued)

U004040699

Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Tank Manifold: Not reported
Tank Release Detection: Not reported
Tank SFC Type: Not reported
Pipe Material: Not reported
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Pipe Pumping System: Not reported
Responsible Unit: NORTHWEST
Dispencer/Pump SFC Type: Not reported

Tank Name: 2
Tag Number: Not reported
Tank Status: Removed
Tank Status Date: 04/19/2005
Tank Install Date: Not reported
Tank Closure Date: 04/19/2005
Capacity Range: 111 TO 1,100 Gallons
Tank Permit Expiration Date: Not reported
Tank Upgrade Date: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Steel
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Tank Manifold: Not reported
Tank Release Detection: Not reported
Tank SFC Type: Not reported
Pipe Material: Not reported
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Pipe Pumping System: Not reported
Responsible Unit: NORTHWEST
Dispencer/Pump SFC Type: Not reported

Tank Name: 3
Tag Number: Not reported
Tank Status: Removed
Tank Status Date: 04/19/2005
Tank Install Date: Not reported
Tank Closure Date: 04/19/2005
Capacity Range: 2,001 to 4,999 Gallons
Tank Permit Expiration Date: Not reported
Tank Upgrade Date: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Steel
Tank Construction: Not reported
Tank Tightness Test: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SCOTTYS SERVICE (Continued)

U004040699

Tank Corrosion Protection: Not reported
Tank Manifold: Not reported
Tank Release Detection: Not reported
Tank SFC Type: Not reported
Pipe Material: Not reported
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Pipe Pumping System: Not reported
Responsible Unit: NORTHWEST
Dispenser/Pump SFC Type: Not reported

Tank Name: 4
Tag Number: Not reported
Tank Status: Removed
Tank Status Date: 04/19/2005
Tank Install Date: Not reported
Tank Closure Date: 04/19/2005
Capacity Range: 5,000 to 9,999 Gallons
Tank Permit Expiration Date: Not reported
Tank Upgrade Date: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Steel
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Tank Manifold: Not reported
Tank Release Detection: Not reported
Tank SFC Type: Not reported
Pipe Material: Not reported
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Pipe Pumping System: Not reported
Responsible Unit: NORTHWEST
Dispenser/Pump SFC Type: Not reported

Tank Name: 5
Tag Number: Not reported
Tank Status: Removed
Tank Status Date: 04/19/2005
Tank Install Date: Not reported
Tank Closure Date: 04/19/2005
Capacity Range: 5,000 to 9,999 Gallons
Tank Permit Expiration Date: Not reported
Tank Upgrade Date: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Steel
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SCOTTYS SERVICE (Continued)

U004040699

Tank Manifold: Not reported
Tank Release Detection: Not reported
Tank SFC Type: Not reported
Pipe Material: Not reported
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Pipe Pumping System: Not reported
Responsible Unit: NORTHWEST
Dispenser/Pump SFC Type: Not reported

**A18
SSW
< 1/8
0.008 mi.
42 ft.**

**SCOTTYS SERVICE
1690 E MAIN ST
FREELAND, WA 98249**

**ALLSITES 1011279452
FINDS N/A**

Site 18 of 18 in cluster A

**Relative:
Lower**

ALLSITES:
Facility Name: SCOTTYS SERVICE
Facility Id: 2242550

**Actual:
117 ft.**

Interaction: 10153
Interaction 1: I
Interaction 2: UST
Ecology Program: TOXICS
Program Data: UST
Facility Alt.: Not reported
Program ID: Not reported
Date Interaction: 2006-04-07 00:00:00
Date Interaction 3: Underground Storage Tank
Latitude: 48.009357383000001
Longitude: -122.52850697700001

FINDS:

Registry ID: 110036131995

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

19
WNW
< 1/8
0.085 mi.
447 ft.

WHIDBEY ISLAND GAME FARM
WHIDBEY ISLAND
FREELAND, WA 98548

UST
ALLSITES U003710160
N/A

Relative:
Lower

UST:

Actual:
110 ft.

Facility ID: 21272468
Site Id: 518231
UBI: Not reported
Phone Number: Not reported
Decimal Latitude: 48.010389
Decimal Longitude: -122.525583

Tank Name: 1
Tag Number: Not reported
Tank Status: Removed
Tank Status Date: 12/20/1999
Tank Install Date: 00/01/1900
Tank Closure Date: Not reported
Capacity Range: Not reported
Tank Permit Expiration Date: Not reported
Tank Upgrade Date: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Tank Manifold: Not reported
Tank Release Detection: Not reported
Tank SFC Type: Not reported
Pipe Material: Not reported
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Pipe Pumping System: Not reported
Responsible Unit: NORTHWEST
Dispenser/Pump SFC Type: Not reported

Tank Name: 2
Tag Number: Not reported
Tank Status: Exempt - Removed
Tank Status Date: 12/20/1999
Tank Install Date: 00/01/1900
Tank Closure Date: Not reported
Capacity Range: Not reported
Tank Permit Expiration Date: Not reported
Tank Upgrade Date: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Tank Manifold: Not reported
Tank Release Detection: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WHIDBEY ISLAND GAME FARM (Continued)

U003710160

Tank SFC Type: Not reported
Pipe Material: Not reported
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Pipe Pumping System: Not reported
Responsible Unit: NORTHWEST
Dispencer/Pump SFC Type: Not reported

ALLSITES:

Facility Name: WHIDBEY ISLAND GAME FARM
Facility Id: 21272468

Interaction: 31679
Interaction 1: I
Interaction 2: UST
Ecology Program: TOXICS
Program Data: UST
Facility Alt.: Not reported
Program ID: 518231
Date Interaction: 1999-12-20 00:00:00
Date Interaction 3: Underground Storage Tank
Latitude: 48.010383382999997
Longitude: -122.52556797699999

B20
WSW
< 1/8
0.102 mi.
536 ft.

COREY OIL CARDLOCK UST 2969
1650 MAIN ST
FREELAND, WA 98249

Site 1 of 3 in cluster B

ALLSITES
SPILLS

S105391269
N/A

Relative:
Lower

ALLSITES:

Facility Name: COREY OIL CARDLOCK UST 2969
Facility Id: 41898821

Actual:
109 ft.

Interaction: 43446
Interaction 1: A
Interaction 2: UST
Ecology Program: TOXICS
Program Data: UST
Facility Alt.: Corey Oil Cardlock & Auto Glass
Program ID: 2969
Date Interaction: 1973-01-01 00:00:00
Date Interaction 3: Underground Storage Tank
Latitude: 48.009447383000001
Longitude: -122.527383977

Interaction: 43447
Interaction 1: A
Interaction 2: TIER2
Ecology Program: HAZWASTE
Program Data: EPCRA
Facility Alt.: Not reported
Program ID: CRK000023760

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COREY OIL CARDLOCK UST 2969 (Continued)

S105391269

Date Interaction: 1990-01-01 00:00:00
Date Interaction 3: Emergency/Haz Chem Rpt TI
Latitude: 48.009447383000001
Longitude: -122.527383977

SPILLS:

Facility ID: 508147
Medium: Not reported
Material Desc: PETROLEUM - DIESEL FUEL
Material Qty: 30
Material Units: GALLON
Date Received: 12/09/1999
Contact Name: COREY OIL
Incident Date: Not reported
Incident Category Type: Not reported
Incident Category: Not reported
Latitude: Not reported
Longitude: Not reported
Source Type: Not reported
Source: Not reported
Vessel Facility Name2: Not reported
Recovered Quantity: Not reported
Resp Party Name: Not reported

B21
WSW
< 1/8
0.102 mi.
536 ft.

COREY OIL CARDLOCK & AUTO GLASS
1650 MAIN ST
FREELAND, WA 98249
Site 2 of 3 in cluster B

UST U000588059
N/A

Relative:
Lower

UST:
Facility ID: 41898821
Site Id: 2969
UBI: Not reported
Phone Number: Not reported
Decimal Latitude: 48.009453
Decimal Longitude: -122.527399

Actual:
109 ft.

Tank Name: 1
Tag Number: A8195
Tank Status: Operational
Tank Status Date: 08/06/1996
Tank Install Date: 00/01/1973
Tank Closure Date: Not reported
Capacity Range: 5,000 to 9,999 Gallons
Tank Permit Expiration Date: 08/31/2017
Tank Upgrade Date: 05/07/1999
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Automatic Shutoff (fill pipe)
Tank Material: Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Impressed Current and Interior Lining
Tank Manifold: Not reported
Tank Release Detection: Automatic Tank Gauging
Tank SFC Type: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COREY OIL CARDLOCK & AUTO GLASS (Continued)

U000588059

Pipe Material: Fiberglass
Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Safe Suction (No Leak Detection)
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Corrosion Resistant
Pipe Pumping System: Safe Suction
Responsible Unit: NORTHWEST
Dispencer/Pump SFC Type: Rubber Boot

Tank Name: 2
Tag Number: A8195
Tank Status: Operational
Tank Status Date: 08/06/1996
Tank Install Date: 00/01/1973
Tank Closure Date: Not reported
Capacity Range: 5,000 to 9,999 Gallons
Tank Permit Expiration Date: 08/31/2017
Tank Upgrade Date: 05/06/1999
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Automatic Shutoff (fill pipe)
Tank Material: Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Impressed Current and Interior Lining
Tank Manifold: Not reported
Tank Release Detection: Automatic Tank Gauging
Tank SFC Type: Not reported
Pipe Material: Fiberglass
Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Safe Suction (No Leak Detection)
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Corrosion Resistant
Pipe Pumping System: Safe Suction
Responsible Unit: NORTHWEST
Dispencer/Pump SFC Type: Rubber Boot

Tank Name: 3
Tag Number: A8195
Tank Status: Operational
Tank Status Date: 08/06/1996
Tank Install Date: 00/01/1973
Tank Closure Date: Not reported
Capacity Range: 5,000 to 9,999 Gallons
Tank Permit Expiration Date: 08/31/2017
Tank Upgrade Date: 05/06/1999
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Automatic Shutoff (fill pipe)
Tank Material: Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Impressed Current and Interior Lining
Tank Manifold: Not reported
Tank Release Detection: Automatic Tank Gauging
Tank SFC Type: Not reported
Pipe Material: Fiberglass

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COREY OIL CARDLOCK & AUTO GLASS (Continued)

U000588059

Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Safe Suction (No Leak Detection)
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Corrosion Resistant
Pipe Pumping System: Safe Suction
Responsible Unit: NORTHWEST
Dispenser/Pump SFC Type: Rubber Boot

Tank Name: 4
Tag Number: A8195
Tank Status: Operational
Tank Status Date: 08/06/1996
Tank Install Date: 00/01/1973
Tank Closure Date: Not reported
Capacity Range: 2,001 to 4,999 Gallons
Tank Permit Expiration Date: 08/31/2017
Tank Upgrade Date: 05/06/1999
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Automatic Shutoff (fill pipe)
Tank Material: Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Impressed Current and Interior Lining
Tank Manifold: Not reported
Tank Release Detection: Automatic Tank Gauging
Tank SFC Type: Not reported
Pipe Material: Fiberglass
Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Safe Suction (No Leak Detection)
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Corrosion Resistant
Pipe Pumping System: Safe Suction
Responsible Unit: NORTHWEST
Dispenser/Pump SFC Type: Rubber Boot

B22
WSW
< 1/8
0.102 mi.
536 ft.

FREELAND SERVICE STATION
1650 MAIN ST
FREELAND, WA 98249

EDR Hist Auto 1022100719
N/A

Relative:
Lower

EDR Hist Auto

Actual:
109 ft.

Year:	Name:	Type:
1988	FREELAND SERVICE STATION	Gasoline Service Stations
1994	FREELAND SERVICE STATION	Gasoline Service Stations
2008	FREELAND SERVICE STATION	Gasoline Service Stations
2009	FREELAND SERVICE STATION	Gasoline Service Stations

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

23
NNW
< 1/8
0.116 mi.
612 ft.

FREELAND WATER DISTRICT
5492 HARBOR AVE
FREELAND, WA 98249

ALLSITES
FINDS

1008925953
N/A

Relative:
Higher

ALLSITES:

Facility Name:

FREELAND WATER DISTRICT

Facility Id:

2911173

Actual:
120 ft.

Interaction:

11594

Interaction 1:

A

Interaction 2:

NONENFNL

Ecology Program:

WATQUAL

Program Data:

DMS

Facility Alt.:

Not reported

Program ID:

Not reported

Date Interaction:

2005-09-02 00:00:00

Date Interaction 3:

Non Enforcement Final

Latitude:

48.009846383000003

Longitude:

-122.52448897799999

FINDS:

Registry ID:

110022929321

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

C24
West
1/8-1/4
0.161 mi.
852 ft.

RITE AID 6722
1609 E MAIN ST
FREELAND, WA 98249

SWRCY
ALLSITES
MANIFEST

S117450608
N/A

Site 1 of 2 in cluster C

Relative:
Lower

SWRCY:

Service:

Freeland Ace Hardware

Phone:

(360) 331-6799

Extension:

Not reported

Website:

<http://lightrecyclewa.org/>

Email:

joanne.neugebauer-rex@ecy.wa.gov

Material Category:

Light Bulbs

Material Accepted:

Fluorescent lights, CFLs, HIDs

Contact Name:

Joanne Neugebauer-Rex

Residential:

Yes

Commercial:

Yes

Service Type:

Dropoff and buy-back sites

Light Recycle Participant:

Yes

Hours:

Hours: Mon-Sat 8 am - 7 pm, Sun 9-6

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

RITE AID 6722 (Continued)

S117450608

Comments: Not reported

ALLSITES:

Facility Name: RITE AID 6722
Facility Id: 8351

Interaction: 111290
Interaction 1: A
Interaction 2: HWG
Ecology Program: HAZWASTE
Program Data: TURBOWASTE
Facility Alt.: Rite Aid 6722
Program ID: WAH000048271
Date Interaction: 2015-01-15 00:00:00
Date Interaction 3: Hazardous Waste Generator
Latitude: 48.010425537000003
Longitude: -122.529117947

WA MANIFEST:

Facility Site ID Number: 8351
EPA ID: WAH000048271
NAICS: 446110
SWC Desc: WT02,WP01
FWC Desc: D001,D002,D007,D009,D010,D011,D024,D026,P001,P075
Form Comm: Not reported
Data Year: 2015
Permit by Rule: False
Treatment by Generator: False
Mixed radioactive waste: False
Importer of hazardous waste: False
Immediate recycler: False
Treatment/Storage/Disposal/Recycling Facility: False
Generator of dangerous fuel waste: False
Generator marketing to burner: False
Other marketers (i.e., blender, distributor, etc.): False
Utility boiler burner: False
Industry boiler burner: False
Industrial Furnace: False
Smelter defferal: False
Universal waste - batteries - generate: False
Universal waste - thermostats - generate: False
Universal waste - mercury - generate: False
Universal waste - lamps - generate: False
Universal waste - batteries - accumulate: False
Universal waste - thermostats - accumulate: False
Universal waste - mercury - accumulate: False
Universal waste - lamps - accumulate: False
Destination Facility for Universal Waste: False
Off-specification used oil burner - utility boiler: False
Off-specification used oil burner - industrial boiler: False
Off-specification used oil burner - industrial furnace: False
Tax Reg #: 601637571
Business Type: Retail pharmacy
Mail Name: Rite Aid Corporation, Attn EH&S
Mail addr line1: 30 Hunter Ln

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

RITE AID 6722 (Continued)

S117450608

Mail city,st,zip: Camp Hill, PA 17011
Mail country: UNITED STATES
Legal org name: Thrifty Payless Inc
Legal org type: Private
Legal addr line1: 30 Hunter Ln
Legal city,st,zip: Camp Hill, PA 17011
Legal country: UNITED STATES
Legal phone nbr: (717)761-2633
Legal effective date: 01/17/2015
Land org name: Rite Aid Corporation
Land org type: Private
Land person name: Not reported
Land addr line1: 30 Hunter Ln
Land city,st,zip: Camp Hill, PA 17011
Land country: UNITED STATES
Land phone nbr: (717)761-2633
Operator org name: Rite Aid Corporation
Operator org type: Private
Operator addr line1: 30 Hunter Ln
Operator city,st,zip: Camp Hill, PA 17011
Operator country: UNITED STATES
Operator phone nbr: (717)761-2633
Operator effective date: 01/17/2015
Site contact name: Stephanie Caiati
Site contact addr line1: 30 Hunter Ln
Site Contact City/State/ Zip: Camp Hill, PA 17011
Site Contact Country: UNITED STATES
Site Contact Phone #: (717)761-2633
Site Contact EMail: sscaiati@riteaid.com
Form Contact NAME: Amanda Patrick
Form Contact ADDR LINE1: 30 Hunter Ln
Form Contact City,ST,Zip: Camp Hill, PA 17011
Form Contact Country: UNITED STATES
Form Contact Phone #: (717)761-2633
Form Contact EMail: apatrick@riteaid.com
Gen Status CD: SQG
Monthly Generation: True
Batch Generation: False
One Time Generation: False
Transport Own Waste: False
Tranports Other Waste: False
Recycler Onsite: False
Transfer Facility: False
Other Exemption: Not reported
UW Battery Gen: False
Used Oil Transporter: False
Used Oil Transfer Facility: False
Used Oil Processor: False
Used Oil Refiner: False
Used Oil Fuel Marketer Directs Shipments: False
Used Oil Fuel Marketer Meets Specs: False

Facility Site ID Number: 8351
EPA ID: WAH000048271
NAICS: 446110
SWC Desc: WP01,WT02,WSC2

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

RITE AID 6722 (Continued)

S117450608

FWC Desc: D001,D002,D007,D009,D010,D011,D024,D026,P001,P075
Form Comm: as a component of reporting
Data Year: 2016
Permit by Rule: False
Treatment by Generator: False
Mixed radioactive waste: False
Importer of hazardous waste: False
Immediate recycler: False
Treatment/Storage/Disposal/Recycling Facility: False
Generator of dangerous fuel waste: False
Generator marketing to burner: False
Other marketers (i.e., blender, distributor, etc.): False
Utility boiler burner: False
Industry boiler burner: False
Industrial Furnace: False
Smelter deferral: False
Universal waste - batteries - generate: False
Universal waste - thermostats - generate: False
Universal waste - mercury - generate: False
Universal waste - lamps - generate: False
Universal waste - batteries - accumulate: False
Universal waste - thermostats - accumulate: False
Universal waste - mercury - accumulate: False
Universal waste - lamps - accumulate: False
Destination Facility for Universal Waste: False
Off-specification used oil burner - utility boiler: False
Off-specification used oil burner - industrial boiler: False
Off-specification used oil burner - industrial furnace: False
Tax Reg #: 601637571
Business Type: Retail pharmacy
Mail Name: Rite Aid Corporation, Attn EH&S
Mail addr line1: 30 Hunter Ln
Mail city,st,zip: Camp Hill, PA 17011
Mail country: UNITED STATES
Legal org name: Thrifty Payless Inc
Legal org type: Private
Legal addr line1: 30 Hunter Ln
Legal city,st,zip: Camp Hill, PA 17011
Legal country: UNITED STATES
Legal phone nbr: (717)761-2633
Legal effective date: 01/17/2015
Land org name: Isle West Properties LLC
Land org type: Private
Land person name: John Kingma
Land addr line1: PO Box 726
Land city,st,zip: Oak Harbro, WA 98277
Land country: UNITED STATES
Land phone nbr: (717)975-8463
Operator org name: Rite Aid Corporation
Operator org type: Private
Operator addr line1: 30 Hunter Ln
Operator city,st,zip: Camp Hill, PA 17011
Operator country: UNITED STATES
Operator phone nbr: (717)761-2633
Operator effective date: 01/17/2015
Site contact name: Store Manager
Site contact addr line1: 1609 E Main Street

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

RITE AID 6722 (Continued)

S117450608

Site Contact City/State/ Zip: Freeland, WA 98249
Site Contact Country: UNITED STATES
Site Contact Phone #: 360-331-4700
Site Contact EMail: Not reported
Form Contact NAME: David W Crozier
Form Contact ADDR LINE1: 30 Hunter Ln
Form Contact City,ST,Zip: Camp Hill, PA 17011
Form Contact Country: UNITED STATES
Form Contact Phone #: 717-975-8643
Form Contact EMail: EHS@riteaid.com
Gen Status CD: SQG
Monthly Generation: True
Batch Generation: False
One Time Generation: False
Transport Own Waste: False
Tranports Other Waste: False
Recycler Onsite: False
Transfer Facility: False
Other Exemption: Not reported
UW Battery Gen: False
Used Oil Transporter: False
Used Oil Transfer Facility: False
Used Oil Processor: False
Used Oil Refiner: False
Used Oil Fuel Marketer Directs Shipments: False
Used Oil Fuel Marketer Meets Specs: False

C25
West
1/8-1/4
0.161 mi.
852 ft.

1609 E MAIN ST
FREELAND, WA 98249
Site 2 of 2 in cluster C

RCRA-CESQG 1017789786
WAH000048271

Relative:
Lower

RCRA-CESQG:

Actual:
99 ft.

Date form received by agency: 08/03/2016
Facility name: Not reported
Facility address: 1609 E MAIN ST
FREELAND, WA 98249
EPA ID: WAH000048271
Mailing address: 30 HUNTER LN
CAMP HILL, PA 17011
Contact: DAVID CROZIER
Contact address: 30 HUNTER LN
CAMP HILL, PA 17011
Contact country: US
Contact telephone: 717-975-8643
Contact email: EHS@RITEAID.COM
EPA Region: Not reported
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

1017789786

from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: RITE AID CORPORTATION
Owner/operator address: 30 HUNTER LN
CAMP HILL, PA 17011
Owner/operator country: US
Owner/operator telephone: (717)761-2633
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: RITE AID CORPORTATION
Owner/operator address: 30 HUNTER LN
CAMP HILL, PA 17011
Owner/operator country: US
Owner/operator telephone: (717)761-2633
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D009
. Waste name: MERCURY

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

1017789786

- . Waste code: D010
- . Waste name: SELENIUM

- . Waste code: D011
- . Waste name: SILVER

- . Waste code: D022
- . Waste name: CHLOROFORM

- . Waste code: D024
- . Waste name: M-CRESOL

- . Waste code: D026
- . Waste name: CRESOL

- . Waste code: P001
- . Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

- . Waste code: P075
- . Waste name: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-(S)-, & SALTS

- . Waste code: U044
- . Waste name: CHLOROFORM (OR) METHANE, TRICHLORO-

- . Waste code: WP01
- . Waste name: Washington State Extremely Hazardous Persistent Waste containing Halogenated Organic Compounds (HOC) at a total concentration level of Greater than 1.0%.

- . Waste code: WT02
- . Waste name: Washington State Dangerous Toxic Waste with a toxic constituents concentration greater than or equal to 0.001% and less than 1.0%, determined by biological testing methods or a book designation procedure.

Historical Generators:

- Date form received by agency: 01/15/2015
- Site name: RITE AID 6722
- Classification: Conditionally Exempt Small Quantity Generator
- . Waste code: D001
 - . Waste name: IGNITABLE WASTE

 - . Waste code: D002
 - . Waste name: CORROSIVE WASTE

 - . Waste code: D007
 - . Waste name: CHROMIUM

 - . Waste code: D009
 - . Waste name: MERCURY

 - . Waste code: D010
 - . Waste name: SELENIUM

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

1017789786

- . Waste code: D011
- . Waste name: SILVER

- . Waste code: D024
- . Waste name: M-CRESOL

- . Waste code: D026
- . Waste name: CRESOL

- . Waste code: P001
- . Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

- . Waste code: P075
- . Waste name: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-(S)-, & SALTS

- . Waste code: WP01
- . Waste name: Washington State Extremely Hazardous Persistent Waste containing Halogenated Organic Compounds (HOC) at a total concentration level of Greater than 1.0%.

- . Waste code: WT02
- . Waste name: Washington State Dangerous Toxic Waste with a toxic constituents concentration greater than or equal to 0.001% and less than 1.0%, determined by biological testing methods or a book designation procedure.

Violation Status: No violations found

26
ESE
1/8-1/4
0.184 mi.
970 ft.

PUGET SOUND ENERGY
1794 MAIN STREET
FREELAND, WA 98249

SWRCY S111416142
N/A

Relative:
Higher

Actual:
120 ft.

SWRCY:
Service: South Whidbey Customer Service Office
Phone: 360-331-3060
Extension: Not reported
Website: <https://pse.com/inyourcommunity/Pages/default.aspx>
Email: Not reported
Material Category: Light Bulbs
Material Accepted: CFLs only
Contact Name: Not reported
Residential: Yes
Commercial: No
Service Type: Dropoff and buy-back sites
Light Recycle Participant: No
Hours: Mon - Fri 9am - 5pm
Comments: Does not take fluorescent tubes; only compact fluorescent bulbs (CFLs). Puget Sound Energy is offering free recycling of CFL bulbs to all employees and customers. Simply place your used CFL bulbs in the labeled bins during normal business hours. Takes twist shaped bulbs, reflector style bulbs, globe/vanity style bulbs, A-line style bulbs, flux illumineux or U-shaped bulbs.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

27
ENE
1/8-1/4
0.214 mi.
1129 ft.

AMERIGAS VILLAGE AT MAPLE RIDGE
1967 ALLIANCE AVE
FREELAND, WA 98249

ALLSITES **S115348349**
N/A

Relative:
Lower

ALLSITES:

Facility Name: AMERIGAS VILLAGE AT MAPLE RIDGE
Facility Id: 1746

Actual:
118 ft.

Interaction: 107106
Interaction 1: A
Interaction 2: TIER2
Ecology Program: HAZWASTE
Program Data: EPCRA
Facility Alt.: AMERIGAS VILLAGE AT MAPLE RIDGE
Program ID: CRK000082710
Date Interaction: 2014-01-24 00:00:00
Date Interaction 3: Emergency/Haz Chem Rpt TI
Latitude: 48.011236312999998
Longitude: -122.518812169

28
West
1/4-1/2
0.282 mi.
1491 ft.

SKAGIT FARMERS SUPPLY FREELAND
1584 E MAIN ST
FREELAND, WA 98249

ALLSITES **1007069635**
FINDS **N/A**

Relative:
Lower

ALLSITES:

Facility Name: SKAGIT FARMERS SUPPLY FREELAND
Facility Id: 51128753

Actual:
56 ft.

Interaction: 48429
Interaction 1: A
Interaction 2: TIER2
Ecology Program: HAZWASTE
Program Data: EPCRA
Facility Alt.: Not reported
Program ID: CRK000032410
Date Interaction: 1992-01-01 00:00:00
Date Interaction 3: Emergency/Haz Chem Rpt TI
Latitude: 48.019994384
Longitude: -122.539984973

FINDS:

Registry ID: 110015462373

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SKAGIT FARMERS SUPPLY FREELAND (Continued)

1007069635

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

D29
WSW
1/4-1/2
0.339 mi.
1791 ft.
NORTHERN ENERGY FREELAND
1518 SR 525
FREELAND, WA 98249
Site 1 of 3 in cluster D

ALLSITES
FINDS
1007068675
N/A

Relative:
Lower

ALLSITES:

Facility Name: NORTHERN ENERGY FREELAND
Facility Id: 55874738

Actual:
57 ft.

Interaction: 51808
Interaction 1: A
Interaction 2: TIER2
Ecology Program: HAZWASTE
Program Data: EPCRA
Facility Alt.: Not reported
Program ID: CRK000043410
Date Interaction: 1996-01-01 00:00:00
Date Interaction 3: Emergency/Haz Chem Rpt TI
Latitude: 48.019994384
Longitude: -122.539984973

FINDS:

Registry ID: 110015452758

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

D30
WSW
1/4-1/2
0.344 mi.
1814 ft.
RAY & DELORES LAFAYETTE
326 S MAIN ST
FREELAND, WA 98249
Site 2 of 3 in cluster D

UST
ALLSITES
U000594389
N/A

Relative:
Lower

UST:

Facility ID: 75879898
Site Id: 10260
UBI: Not reported
Phone Number: Not reported
Decimal Latitude: 48.034054
Decimal Longitude: -122.601497

Actual:
57 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

RAY & DELORES LAFAYETTE (Continued)

U000594389

Tank Name: 1
Tag Number: Not reported
Tank Status: Removed
Tank Status Date: 08/06/1996
Tank Install Date: 00/31/1964
Tank Closure Date: Not reported
Capacity Range: Not reported
Tank Permit Expiration Date: 06/20/1992
Tank Upgrade Date: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Steel
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Tank Manifold: Not reported
Tank Release Detection: Not reported
Tank SFC Type: Not reported
Pipe Material: Not reported
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Pipe Pumping System: Not reported
Responsible Unit: NORTHWEST
Dispenser/Pump SFC Type: Not reported

ALLSITES:

Facility Name: LAFAYETTE RAY & DELORES
Facility Id: 75879898

Interaction: 63157
Interaction 1: I
Interaction 2: UST
Ecology Program: TOXICS
Program Data: UST
Facility Alt.: Not reported
Program ID: 10260
Date Interaction: 1998-06-08 00:00:00
Date Interaction 3: Underground Storage Tank
Latitude: 48.034048390000002
Longitude: -122.601481959

D31
WSW
1/4-1/2
0.376 mi.
1985 ft.
FREELAND SHELL STATION
5618 FISH RD
FREELAND, WA 98249
Site 3 of 3 in cluster D

ALLSITES
Financial Assurance
MANIFEST
S108022928
N/A

Relative:
Lower
Actual:
57 ft.
ALLSITES:
Facility Name: FREELAND SHELL STATION
Facility Id: 6999163
Interaction: 19986
Interaction 1: A
Interaction 2: UST

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FREELAND SHELL STATION (Continued)

S108022928

Ecology Program: TOXICS
Program Data: UST
Facility Alt.: FREELAND SERVICE CENTER
Program ID: 617036
Date Interaction: 2003-03-05 00:00:00
Date Interaction 3: Underground Storage Tank
Latitude: 48.000130384000002
Longitude: -122.516915981

Interaction: 19987
Interaction 1: I
Interaction 2: HWG
Ecology Program: HAZWASTE
Program Data: TURBOWASTE
Facility Alt.: Freeland Lube Center
Program ID: WAH000033404
Date Interaction: 2008-08-06 00:00:00
Date Interaction 3: Hazardous Waste Generator
Latitude: 48.000130384000002
Longitude: -122.516915981

WA Financial Assurance 1:

DOE Site ID: 617036
Site Type: PLIA
Financial Resp Type: Colony (GUS)
Inception Date: 02/26/2011
Expiration Date: 02/26/2012

WA MANIFEST:

Facility Site ID Number: 6999163
EPA ID: WAH000033404
NAICS: 811191
SWC Desc: Not reported
FWC Desc: Not reported
Form Comm: Not reported
Data Year: 2010
Permit by Rule: False
Treatment by Generator: False
Mixed radioactive waste: False
Importer of hazardous waste: False
Immediate recycler: False
Treatment/Storage/Disposal/Recycling Facility: False
Generator of dangerous fuel waste: False
Generator marketing to burner: False
Other marketers (i.e., blender, distributor, etc.): False
Utility boiler burner: False
Industry boiler burner: False
Industrial Furnace: False
Smelter defferal: False
Universal waste - batteries - generate: False
Universal waste - thermostats - generate: False
Universal waste - mercury - generate: False
Universal waste - lamps - generate: False
Universal waste - batteries - accumulate: False

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FREELAND SHELL STATION (Continued)

S108022928

Universal waste - thermostats - accumulate: False
Universal waste - mercury - accumulate: False
Universal waste - lamps - accumulate: False
Destination Facility for Universal Waste: False
Off-specification used oil burner - utility boiler: False
Off-specification used oil burner - industrial boiler: False
Off-specification used oil burner - industrial furnace: False
Tax Reg #: 602979387
Business Type: Oil Change
Mail Name: The Myers Group
Mail addr line1: PO Box 1170
Mail city,st,zip: Clinton, WA 98236
Mail country: UNITED STATES
Legal org name: Aook Corner Properties LLC
Legal org type: Private
Legal addr line1: PO Box 1170
Legal city,st,zip: Clinton, WA 98236
Legal country: UNITED STATES
Legal phone nbr: (360)321-5690
Legal effective date: 03/01/2008
Land org name: Aook Corner Properties LLC
Land org type: Private
Land person name: Not reported
Land addr line1: PO Box 1170
Land city,st,zip: Clinton, WA 98236
Land country: UNITED STATES
Land phone nbr: (360)321-5690
Operator org name: Freeland Lube Center
Operator org type: Private
Operator addr line1: 5618 Fish Rd
Operator city,st,zip: Freeland, WA 98249
Operator country: UNITED STATES
Operator phone nbr: (000)000-0000
Operator effective date: Not reported
Site contact name: Cindy Rowley
Site contact addr line1: PO Box 1170
Site Contact City/State/ Zip: Clinton, WA 98236
Site Contact Country: UNITED STATES
Site Contact Phone #: (360)331-3588
Site Contact EMail: Not reported
Form Contact NAME: John W Albertsen
Form Contact ADDR LINE1: PO Box 1170
Form Contact City,ST,Zip: Clinton, WA 98236
Form Contact Country: UNITED STATES
Form Contact Phone #: (360)321-5692
Form Contact EMail: bayview@whidbey.com
Gen Status CD: SQG
Monthly Generation: True
Batch Generation: False
One Time Generation: False
Transport Own Waste: False
Tranports Other Waste: False
Recycler Onsite: False
Transfer Facility: False
Other Exemption: Not reported
UW Battery Gen: False
Used Oil Transporter: False

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FREELAND SHELL STATION (Continued)

S108022928

Used Oil Transfer Facility: False
Used Oil Processor: False
Used Oil Refiner: False
Used Oil Fuel Marketer Directs Shipments: True
Used Oil Fuel Marketer Meets Specs: True

Facility Site ID Number: 6999163
EPA ID: WAH000033404
NAICS: 811191
SWC Desc: Not reported
FWC Desc: Not reported
Form Comm: Not reported
Data Year: 2008
Permit by Rule: False
Treatment by Generator: False
Mixed radioactive waste: False
Importer of hazardous waste: False
Immediate recycler: False
Treatment/Storage/Disposal/Recycling Facility: False
Generator of dangerous fuel waste: False
Generator marketing to burner: False
Other marketers (i.e., blender, distributor, etc.): False
Utility boiler burner: False
Industry boiler burner: False
Industrial Furnace: False
Smelter deferral: False
Universal waste - batteries - generate: False
Universal waste - thermostats - generate: False
Universal waste - mercury - generate: False
Universal waste - lamps - generate: False
Universal waste - batteries - accumulate: False
Universal waste - thermostats - accumulate: False
Universal waste - mercury - accumulate: False
Universal waste - lamps - accumulate: False
Destination Facility for Universal Waste: False
Off-specification used oil burner - utility boiler: False
Off-specification used oil burner - industrial boiler: False
Off-specification used oil burner - industrial furnace: False
Tax Reg #: 602979387
Business Type: Oil Change
Mail Name: The Myers Group
Mail addr line1: PO Box 1170
Mail city,st,zip: Clinton, WA 98236
Mail country: UNITED STATES
Legal org name: Aook Corner Properties LLC
Legal org type: Private
Legal addr line1: PO Box 1170
Legal city,st,zip: Clinton, WA 98236
Legal country: UNITED STATES
Legal phone nbr: (360)321-5690
Legal effective date: 03/01/2008
Land org name: Aook Corner Properties LLC
Land org type: Private
Land person name: Not reported
Land addr line1: PO Box 1170
Land city,st,zip: Clinton, WA 98236

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FREELAND SHELL STATION (Continued)

S108022928

Land country: UNITED STATES
Land phone nbr: (360)321-5690
Operator org name: Freeland Lube Center
Operator org type: Private
Operator addr line1: 5618 Fish Rd
Operator city,st,zip: Freeland, WA 98249
Operator country: UNITED STATES
Operator phone nbr: (000)000-0000
Operator effective date: Not reported
Site contact name: Cindy Rowley
Site contact addr line1: PO Box 1170
Site Contact City/State/ Zip: Clinton, WA 98236
Site Contact Country: UNITED STATES
Site Contact Phone #: (360)331-3588
Site Contact EMail: Not reported
Form Contact NAME: John W Albertsen
Form Contact ADDR LINE1: PO Box 1170
Form Contact City,ST,Zip: Clinton, WA 98236
Form Contact Country: UNITED STATES
Form Contact Phone #: (360)321-5692
Form Contact EMail: bayview@whidbey.com
Gen Status CD: SQG
Monthly Generation: True
Batch Generation: False
One Time Generation: False
Transport Own Waste: False
Tranports Other Waste: False
Recycler Onsite: False
Transfer Facility: False
Other Exemption: Not reported
UW Battery Gen: False
Used Oil Transporter: False
Used Oil Transfer Facility: False
Used Oil Processor: False
Used Oil Refiner: False
Used Oil Fuel Marketer Directs Shipments: True
Used Oil Fuel Marketer Meets Specs: True

32
South
1/4-1/2
0.384 mi.
2027 ft.

SUNNY VIEW VILLAGE
1667 SCENIC AVE
FREELAND, WA 98249

ALLSITES S116505731
N/A

Relative:
Higher

ALLSITES:
Facility Name: SUNNY VIEW VILLAGE
Facility Id: 15145

Actual:
154 ft.

Interaction: 107925
Interaction 1: A
Interaction 2: CONSTSWGP
Ecology Program: WATQUAL
Program Data: PARIS
Facility Alt.: Sunny View Village
Program ID: WAR301716
Date Interaction: 2014-03-03 00:00:00
Date Interaction 3: Construction SW GP

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUNNY VIEW VILLAGE (Continued)

S116505731

Latitude: 48.004086516000001
Longitude: -122.528834047

33
SSE
1/4-1/2
0.397 mi.
2098 ft.

VERIZON WIRELESS FREELAND
1730 SCENIC AVE
FREELAND, WA 98249

ALLSITES **1011932168**
FINDS **N/A**

Relative:
Higher

ALLSITES:
Facility Name: VERIZON WIRELESS FREELAND
Facility Id: 4023143

Actual:
248 ft.

Interaction: 13897
Interaction 1: A
Interaction 2: TIER2
Ecology Program: HAZWASTE
Program Data: EPCRA
Facility Alt.: Not reported
Program ID: CRK000069550
Date Interaction: 2008-01-01 00:00:00
Date Interaction 3: Emergency/Haz Chem Rpt TI
Latitude: 48.004093382999997
Longitude: -122.52342697900001

FINDS:

Registry ID: 110037547722

Environmental Interest/Information System

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[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

E34
West
1/4-1/2
0.479 mi.
2531 ft.

SHORT STOP FREELAND
1504 E HWY 525
FREELAND, WA 98249
Site 1 of 2 in cluster E

CSCSL **1007069398**
LUST **N/A**
UST
ALLSITES
FINDS

Relative:
Lower

CSCSL:
Facility ID: 52297857
Region: Northwest
Lat/Long: 48.009806 / -122.534528
Brownfield Status: Not reported
Rank Status: N
Clean Up Siteid: 11976

Actual:
66 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SHORT STOP FREELAND (Continued)

1007069398

Site Status: Awaiting Cleanup
PSI?: Yes
Contaminant Name: Petroleum-Gasoline
Ground Water: Not reported
Surface Water: Not reported
Soil: Confirmed Above Cleanup Level
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Northwest

LUST:

Facility ID: 52297857
Lust Status Type: Awaiting Cleanup
Cleanup Site ID: 11976
Cleanup Unit Type: Upland
Process Type: Independent Action
Cleanup Unit Name: SHORT STOP FREELAND
Lust Status Date: 05/18/2011
Response Section: Northwest
Lat/Long: 48.009806 / -122.53452

UST:

Facility ID: 52297857
Site Id: 101097
UBI: Not reported
Phone Number: Not reported
Decimal Latitude: 48.009806
Decimal Longitude: -122.534528

Tank Name: 1
Tag Number: A1289
Tank Status: Operational
Tank Status Date: 08/06/1996
Tank Install Date: 00/01/1989
Tank Closure Date: Not reported
Capacity Range: 5,000 to 9,999 Gallons
Tank Permit Expiration Date: 07/31/2017
Tank Upgrade Date: 09/02/1998
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Ball Float Valve (vent line)
Tank Material: Dielectric Coated Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Corrosion Resistant
Tank Manifold: Not reported
Tank Release Detection: Automatic Tank Gauging
Tank SFC Type: Not reported
Pipe Material: Fiberglass
Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Automatic Line Leak Detector (ALLD)
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Corrosion Resistant
Pipe Pumping System: Pressurized System
Responsible Unit: NORTHWEST
Dispenser/Pump SFC Type: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SHORT STOP FREELAND (Continued)

1007069398

Tank Name: 2
Tag Number: A1289
Tank Status: Operational
Tank Status Date: 08/06/1996
Tank Install Date: 00/01/1989
Tank Closure Date: Not reported
Capacity Range: 5,000 to 9,999 Gallons
Tank Permit Expiration Date: 07/31/2017
Tank Upgrade Date: 09/02/1998
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Ball Float Valve (vent line)
Tank Material: Dielectric Coated Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Corrosion Resistant
Tank Manifold: Not reported
Tank Release Detection: Automatic Tank Gauging
Tank SFC Type: Not reported
Pipe Material: Fiberglass
Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Automatic Line Leak Detector (ALLD)
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Corrosion Resistant
Pipe Pumping System: Pressurized System
Responsible Unit: NORTHWEST
Dispencer/Pump SFC Type: Not reported

Tank Name: 3
Tag Number: A1289
Tank Status: Operational
Tank Status Date: 08/06/1996
Tank Install Date: 00/01/1989
Tank Closure Date: Not reported
Capacity Range: 5,000 to 9,999 Gallons
Tank Permit Expiration Date: 07/31/2017
Tank Upgrade Date: 09/02/1998
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Ball Float Valve (vent line)
Tank Material: Dielectric Coated Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Corrosion Resistant
Tank Manifold: Not reported
Tank Release Detection: Automatic Tank Gauging
Tank SFC Type: Not reported
Pipe Material: Fiberglass
Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Automatic Line Leak Detector (ALLD)
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Corrosion Resistant
Pipe Pumping System: Pressurized System
Responsible Unit: NORTHWEST
Dispencer/Pump SFC Type: Not reported

Tank Name: 4

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SHORT STOP FREELAND (Continued)

1007069398

Tag Number: A1289
Tank Status: Operational
Tank Status Date: 09/29/1996
Tank Install Date: 00/01/1996
Tank Closure Date: Not reported
Capacity Range: 10,000 to 19,999 Gallons
Tank Permit Expiration Date: 07/31/2017
Tank Upgrade Date: 09/02/1998
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Ball Float Valve (vent line)
Tank Material: Dielectric Coated Steel
Tank Construction: Double Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Corrosion Resistant
Tank Manifold: Not reported
Tank Release Detection: Automatic Tank Gauging
Tank SFC Type: Not reported
Pipe Material: Fiberglass
Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Automatic Line Leak Detector (ALLD)
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Corrosion Resistant
Pipe Pumping System: Pressurized System
Responsible Unit: NORTHWEST
Dispenser/Pump SFC Type: Not reported

ALLSITES:

Facility Name: SHORT STOP FREELAND
Facility Id: 52297857

Interaction: 102581
Interaction 1: A
Interaction 2: LUST
Ecology Program: TOXICS
Program Data: ISIS
Facility Alt.: SHORT STOP FREELAND
Program ID: 101097
Date Interaction: 2012-01-31 00:00:00
Date Interaction 3: LUST Facility
Latitude: 48.009800384000002
Longitude: -122.534512976

Interaction: 102919
Interaction 1: A
Interaction 2: SCS
Ecology Program: TOXICS
Program Data: ISIS
Facility Alt.: SHORT STOP FREELAND
Program ID: Not reported
Date Interaction: 2012-01-06 00:00:00
Date Interaction 3: State Cleanup Site
Latitude: 48.009800384000002
Longitude: -122.534512976

Interaction: 49260

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SHORT STOP FREELAND (Continued)

1007069398

Interaction 1: A
Interaction 2: UST
Ecology Program: TOXICS
Program Data: UST
Facility Alt.: Not reported
Program ID: 101097
Date Interaction: 1989-06-01 00:00:00
Date Interaction 3: Underground Storage Tank
Latitude: 48.009800384000002
Longitude: -122.534512976

FINDS:

Registry ID: 110015459993

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

E35
West
1/4-1/2
0.479 mi.
2531 ft.

TEXACO FREELAND
18205 SR 525
FREELAND, WA 98249

ALLSITES
FINDS
Financial Assurance

1011267157
N/A

Site 2 of 2 in cluster E

Relative:
Lower

ALLSITES:
Facility Name: TEXACO FREELAND
Facility Id: 4671872

Actual:
66 ft.

Interaction: 15201
Interaction 1: A
Interaction 2: ENFORFNL
Ecology Program: TOXICS
Program Data: DMS
Facility Alt.: Not reported
Program ID: Not reported
Date Interaction: 2006-06-29 00:00:00
Date Interaction 3: Enforcement Final
Latitude: 48.008836381000002
Longitude: -122.50744998

FINDS:

Registry ID: 110036124967

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TEXACO FREELAND (Continued)

1011267157

means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

WA Financial Assurance 1:

DOE Site ID:	101097
Site Type:	PLIA
Financial Resp Type:	Colony (GUS)
Inception Date:	06/20/2011
Expiration Date:	06/20/2012

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NO SITES FOUND					

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/05/2017	Source: EPA
Date Data Arrived at EDR: 04/21/2017	Telephone: N/A
Date Made Active in Reports: 05/12/2017	Last EDR Contact: 06/08/2017
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/17/2017
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/05/2017	Source: EPA
Date Data Arrived at EDR: 04/21/2017	Telephone: N/A
Date Made Active in Reports: 05/12/2017	Last EDR Contact: 06/09/2017
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/17/2017
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/05/2017	Source: EPA
Date Data Arrived at EDR: 04/21/2017	Telephone: N/A
Date Made Active in Reports: 05/12/2017	Last EDR Contact: 06/09/2017
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/17/2017
	Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/05/2017	Telephone: 703-603-8704
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 04/07/2017
Number of Days to Update: 92	Next Scheduled EDR Contact: 07/17/2017
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/07/2017	Source: EPA
Date Data Arrived at EDR: 04/19/2017	Telephone: 800-424-9346
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 06/08/2017
Number of Days to Update: 16	Next Scheduled EDR Contact: 07/31/2017
	Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 02/07/2017	Source: EPA
Date Data Arrived at EDR: 04/19/2017	Telephone: 800-424-9346
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 06/08/2017
Number of Days to Update: 16	Next Scheduled EDR Contact: 07/31/2017
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/12/2016	Source: EPA
Date Data Arrived at EDR: 12/28/2016	Telephone: 800-424-9346
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 06/29/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/12/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/28/2016	Telephone: (206) 553-1200
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 06/29/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/28/2016	Telephone: (206) 553-1200
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 06/29/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/12/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/28/2016	Telephone: (206) 553-1200
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 06/29/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/28/2016	Telephone: (206) 553-1200
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 06/29/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/28/2016	Source: Department of the Navy
Date Data Arrived at EDR: 01/04/2017	Telephone: 843-820-7326
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 05/15/2017
Number of Days to Update: 93	Next Scheduled EDR Contact: 08/28/2017
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/28/2017	Telephone: 703-603-0695
Date Made Active in Reports: 06/09/2017	Last EDR Contact: 05/31/2017
Number of Days to Update: 101	Next Scheduled EDR Contact: 09/11/2017
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/28/2017	Telephone: 703-603-0695
Date Made Active in Reports: 06/09/2017	Last EDR Contact: 05/31/2017
Number of Days to Update: 101	Next Scheduled EDR Contact: 09/11/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 43

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/28/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

State- and tribal - equivalent NPL

HSL: Hazardous Sites List

The Hazardous Sites List is a subset of the CSCSL Report. It includes sites which have been assessed and ranked using the Washington Ranking Method (WARM).

Date of Government Version: 02/21/2017
Date Data Arrived at EDR: 03/09/2017
Date Made Active in Reports: 06/02/2017
Number of Days to Update: 85

Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 06/06/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

State- and tribal - equivalent CERCLIS

CSCSL: Confirmed and Suspected Contaminated Sites List

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 04/18/2017
Date Data Arrived at EDR: 04/20/2017
Date Made Active in Reports: 06/02/2017
Number of Days to Update: 43

Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 04/20/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facility Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 06/02/2017
Number of Days to Update: 73

Source: Department of Ecology
Telephone: 360-407-6132
Last EDR Contact: 06/05/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Annually

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tanks Site List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 05/16/2017
Date Data Arrived at EDR: 05/19/2017
Date Made Active in Reports: 06/02/2017
Number of Days to Update: 14

Source: Department of Ecology
Telephone: 360-407-7183
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/26/2017	Telephone: 206-553-2857
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/06/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/26/2017	Telephone: 415-972-3372
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/01/2016	Source: EPA Region 7
Date Data Arrived at EDR: 01/26/2017	Telephone: 913-551-7003
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/01/2016	Source: EPA Region 6
Date Data Arrived at EDR: 01/26/2017	Telephone: 214-665-6597
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016	Source: EPA Region 4
Date Data Arrived at EDR: 01/27/2017	Telephone: 404-562-8677
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 11/14/2016	Source: EPA Region 1
Date Data Arrived at EDR: 01/26/2017	Telephone: 617-918-1313
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/14/2016	Source: EPA, Region 5
Date Data Arrived at EDR: 01/26/2017	Telephone: 312-886-7439
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/11/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

UST: Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 01/31/2017
Date Data Arrived at EDR: 02/02/2017
Date Made Active in Reports: 03/20/2017
Number of Days to Update: 46

Source: Department of Ecology
Telephone: 360-407-7183
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

AST: Aboveground Storage Tank Locations

A listing of aboveground storage tank locations regulated by the Department of Ecology's Spill Prevention, Preparedness and Response Program.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 02/02/2016
Date Made Active in Reports: 05/03/2016
Number of Days to Update: 91

Source: Department of Ecology
Telephone: 360-407-7562
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/06/2016	Source: EPA Region 9
Date Data Arrived at EDR: 01/26/2017	Telephone: 415-972-3368
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/26/2017	Telephone: 206-553-2857
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016	Source: EPA Region 4
Date Data Arrived at EDR: 01/27/2017	Telephone: 404-562-9424
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Semi-Annually

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/17/2016	Source: EPA Region 8
Date Data Arrived at EDR: 01/26/2017	Telephone: 303-312-6137
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 11/14/2016	Source: EPA, Region 1
Date Data Arrived at EDR: 01/26/2017	Telephone: 617-918-1313
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 01/14/2017	Source: EPA Region 5
Date Data Arrived at EDR: 01/26/2017	Telephone: 312-886-6136
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal institutional control / engineering control registries

INST CONTROL: Institutional Control Site List
Sites that have institutional controls.

Date of Government Version: 04/18/2017	Source: Department of Ecology
Date Data Arrived at EDR: 04/20/2017	Telephone: 360-407-7170
Date Made Active in Reports: 06/02/2017	Last EDR Contact: 04/20/2017
Number of Days to Update: 43	Next Scheduled EDR Contact: 07/31/2017
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 06/27/2017
Number of Days to Update: 142	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Sites
Sites that have entered either the Voluntary Cleanup Program or its predecessor Independent Remedial Action Program.

Date of Government Version: 04/18/2017	Source: Department of Ecology
Date Data Arrived at EDR: 04/20/2017	Telephone: 360-407-7200
Date Made Active in Reports: 06/30/2017	Last EDR Contact: 04/20/2017
Number of Days to Update: 71	Next Scheduled EDR Contact: 07/31/2017
	Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

ICR: Independent Cleanup Reports
These are remedial action reports Ecology has received from either the owner or operator of the sites. These actions have been conducted without department oversight or approval and are not under an order or decree. This database is no longer updated by the Department of Ecology.

Date of Government Version: 12/01/2002	Source: Department of Ecology
Date Data Arrived at EDR: 01/03/2003	Telephone: 360-407-7200
Date Made Active in Reports: 01/22/2003	Last EDR Contact: 08/10/2009
Number of Days to Update: 19	Next Scheduled EDR Contact: 11/09/2009
	Data Release Frequency: No Update Planned

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Sites Listing
A listing of brownfields sites included in the Confirmed & Suspected Sites Listing. Brownfields are abandoned, idle or underused commercial or industrial properties, where the expansion or redevelopment is hindered by real or perceived contamination. Brownfields vary in size, location, age, and past use -- they can be anything from a five-hundred acre automobile assembly plant to a small, abandoned corner gas station.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/18/2017
Date Data Arrived at EDR: 01/20/2017
Date Made Active in Reports: 03/17/2017
Number of Days to Update: 56

Source: Department of Ecology
Telephone: 360-725-4030
Last EDR Contact: 04/18/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/02/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/20/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Facility List

A listing of recycling center locations.

Date of Government Version: 04/26/2017
Date Data Arrived at EDR: 04/27/2017
Date Made Active in Reports: 06/30/2017
Number of Days to Update: 64

Source: Department of Ecology
Telephone: 360-407-6105
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

SWTIRE: Solid Waste Tire Facilities

This study identified sites statewide with unauthorized accumulations of scrap tires.

Date of Government Version: 11/01/2005
Date Data Arrived at EDR: 03/16/2006
Date Made Active in Reports: 04/13/2006
Number of Days to Update: 28

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/09/2017
Date Data Arrived at EDR: 03/08/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 93

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/28/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: No Update Planned

ALLSITES: Facility/Site Identification System Listing

Information on facilities and sites of interest to the Department of Ecology.

Date of Government Version: 05/05/2017
Date Data Arrived at EDR: 05/08/2017
Date Made Active in Reports: 06/02/2017
Number of Days to Update: 25

Source: Department of Ecology
Telephone: 360-407-6423
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

CDL: Clandestine Drug Lab Contaminated Site List

Illegal methamphetamine labs use hazardous chemicals that create public health hazards. Chemicals and residues can cause burns, respiratory and neurological damage, and death. Biological hazards associated with intravenous needles, feces, and blood also pose health risks.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 06/01/2017
Number of Days to Update: 79

Source: Department of Health
Telephone: 360-236-3380
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

HIST CDL: List of Sites Contaminated by Clandestine Drug Labs

This listing of contaminated sites by Clandestine Drug Labs includes non-remediated properties. The current CDL listing does not. This listing is no longer updated by the state agency.

Date of Government Version: 02/08/2007
Date Data Arrived at EDR: 06/26/2007
Date Made Active in Reports: 07/19/2007
Number of Days to Update: 23

Source: Department of Health
Telephone: 360-236-3381
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CSCSL NFA: Confirmed and Contaminated Sites - No Further Action

This report contains information about sites that are undergoing cleanup and sites that are awaiting further investigation and/or cleanup. Sites on the Hazardous Sites List (see above) are included in this data set.

Date of Government Version: 04/18/2017	Source: Department of Ecology
Date Data Arrived at EDR: 04/20/2017	Telephone: 360-407-7170
Date Made Active in Reports: 06/01/2017	Last EDR Contact: 04/20/2017
Number of Days to Update: 42	Next Scheduled EDR Contact: 07/31/2017
	Data Release Frequency: Semi-Annually

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/09/2017	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 03/08/2017	Telephone: 202-307-1000
Date Made Active in Reports: 06/09/2017	Last EDR Contact: 05/31/2017
Number of Days to Update: 93	Next Scheduled EDR Contact: 09/11/2017
	Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/18/2014	Telephone: 202-564-6023
Date Made Active in Reports: 04/24/2014	Last EDR Contact: 06/09/2017
Number of Days to Update: 37	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/28/2016	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 12/28/2016	Telephone: 202-366-4555
Date Made Active in Reports: 02/03/2017	Last EDR Contact: 06/28/2017
Number of Days to Update: 37	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Annually

SPILLS: Reported Spills

Spills reported to the Spill Prevention, Preparedness and Response Division.

Date of Government Version: 03/08/2017	Source: Department of Ecology
Date Data Arrived at EDR: 03/09/2017	Telephone: 360-407-6950
Date Made Active in Reports: 06/05/2017	Last EDR Contact: 06/05/2017
Number of Days to Update: 88	Next Scheduled EDR Contact: 09/18/2017
	Data Release Frequency: Semi-Annually

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/23/2006
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 06/29/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/24/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/26/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/26/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 06/06/2017
Number of Days to Update: 3	Next Scheduled EDR Contact: 08/21/2017
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016	Source: EPA
Date Data Arrived at EDR: 04/28/2016	Telephone: 202-566-0500
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 04/10/2017
Number of Days to Update: 127	Next Scheduled EDR Contact: 07/24/2017
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 04/10/2017
Number of Days to Update: 79	Next Scheduled EDR Contact: 07/24/2017
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/19/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/04/2017
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/19/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/04/2017
	Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 05/08/2017
Number of Days to Update: 43	Next Scheduled EDR Contact: 08/21/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 06/05/2017
Number of Days to Update: 76	Next Scheduled EDR Contact: 09/18/2017
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 06/05/2017
Number of Days to Update: 40	Next Scheduled EDR Contact: 09/18/2017
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 04/28/2017
Number of Days to Update: 83	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/04/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/06/2017	Telephone: 202-343-9775
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 04/06/2017
Number of Days to Update: 35	Next Scheduled EDR Contact: 07/17/2017
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 77

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/26/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust.

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/08/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 38

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/14/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 21

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/04/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 35

Source: EPA
Telephone: (206) 553-1200
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/19/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2017	Telephone: 202-564-2280
Date Made Active in Reports: 05/12/2017	Last EDR Contact: 06/07/2017
Number of Days to Update: 52	Next Scheduled EDR Contact: 09/18/2017
	Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/22/2017	Source: EPA
Date Data Arrived at EDR: 02/22/2017	Telephone: 800-385-6164
Date Made Active in Reports: 05/12/2017	Last EDR Contact: 05/24/2017
Number of Days to Update: 79	Next Scheduled EDR Contact: 09/04/2017
	Data Release Frequency: Quarterly

AIRS (EMI): Washington Emissions Data System Emissions inventory data.

Date of Government Version: 12/31/2016	Source: Department of Ecology
Date Data Arrived at EDR: 01/10/2017	Telephone: 360-407-6040
Date Made Active in Reports: 03/17/2017	Last EDR Contact: 06/19/2017
Number of Days to Update: 66	Next Scheduled EDR Contact: 10/02/2017
	Data Release Frequency: Annually

COAL ASH: Coal Ash Disposal Site Listing A listing of coal ash disposal site locations.

Date of Government Version: 03/13/2017	Source: Department of Ecology
Date Data Arrived at EDR: 03/21/2017	Telephone: 360-407-6933
Date Made Active in Reports: 06/01/2017	Last EDR Contact: 06/05/2017
Number of Days to Update: 72	Next Scheduled EDR Contact: 09/18/2017
	Data Release Frequency: Varies

DRYCLEANERS: Drycleaner List

A listing of registered drycleaners who registered with the Department of Ecology (using the SIC code of 7215 and 7216) as hazardous waste generators.

Date of Government Version: 12/31/2015	Source: Department of Ecology
Date Data Arrived at EDR: 05/06/2016	Telephone: 360-407-6732
Date Made Active in Reports: 07/15/2016	Last EDR Contact: 04/14/2017
Number of Days to Update: 70	Next Scheduled EDR Contact: 07/31/2017
	Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/24/2012	Source: Department of Ecology
Date Data Arrived at EDR: 02/24/2012	Telephone: 360-586-1060
Date Made Active in Reports: 03/27/2012	Last EDR Contact: 05/29/2017
Number of Days to Update: 32	Next Scheduled EDR Contact: 09/11/2017
	Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/14/2017
Date Made Active in Reports: 03/17/2017
Number of Days to Update: 31

Source: Department of Ecology
Telephone: 360-407-6754
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

Financial Assurance 3: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 03/06/2007
Date Made Active in Reports: 04/19/2007
Number of Days to Update: 44

Source: Department of Ecology
Telephone: 360-407-6136
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

INACTIVE DRYCLEANERS: Inactive Drycleaners

A listing of inactive drycleaner facility locations.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 05/06/2016
Date Made Active in Reports: 07/15/2016
Number of Days to Update: 70

Source: Department of Ecology
Telephone: 360-407-6732
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Annually

WA MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/27/2017
Date Made Active in Reports: 06/05/2017
Number of Days to Update: 39

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 06/19/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Annually

NPDES: Water Quality Permit System Data

A listing of permitted wastewater facilities.

Date of Government Version: 04/18/2017
Date Data Arrived at EDR: 04/20/2017
Date Made Active in Reports: 06/05/2017
Number of Days to Update: 46

Source: Department of Ecology
Telephone: 360-407-6073
Last EDR Contact: 04/20/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Quarterly

UIC: Underground Injection Wells Listing

A listing of underground injection wells.

Date of Government Version: 04/18/2017
Date Data Arrived at EDR: 04/20/2017
Date Made Active in Reports: 06/05/2017
Number of Days to Update: 46

Source: Department of Ecology
Telephone: 360-407-6143
Last EDR Contact: 04/20/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Ecology in Washington.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Ecology in Washington.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Ecology in Washington.

Date of Government Version: N/A

Date Data Arrived at EDR: 07/01/2013

Date Made Active in Reports: 12/24/2013

Number of Days to Update: 176

Source: Department of Ecology

Telephone: N/A

Last EDR Contact: 06/01/2012

Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

COUNTY RECORDS

KING COUNTY:

Abandoned Landfill Study in King County

The King County Abandoned Landfill Survey was conducted from October through December 1984 by the Health Department's Environmental Health Division at the request of the King County Council. The primary objective of the survey was to determine if any public health problems existed at the predetermined 24 sites.

Date of Government Version: 04/30/1985

Date Data Arrived at EDR: 11/07/1994

Date Made Active in Reports: N/A

Number of Days to Update: 0

Source: Seattle-King County Department of Public Health

Telephone: 206-296-4785

Last EDR Contact: 10/21/1994

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SEATTLE COUNTY:

Abandoned Landfill Study in the City of Seattle

The Seattle Abandoned Landfill Survey was conducted in June and July of 1984 by the Health Department's Environmental Health Division at the request of the Mayor's Office. The primary objective of the survey was to determine if any public health problems existed at the predetermined 12 sites.

Date of Government Version: 07/30/1984

Date Data Arrived at EDR: 11/07/1994

Date Made Active in Reports: N/A

Number of Days to Update: 0

Source: Seattle - King County Department of Public Health

Telephone: 206-296-4785

Last EDR Contact: 10/21/1994

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SEATTLE/KING COUNTY:

Seattle - King County Abandoned Landfill Toxicity / Hazard Assessment Project

This report presents the Seattle-King County Health Department's follow-up investigation of two city owned and four county owned abandoned landfills which was conducted from February to December 1986.

Date of Government Version: 12/31/1986

Date Data Arrived at EDR: 08/18/1995

Date Made Active in Reports: 09/20/1995

Number of Days to Update: 33

Source: Department of Public Health

Telephone: 206-296-4785

Last EDR Contact: 08/14/1995

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SNOHOMISH COUNTY:

Solid Waste Sites of Record at Snohomish Health District

Solid waste disposal and/or utilization sites in Snohomish County.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/16/2011
Date Data Arrived at EDR: 03/29/2012
Date Made Active in Reports: 05/03/2012
Number of Days to Update: 35

Source: Snohomish Health District
Telephone: 206-339-5250
Last EDR Contact: 06/23/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Semi-Annually

TACOMA/PIERCE COUNTY:

Closed Landfill Survey

Following numerous requests for information about closed dumpsites and landfills in Pierce County, the Tacoma-Pierce County Health Department decided to conduct a study on the matter. The aim of the study was to evaluate public health risks associated with the closed dumpsites and landfills, and to determine the need, if any, for further investigations of a more detailed nature. The sites represent all of the known dumpsites and landfills closed after 1950.

Date of Government Version: 09/01/2002
Date Data Arrived at EDR: 03/24/2003
Date Made Active in Reports: 05/14/2003
Number of Days to Update: 51

Source: Tacoma-Pierce County Health Department
Telephone: 206-591-6500
Last EDR Contact: 03/19/2003
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: No Update Planned

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 02/01/2017
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/03/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 07/22/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 123

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/18/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015

Date Data Arrived at EDR: 04/14/2016

Date Made Active in Reports: 06/03/2016

Number of Days to Update: 50

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 06/12/2017

Next Scheduled EDR Contact: 09/25/2017

Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Daycare Center Listing

Source: Department of Social & Health Services

Telephone: 253-383-1735

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Ecology
Telephone: 360-407-6121

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

WHIDBEY MARINE AND AUTO
1695 MAIN STREET
FREELAND, WA 98249

TARGET PROPERTY COORDINATES

Latitude (North):	48.009908 - 48° 0' 35.67"
Longitude (West):	122.523556 - 122° 31' 24.80"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	535534.9
UTM Y (Meters):	5317292.5
Elevation:	119 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	6005579 FREELAND, WA
Version Date:	2014
Northeast Map:	6005617 LANGLEY, WA
Version Date:	2014
Southeast Map:	6005203 MAXWELTON, WA
Version Date:	2014
South Map:	6005193 HANSVILLE, WA
Version Date:	2014

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

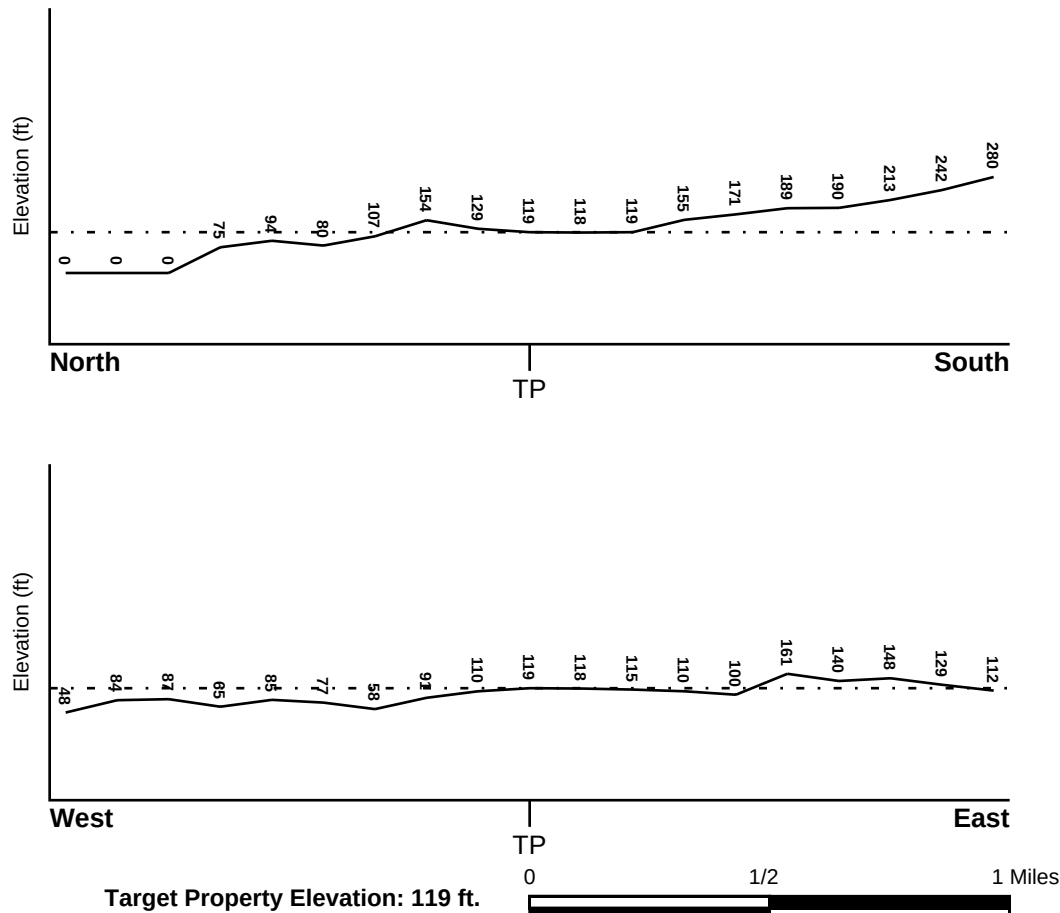
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
53029C0320E	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
53029C0410E	FEMA FIRM Flood data
53035C0050E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
FREELAND	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

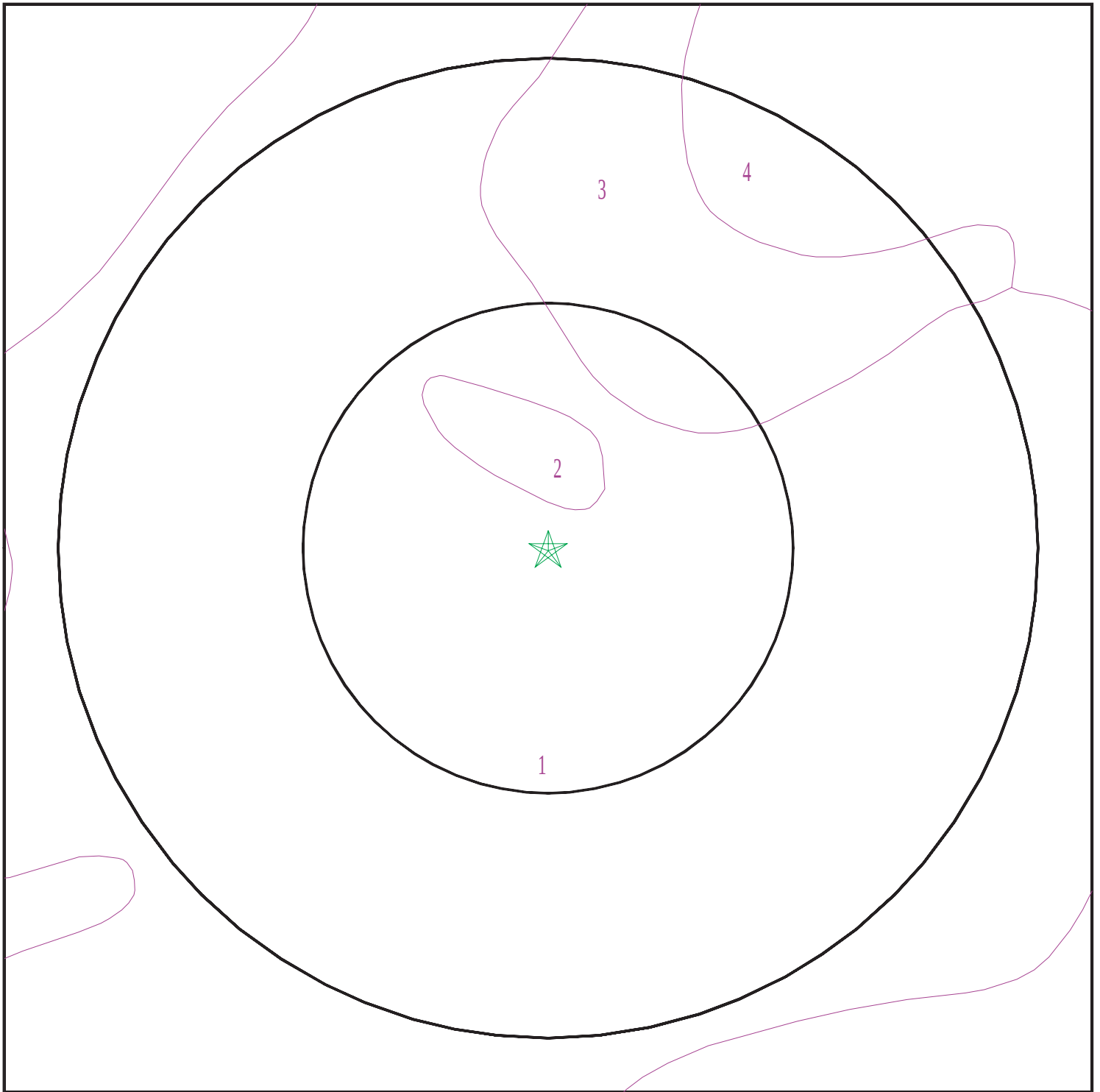
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4988633.2s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: Whidbey Marine and Auto
ADDRESS: 1695 Main Street
Freeland WA 98249
LAT/LONG: 48.009908 / 122.523556

CLIENT: Sound Earth Strategies
CONTACT: Kevin Bartelt
INQUIRY #: 4988633.2s
DATE: July 14, 2017 9:22 am

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Keystone

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 5.5 Min: 4.5
2	7 inches	18 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 6.5 Min: 5.1
3	18 inches	59 inches	gravelly sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141	Max: 6.5 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: Casey

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 92 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6.5 Min: 5.1
2	11 inches	48 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.42 Min: 0.01	Max: 7.3 Min: 5.6
3	48 inches	59 inches	stratified loamy fine sand to clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0 Min: 0	Max: 7.3 Min: 6.1

Soil Map ID: 3

Soil Component Name: Keystone

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 5.5 Min: 4.5
2	7 inches	18 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 6.5 Min: 5.1
3	18 inches	59 inches	gravelly sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141	Max: 6.5 Min: 6.1

Soil Map ID: 4

Soil Component Name: Whidbey

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 69 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	7 inches	29 inches	very gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6.5 Min: 5.1
3	29 inches	59 inches	very gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean Gravels, Well-graded gravel. COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel.	Max: 0.42 Min: 0.01	Max: 6.5 Min: 5.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	USGS40001279862	0 - 1/8 Mile WSW
A2	USGS40001279883	0 - 1/8 Mile WNW
A3	USGS40001279845	0 - 1/8 Mile WSW
A4	USGS40001279863	1/8 - 1/4 Mile WSW
A5	USGS40001279846	1/8 - 1/4 Mile WSW
6	USGS40001279861	1/8 - 1/4 Mile East
A7	USGS40001279864	1/8 - 1/4 Mile West
A8	USGS40001279847	1/8 - 1/4 Mile WSW
A9	USGS40001279835	1/8 - 1/4 Mile WSW
A10	USGS40001279874	1/8 - 1/4 Mile West
B11	USGS40001279965	1/8 - 1/4 Mile NNW
B12	USGS40001279966	1/8 - 1/4 Mile NNW
C13	USGS40001279754	1/4 - 1/2 Mile SE
15	USGS40001279692	1/4 - 1/2 Mile SSW
D16	USGS40001279844	1/4 - 1/2 Mile East
E18	USGS40001279665	1/4 - 1/2 Mile SSE
D19	USGS40001279843	1/4 - 1/2 Mile East
20	USGS40001280034	1/4 - 1/2 Mile NNW
22	USGS40001279875	1/4 - 1/2 Mile West
F23	USGS40001279666	1/4 - 1/2 Mile SSW
F25	USGS40001279678	1/4 - 1/2 Mile SW
26	USGS40001279918	1/4 - 1/2 Mile ENE
27	USGS40001279954	1/4 - 1/2 Mile ENE
28	USGS40001279967	1/4 - 1/2 Mile WNW
G29	USGS40001279619	1/4 - 1/2 Mile South
H30	USGS40001279641	1/4 - 1/2 Mile SW
H31	USGS40001279652	1/4 - 1/2 Mile SW
32	USGS40001280018	1/2 - 1 Mile NW
33	USGS40001279667	1/2 - 1 Mile SW
36	USGS40001279549	1/2 - 1 Mile SSW
39	USGS40001279848	1/2 - 1 Mile West
40	USGS40001279953	1/2 - 1 Mile ENE
J41	USGS40001279947	1/2 - 1 Mile WNW
43	USGS40001280267	1/2 - 1 Mile North
K44	USGS40001279709	1/2 - 1 Mile WSW
45	USGS40001280266	1/2 - 1 Mile North
46	USGS40001279557	1/2 - 1 Mile SE
K47	USGS40001279699	1/2 - 1 Mile WSW
K49	USGS40001279700	1/2 - 1 Mile WSW
M50	USGS40001279814	1/2 - 1 Mile East
L51	USGS40001279677	1/2 - 1 Mile ESE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
52	USGS40001279575	1/2 - 1 Mile SW
M53	USGS40001279813	1/2 - 1 Mile East
54	USGS40001279882	1/2 - 1 Mile East
57	USGS40001280287	1/2 - 1 Mile NNE
59	USGS40001279676	1/2 - 1 Mile ESE
64	USGS40001279873	1/2 - 1 Mile East
66	USGS40001279739	1/2 - 1 Mile ESE
O67	USGS40001279556	1/2 - 1 Mile SE
N68	USGS40001279505	1/2 - 1 Mile SE
O69	USGS40001279548	1/2 - 1 Mile SE
70	USGS40001279506	1/2 - 1 Mile SW
71	USGS40001279948	1/2 - 1 Mile WNW
P74	USGS40001279611	1/2 - 1 Mile ESE
75	USGS40001279422	1/2 - 1 Mile SSE
Q76	USGS40001279964	1/2 - 1 Mile ENE
Q78	USGS40001279963	1/2 - 1 Mile ENE
82	USGS40001279385	1/2 - 1 Mile SSW
P83	USGS40001279596	1/2 - 1 Mile ESE
P84	USGS40001279595	1/2 - 1 Mile ESE
85	USGS40001279550	1/2 - 1 Mile SW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

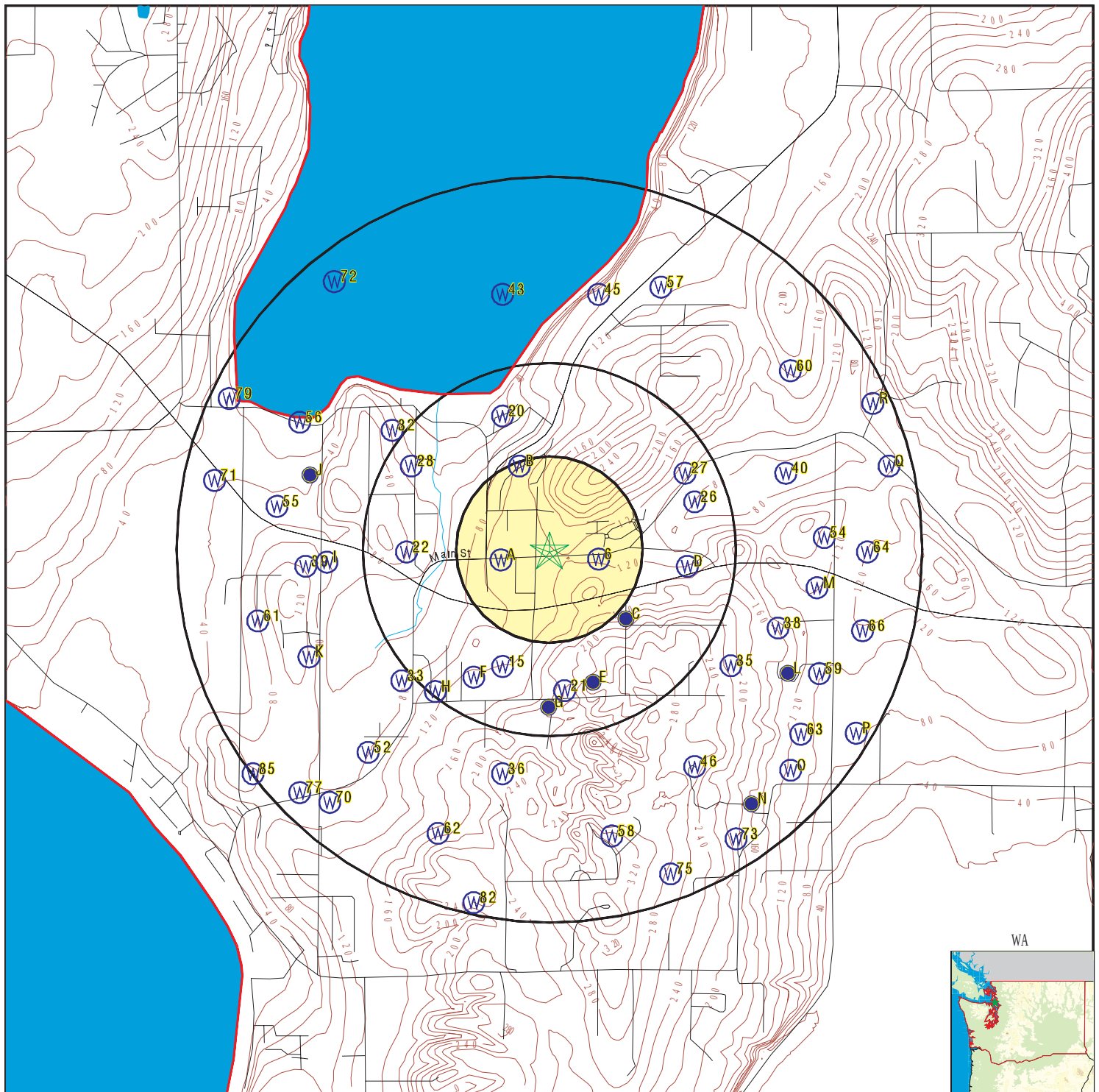
MAP ID	WELL ID	LOCATION FROM TP
C14	WA8000000006794	1/4 - 1/2 Mile SE
E17	WA8000000025911	1/4 - 1/2 Mile SSE
21	WA8000000005926	1/4 - 1/2 Mile South
G24	WA8000000007665	1/4 - 1/2 Mile South
I34	WA8000000000193	1/2 - 1 Mile West
35	WA8000000001809	1/2 - 1 Mile ESE
I37	WA8000000022269	1/2 - 1 Mile West
38	WA8000000000942	1/2 - 1 Mile ESE
J42	WA8000000005615	1/2 - 1 Mile WNW
L48	WA8000000005432	1/2 - 1 Mile ESE
55	WA8000000030607	1/2 - 1 Mile West
56	WA8000000008879	1/2 - 1 Mile WNW
58	WA8000000026450	1/2 - 1 Mile SSE
60	WA8000000029701	1/2 - 1 Mile NE
61	WA8000000001271	1/2 - 1 Mile WSW
62	WA8000000004773	1/2 - 1 Mile SSW
63	WA8000000025912	1/2 - 1 Mile SE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
N65	WA8000000024660	1/2 - 1 Mile SE
72	WA8000000027225	1/2 - 1 Mile NW
73	WA8000000014201	1/2 - 1 Mile SSE
77	WA8000000008906	1/2 - 1 Mile SW
79	WA8000000009396	1/2 - 1 Mile WNW
R80	WA8000000027262	1/2 - 1 Mile ENE
R81	WA8000000014163	1/2 - 1 Mile ENE

PHYSICAL SETTING SOURCE MAP - 4988633.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Whidbey Marine and Auto
 ADDRESS: 1695 Main Street
 Freeland WA 98249
 LAT/LONG: 48.009908 / 122.523556

CLIENT: Sound Earth Strategies
 CONTACT: Kevin Bartelt
 INQUIRY #: 4988633.2s
 DATE: July 14, 2017 9:22 am

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A1
WSW
0 - 1/8 Mile
Lower

FED USGS USGS40001279862

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480035122312901		
Monloc name:	29N/02E-11N03		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.009537
Longitude:	-122.525983	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	110
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19610101	Welldepth:	105
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-08-08	102	

A2
WNW
0 - 1/8 Mile
Lower

FED USGS USGS40001279883

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480038122312901		
Monloc name:	29N/02E-11N08		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0103704
Longitude:	-122.525983	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	100
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	Not Reported
Construction date:	19761207	Wellholeddepth:	125
Welldepth units:	Not Reported		
Wellholeddepth units:	ft		

Ground-water levels, Number of Measurements: 0

A3
WSW
0 - 1/8 Mile
Lower

FED USGS USGS40001279845

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480034122312901		
Monloc name:	29N/02E-11N02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0092592
Longitude:	-122.525983	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	110
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19610101	Welldepth:	132
Welldepth units:	ft	Wellholeddepth:	Not Reported
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel	
1961-01-01	103		

A4
WSW
1/8 - 1/4 Mile
Lower

FED USGS USGS40001279863

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480035122313001		
Monloc name:	29N/02E-11N04		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.009537
Longitude:	-122.5262608	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	110
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19520101	Welldepth:	120
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1952-05-01	111	

A5
WSW
1/8 - 1/4 Mile
Lower

FED USGS USGS40001279846

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480034122313001		
Monloc name:	29N/02E-11N01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0092592
Longitude:	-122.5262608	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	110
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19480101	Welldepth:	117
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-08-06	103	

6
East
1/8 - 1/4 Mile
Higher

FED USGS USGS40001279861

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480035122311001		
Monloc name:	29N/02E-11P01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0095371
Longitude:	-122.5207049	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	200
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19650201	Welldepth:	170
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1965-02-01	126	

A7
West
1/8 - 1/4 Mile
Lower

FED USGS USGS40001279864

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480035122313101		
Monloc name:	29N/02E-11N05		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.009537
Longitude:	-122.5265386	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	118
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	124
Construction date:	19610601	Wellholeddepth:	Not Reported
Welldepth units:	ft		
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1963-08-12	111.83	

A8
WSW
1/8 - 1/4 Mile
Lower

FED USGS USGS40001279847

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480034122313101		
Monloc name:	29N/02E-11N06		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0092592
Longitude:	-122.5265386	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	112
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19480101	Welldepth:	132
Welldepth units:	ft	Wellholeddepth:	Not Reported
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1963-08-12	105	

A9
WSW
1/8 - 1/4 Mile
Lower

FED USGS USGS40001279835

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480033122313101		
Monloc name:	29N/02E-11N07		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0089815
Longitude:	-122.5265386	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	92
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19631101	Welldepth:	117
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1964-04-14	90	

A10
West
1/8 - 1/4 Mile
Lower

FED USGS USGS40001279874

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480036122313301		
Monloc name:	29N/02E-10R02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0098148
Longitude:	-122.5270942	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	30
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19750819	Welldepth:	60
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1975-08-19	29	

B11
NNW
1/8 - 1/4 Mile
Lower

FED USGS USGS40001279965

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480048122312601		
Monloc name:	29N/02E-11M02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0131483
Longitude:	-122.5251498	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	110
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19591101	Welldepth:	165
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1959-11-01	115	

B12
NNW
1/8 - 1/4 Mile
Lower

FED USGS USGS40001279966

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480048122312701		
Monloc name:	29N/02E-11M01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0131482
Longitude:	-122.5254276	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	85
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	143
Construction date:	19590101	Wellholeddepth:	143
Welldepth units:	ft		
Wellholeddepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1959-01-01	78	

C13
SE
1/4 - 1/2 Mile
Higher

FED USGS USGS40001279754

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480027122310501		
Monloc name:	29N/02E-14C01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0073148
Longitude:	-122.5193158	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	175
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholeddepth:	Not Reported
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1963-08-13	3	

C14
SE
1/4 - 1/2 Mile
Higher

WA WELLS WA8000000006794

Fid:	6793	Lerootid:	59583
Srcrootid:	15227	Pwsid:	31003
Srctnum:	01	Pwssrcid:	3100301
Systemname:	HARBOR HILL	Systemgrou:	A
Systemtype:	Comm	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	43	Resconnect:	15
Totalconne:	15	Srcname:	AGA860 WELL 1
Srctype:	W	Srcusecode:	P
Srcwelldep:	208	Township:	29

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Range :	02E	Section:	14
Qtrqtrsect:	Not Reported		
Longitude:	-122.518931		
Latitude:	48.007134		
Latlongmet:	GPS	Srctot1yr:	481
Srctot6mo:	340	Srctot10yr:	1522
Srctot5yr:	1076	Priconata 1:	WHIDBEY WATER SERVICES
Protection:	CFR	Priconata 2:	5421 WOODARD AVE
Priconata 1:	WHIDBEY WATER SERVICES	Priconata 4:	WA
Priconata 3:	FREELAND		
Priconata 5:	98249		
Priconata 6:	Not Reported		
Pwseffecti:	01-JAN-70	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srctstatusi:	A
Srceffecti:	01-JAN-70	Srctinactiv:	Not Reported
Floodzonei:	N	Priconata 7:	ANDY CAMPBELL
Srctswinfl:	U	Latlongdat:	09-FEB-01
Site id:	WA8000000006794		

15
SSW
1/4 - 1/2 Mile
Higher

FED USGS USGS40001279692

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480020122313001		
Monloc name:	29N/02E-14D01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0053702
Longitude:	-122.5262606	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	130
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19460101	Welldepth:	123
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
------	-----------------------	---------------------

1962-01-01 98

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

D16

East

1/4 - 1/2 Mile

Higher

FED USGS

USGS40001279844

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480034122305201		
Monloc name:	29N/02E-11Q01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0092594
Longitude:	-122.5157045	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	118
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19510101	Welldepth:	65
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-06-01	62	

E17

SSE

1/4 - 1/2 Mile

Higher

WA WELLS

WA8000000025911

Fid:	25910	Lerootid:	58747
Srcrootid:	14146	Pwsid:	26450
Srctnum:	01	Pwssrcid:	2645001
Systemname:	FREELAND WATER AND SEWER SYSTEM	Systemtype:	A
Systemtype:	Comm	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	617	Resconnect:	433
Totalconne:	533	Srctname:	AGA907 WELL A
Srctype:	WW	Srctusecode:	P
Srctwelldep:	240	Township:	29
Range :	02E	Section:	14
Qtrqtrsect:	SWNW		
Longitude:	-122.521348		
Latitude:	48.004709		
Latlongmet:	GPS	Srctsuscept:	M
Srctvulnioc:	L	Srctvulnvoc:	M
Srctvulnsoc:	L	Doewelltag:	AGA907
Srctot6mo:	200	Srctot1yr:	280
Srctot5yr:	620	Srctot10yr:	880
Protection:	CFR	Prictcontact:	3605791956

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Priconta 1:	WHIDBEY WATER SERVICES	Priconta 2:	5421 WOODARD AVE
Priconta 3:	FREELAND	Priconta 4:	WA
Priconta 5:	98249		
Priconta 6:	Not Reported		
Pwseffecti:	01-JAN-70	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srcstatusi:	A
Srcseffecti:	01-JAN-70	Srcinactiv:	Not Reported
Floodzonei:	N	Priconta 7:	ANDY CAMPBELL
Srswinflu:	U	Latlongdat:	20-FEB-01
Site id:	WA8000000025911		

E18 SSE 1/4 - 1/2 Mile Higher

FED USGS USGS40001279665

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480018122311001		
Monloc name:	29N/02E-14C02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0048147
Longitude:	-122.5207046	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	250
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19651215	Welldepth:	257
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1965-12-15	243		1965-12-15	243	

D19 East 1/4 - 1/2 Mile Higher

FED USGS USGS40001279843

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480034122305101		
Monloc name:	29N/02E-11Q02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0092594
Longitude:	-122.5154267	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	100
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19600101	Welldepth:	110
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1960-09-28	98	

20
NNW
1/4 - 1/2 Mile
Lower

FED USGS USGS40001280034

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480055122313001		
Monloc name:	29N/02E-10H01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0150927
Longitude:	-122.526261	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	92
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19600401	Welldepth:	157
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1960-04-01	145	

21
South
1/4 - 1/2 Mile
Higher

WA WELLS WA8000000005926

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	5925	Lerootid:	58747
Srcrootid:	14148	Pwsid:	26450
Srcnum:	03	Pwssrcid:	2645003
Systemname:	FREELAND WATER AND SEWER SYSTEM	Systemid:	A
Systemtype:	Comm	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespoul:	617	Resconnect:	433
Totalconne:	533	Srcname:	WELLS A & B
Srctype:	WF	Srcusecode:	P
Srcwelldep:	200	Township:	29
Range :	02E	Section:	14
Qtrqtrsect:	SWNW		
Longitude:	-122.522672		
Latitude:	48.004431		
Latlongmet:	Average	Srcsuscept:	M
Srcvulnioc:	L	Srcvulnvoc:	M
Srcvulnsoc:	L	Doewelltag:	Not Reported
Srctot6mo:	0	Srctot1yr:	0
Srctot5yr:	0	Srctot10yr:	0
Protection:	Assigned	Prcontact:	3605791956
Priconta 1:	WHIDBEY WATER SERVICES	Priconta 2:	5421 WOODARD AVE
Priconta 3:	FREELAND	Priconta 4:	WA
Priconta 5:	98249		
Priconta 6:	Not Reported		
Pwseffecti:	01-JAN-70	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srcstatusi:	A
Srceffecti:	06-FEB-97	Srcinactiv:	Not Reported
Floodzonei:	N	Priconta 7:	ANDY CAMPBELL
Srcswinfl:	U	Latlongdat:	Not Reported
Site id:	WA8000000005926		

22

West

1/4 - 1/2 Mile

Lower

FED USGS

USGS40001279875

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480036122315001		
Monloc name:	29N/02E-10R01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0098147
Longitude:	-122.5318168	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	59
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	60
Construction date:	19010101	Wellholeddepth:	Not Reported
Welldepth units:	ft		
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1963-08-06	55.6	

F23
SSW
1/4 - 1/2 Mile
Higher

FED USGS USGS40001279666

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480018122313401		
Monloc name:	29N/02E-14D03		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0048147
Longitude:	-122.5273718	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	130
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19761220	Welldepth:	139
Welldepth units:	ft	Wellholeddepth:	139
Wellholeddepth units:	ft		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
-----			-----		
1976-12-20	80		1976-12-20	80	

G24
South
1/4 - 1/2 Mile
Higher

WA WELLS WA8000000007665

Fid:	7664	Lerootid:	58747
Srctootid:	14147	Pwsid:	26450
Srctnum:	02	Pwssrcid:	2645002
Systemname:	FREELAND WATER AND SEWER SYSTEM	Systemtype:	A
Systemtype:	Comm	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	617	Resconnect:	433
Totalconne:	533	Srctname:	AGA908 WELL B
Srctype:	WW	Srctusecode:	P
Srctwelldep:	200	Township:	29

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Range :	02E	Section:	14
Qtrqtrsect:	SWNW		
Longitude:	-122.523996		
Latitude:	48.004154		
Latlongmet:	GPS	Srctot1yr:	240
Srctot6mo:	170	Srctot10yr:	750
Srctot5yr:	530	Prcontact:	3605791956
Protection:	CFR	Prcontact 2:	5421 WOODARD AVE
Prcontact 1:	WHIDBEY WATER SERVICES	Prcontact 4:	WA
Prcontact 3:	FREELAND		
Prcontact 5:	98249		
Prcontact 6:	Not Reported		
Pwseffecti:	01-JAN-70	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srctstatusi:	A
Srceffecti:	01-JAN-70	Srctinactiv:	Not Reported
Floodzonei:	N	Prcontact 7:	ANDY CAMPBELL
Srctswinfl:	U	Latlongdat:	20-FEB-01
Site id:	WA8000000007665		

F25
SW
1/4 - 1/2 Mile
Higher

FED USGS USGS40001279678

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480019122313801		
Monloc name:	29N/02E-14D02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0050924
Longitude:	-122.528483	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	115
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19601101	Welldepth:	136
Welldepth units:	ft	Wellholedepth:	136
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
------	--------------------	------------------

1963-08-12 111

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

26

ENE

1/4 - 1/2 Mile

Lower

FED USGS

USGS40001279918

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480043122305001		
Monloc name:	29N/02E-11K02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0117594
Longitude:	-122.515149	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	93
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19770709	Welldepth:	169
Welldepth units:	ft	Wellholedepth:	171
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1977-07-09	85	

27

ENE

1/4 - 1/2 Mile

Lower

FED USGS

USGS40001279954

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480047122305201		
Monloc name:	29N/02E-11K01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0128706
Longitude:	-122.5157047	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	100
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	138
Construction date:	19310101	Wellholedepth:	Not Reported
Welldepth units:	ft		
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-08-13	108.0	

28
WNW
1/4 - 1/2 Mile
Lower

FED USGS USGS40001279967

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480048122314901		
Monloc name:	29N/02E-10R03		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0131482
Longitude:	-122.5315392	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	55
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19600101	Welldepth:	137
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-08-07	50.2	

G29
South
1/4 - 1/2 Mile
Higher

FED USGS USGS40001279619

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480013122311901		
Monloc name:	29N/02E-14E02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0034258
Longitude:	-122.5232047	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	200
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19790720	Welldepth:	220
Welldepth units:	ft	Wellholedepth:	220
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel		Date	Feet below Surface	Feet to Sealevel
1979-07-20	185			1979-07-20	185	

H30
SW
1/4 - 1/2 Mile
Lower

FED USGS USGS40001279641

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480016122314301		
Monloc name:	29N/02E-15A03		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0042591
Longitude:	-122.5298719	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	109
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19790610	Welldepth:	141
Welldepth units:	ft	Wellholedepth:	141
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel		Date	Feet below Surface	Feet to Sealevel
1979-06-10	118			1979-06-10	118	

H31
SW
1/4 - 1/2 Mile
Lower

FED USGS USGS40001279652

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480017122314501		
Monloc name:	29N/02E-15A02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0045368
Longitude:	-122.5304275	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	12
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19620401	Welldepth:	41
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1962-04-01	4		1962-04-01	4	

32
NW
1/2 - 1 Mile
Lower

FED USGS USGS40001280018

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480053122315301		
Monloc name:	29N/02E-10H02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0145371
Longitude:	-122.5326504	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	40
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type: Not Reported
Construction date: 19800323
Welldepth units: ft
Wellholeddepth units: ft
Welldepth: 120
Wellholeddepth: 120

Ground-water levels, Number of Measurements: 0

33
SW
1/2 - 1 Mile
Lower

FED USGS USGS40001279667

Org. Identifier: USGS-WA
Formal name: USGS Washington Water Science Center
Monloc Identifier: USGS-480018122315101
Monloc name: 29N/02E-15A01
Monloc type: Well
Monloc desc: Not Reported
Huc code: 17110019
Drainagearea Units: Not Reported
Contrib drainagearea units: Not Reported
Longitude: -122.5320943
Horiz Acc measure: 1
Horiz Collection method: Interpolated from map
Horiz coord refsys: NAD83
Vert measure units: feet
Vert accmeasure units: feet
Vertcollection method: Interpolated from topographic map
Vert coord refsys: NGVD29
Aquifername: Not Reported
Formation type: Not Reported
Aquifer type: Not Reported
Construction date: 19300101
Welldepth units: ft
Wellholeddepth units: Not Reported
Drainagearea value: Not Reported
Contrib drainagearea: Not Reported
Latitude: 48.0048146
Sourcemap scale: 24000
Horiz Acc measure units: seconds
Vert measure val: 70
Vertacc measure val: 1
Countrycode: US
Welldepth: 65
Wellholeddepth: Not Reported

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1963-08-12	27.3		1963-08-12	27.3	

I34
West
1/2 - 1 Mile
Lower

WA WELLS WA8000000000193

Fid: 192
Srcrootid: 238
Srcnum: 01
Systemname: TRINITY LUTHERAN CHURCH
Systemtype: TNC
County: ISLAND
Ftrespopul: 0
Totalconne: 1
Srctype: W
Srcwelldep: 0
Lerootid: 46985
Pwsid: 00213
Pwssrcid: 0021301
Systemgrou: A
Region: NW
Smaid: Not Reported
Resconnect: 0
Srcname: WELL #1
Srcusecode: P
Township: 29

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Range :	02E	Section:	10
Qtrqtrsect:	SWSE		
Longitude:	-122.536		
Latitude:	48.00951		
Latlongmet:	QtrQtrSe	Srctot10yr:	0
Srctot6mo:	0	Srctot10yr:	0
Srctot5yr:	0	Prcontact:	3603215191
Protection:	Assigned	Prcontact 2:	P O BOX 97
Prconta 1:	Not Reported	Prconta 4:	WA
Prconta 3:	FREELAND		
Prconta 5:	98249		
Prconta 6:	Not Reported		
Pwseffecti:	23-DEC-92	Pwsstatusi:	I
Pwsinactiv:	23-DEC-92	Srctstatusi:	I
Srceffecti:	11-JAN-91	Srctstatusi:	23-DEC-92
Floodzonei:	N	Prconta 7:	JIM LINDUS
Srctswinfl:	U	Latlongdat:	Not Reported
Site id:	WA8000000000193		

35
ESE
1/2 - 1 Mile
Higher

WA WELLS WA80000000001809

Fid:	1808	Lerootid:	47844
Srctrootid:	1199	Pwsid:	01072
Srctnum:	01	Pwssrcid:	0107201
Systemname:	SUNNY VIEW FARMS WATER SYSTEM	Systemgrou:	B
Systemtype:	GRPB	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	9	Resconnect:	4
Totalconne:	4	Srctname:	WELL #1 ALQ382
Srcttype:	W	Srctusecode:	P
Srctwelldep:	220	Township:	29
Range :	02E	Section:	13
Qtrqtrsect:	NWNE		
Longitude:	-122.51305		
Latitude:	48.0054		
Latlongmet:	GPS	Srctstatusi:	H
Srctvulnioc:	H	Srctvulnvoc:	H
Srctvulnsoc:	U	Doewelltag:	ALQ382
Srctot6mo:	0	Srctot10yr:	0
Srctot5yr:	0	Srctot10yr:	0
Protection:	Assigned	Prcontact:	3605791956
Prconta 1:	WHIDBEY WATER SERVICES	Prconta 2:	5421 WOODARD AVE
Prconta 3:	FREELAND	Prconta 4:	WA
Prconta 5:	98249		
Prconta 6:	Not Reported		
Pwseffecti:	28-JUN-96	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srctstatusi:	A
Srceffecti:	28-JUN-96	Srctstatusi:	Not Reported
Floodzonei:	N	Prconta 7:	ANDY CAMPBELL
Srctswinfl:	U	Latlongdat:	Not Reported
Site id:	WA80000000001809		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

36
SSW
1/2 - 1 Mile
Higher

FED USGS USGS40001279549

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480005122313001		
Monloc name:	29N/02E-14E01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0012035
Longitude:	-122.5262604	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	133
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19420101	Welldepth:	157
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1942-01-01	130		1942-01-01	130	

I37
West
1/2 - 1 Mile
Lower

WA WELLS WA8000000022269

Fid:	22268	Lerootid:	47539
Srctootid:	863	Pwsid:	00767
Srctnum:	01	Pwssrcid:	0076701
Systemname:	LEWIS WATER SYSTEM	Systemgrou:	B
Systemtype:	GRPB	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	7	Resconnect:	4
Totalconne:	4	Srctname:	WELL BAA960
Srctype:	W	Srctusecode:	P
Srctwelldep:	228	Township:	29
Range :	02E	Section:	10
Qtrqtrsect:	SESW		
Longitude:	-122.536857		
Latitude:	48.009323		
Latlongmet:	QtrQtrSection	Srctsuscept:	H
Srctvulnioc:	H	Srctvulnvoc:	H
Srctvulnsoc:	U	Doewelltag:	BAA960
Srctot6mo:	0	Srctot1yr:	0
Srctot5yr:	0	Srctot10yr:	0
Protection:	Assigned	Prctcontact:	3603313034

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Priconta 1:	Not Reported	Priconta 2:	5296 S SLOCUM WY
Priconta 3:	FREELAND	Priconta 4:	WA
Priconta 5:	98249		
Priconta 6:	Not Reported		
Pwseffecti:	01-JUL-91	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srcstatusi:	A
Srcseffecti:	01-JUL-91	Srcinactiv:	Not Reported
Floodzonei:	N	Priconta 7:	ROBERT ELLIOT
Srcswinflu:	U	Latlongdat:	Not Reported
Site id:	WA8000000022269		

38
ESE
1/2 - 1 Mile
Higher

WA WELLS WA8000000000942

Fid:	941	Lerootid:	48494
Srcrootid:	1919	Pwsid:	01722
Srcnum:	01	Pwssrcid:	0172201
Systemname:	CATTAIL LANE WATER ASSOCIATION	Systemgroup:	B
Systemtype:	GRPB	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespul:	14	Resconnect:	5
Totalconne:	5	Srcname:	WELL #1 AGA645
Srcype:	W	Srcusecode:	P
Srcwelldep:	171	Township:	29
Range :	02E	Section:	14
Qtrqtrsect:	NENE		
Longitude:	-122.510315		
Latitude:	48.006864		
Latlongmet:	GPS	Srcsuscept:	H
Srcvulnioc:	H	Srcvulnvoc:	H
Srcvulnsoc:	U	Doewelltag:	AGA645
Srctot6mo:	0	Srctot1yr:	0
Srctot5yr:	0	Srctot10yr:	0
Protection:	Assigned	Pricontact:	3603213870
Priconta 1:	Not Reported	Priconta 2:	PO BOX 217
Priconta 3:	FREELAND	Priconta 4:	WA
Priconta 5:	98249		
Priconta 6:	Not Reported		
Pwseffecti:	28-AUG-92	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srcstatusi:	A
Srcseffecti:	28-AUG-92	Srcinactiv:	Not Reported
Floodzonei:	N	Priconta 7:	MICK OLSEN
Srcswinflu:	U	Latlongdat:	Not Reported
Site id:	WA80000000000942		

39
West
1/2 - 1 Mile
Lower

FED USGS USGS40001279848

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480034122321101		
Monloc name:	29N/02E-10Q01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0092591
Longitude:	-122.5376505	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	65
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19390101	Welldepth:	67
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1963-08-06	61	

40
ENE
1/2 - 1 Mile
Lower

FED USGS USGS40001279953

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480047122303101		
Monloc name:	29N/02E-11J01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0128706
Longitude:	-122.509871	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	85
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	94.6
Construction date:	19010101	Wellholeddepth:	Not Reported
Welldepth units:	ft		
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-08-13	91.5	

J41
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001279947**

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480046122321001		
Monloc name:	29N/02E-10K01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0125925
Longitude:	-122.5373729	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	85
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19581001	Welldepth:	80
Welldepth units:	ft	Wellholeddepth:	Not Reported
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-08-06	68.8	

J42
WNW
1/2 - 1 Mile
Lower

WA WELLS **WA8000000005615**

Fid:	5614	Lerootid:	57141
Srcrootid:	11990	Pwsid:	17985
Srctnum:	01	Pwssrcid:	1798501
Systemname:	BLUEBERRY HILL	Systemgrou:	A
Systemtype:	TNC	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	0	Resconnect:	0
Totalconne:	1	Srctname:	WELL ALT197
Srctype:	W	Srctusecode:	P
Srctwelldep:	70	Township:	29

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Range :	02E	Section:	10
Qtrqtrsect:	NWSE		
Longitude:	-122.53744		
Latitude:	48.013019		
Latlongmet:	GPS	Srctot1yr:	0
Srctot6mo:	0	Srctot10yr:	0
Srctot5yr:	0	Prcontact:	3609296555
Protection:	Assigned	Prcontact 2:	PO BOX 766
Prcontact 1:	WHIDBEY WATER MANAGEMENT	Prcontact 4:	WA
Prcontact 3:	CLINTON		
Prcontact 5:	98236		
Prcontact 6:	vistairewater@gmail.com		
Pwseffecti:	09-DEC-05	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srctstatusi:	A
Srceffecti:	01-JAN-70	Srctinactiv:	Not Reported
Floodzonei:	N	Prcontact 7:	SARAH BELLIN
Srctswinfl:	U	Latlongdat:	23-JUN-05
Site id:	WA8000000005615		

43
North
1/2 - 1 Mile
Lower

FED USGS USGS40001280267

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480112122313001		
Monloc name:	29N/02E-11E01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0198151
Longitude:	-122.5262614	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	28
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19010101	Welldepth:	19.2
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
------	-----------------------	---------------------

1963-08-27 11.5

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

K44
WSW
1/2 - 1 Mile
Lower

FED USGS USGS40001279709

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480022122321001		
Monloc name:	29N/02E-15B03		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0059257
Longitude:	-122.5373725	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	58
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19630304	Welldepth:	67
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

45
North
1/2 - 1 Mile
Lower

FED USGS USGS40001280266

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480112122311001		
Monloc name:	29N/02E-11C01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0198152
Longitude:	-122.5207054	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	95
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	138
Construction date:	19620101	Wellholedepth:	Not Reported
Welldepth units:	ft		
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-08-07	89.3	

46
SE
1/2 - 1 Mile
Higher

FED USGS USGS40001279557

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480006122305001		
Monloc name:	29N/02E-15E04		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0014814
Longitude:	-122.5151485	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	7
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19750506	Welldepth:	64
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1975-05-08	7		1975-05-08	7	

K47
WSW
1/2 - 1 Mile
Lower

FED USGS USGS40001279699

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480021122321001		
Monloc name:	29N/02E-15B02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0056479
Longitude:	-122.5373725	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	100
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19630304	Welldepth:	167
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1963-03-04	105	

**L48
ESE
1/2 - 1 Mile
Higher**

WA WELLS WA8000000005432

Fid:	5431	Lerootid:	56944
Srctootid:	11743	Pwsid:	16540
Srctnum:	01	Pwssrcid:	1654001
Systemname:	HOLLY HILL WATER SYSTEM	Systemgrou:	B
Systemtype:	GRPB	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	8	Resconnect:	5
Totalconne:	5	Srctname:	WELL #1 ALQ078
Srctype:	W	Srctusecode:	P
Srctwelldep:	177	Township:	29
Range :	02E	Section:	14
Qtrqtrsect:	NENE		
Longitude:	-122.509916		
Latitude:	48.005128		
Latlongmet:	GPS	Srctsuscept:	H
Srctvulnioc:	H	Srctvulnvoc:	H
Srctvulnsoc:	U	Doewelltag:	ALQ078
Srctot6mo:	0	Srctot1yr:	0
Srctot5yr:	0	Srctot10yr:	0
Protection:	Assigned	Prctcontact:	3605791956
Prctonta 1:	WHIDBEY WATER SERVICES	Prctonta 2:	5421 WOODARD AVE
Prctonta 3:	FREELAND	Prctonta 4:	WA
Prctonta 5:	98249		
Prctonta 6:	Not Reported		
Pwseffecti:	01-JAN-83	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srctstatusi:	A
Srceffecti:	01-JAN-70	Srctinactiv:	Not Reported
Floodzonei:	N	Prctonta 7:	ANDY CAMPBELL
Srctswinfl:	U	Latlongdat:	Not Reported
Site id:	WA8000000005432		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

K49
WSW
1/2 - 1 Mile
Lower

FED USGS USGS40001279700

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480021122321101		
Monloc name:	29N/02E-15B01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0056479
Longitude:	-122.5376503	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	95
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19590401	Welldepth:	130
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1959-04-10	60	

M50
East
1/2 - 1 Mile
Higher

FED USGS USGS40001279814

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480031122302501		
Monloc name:	29N/02E-11R01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0084261
Longitude:	-122.508204	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	135
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	145
Construction date:	19490601	Wellholedepth:	Not Reported
Welldepth units:	ft		
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1963-07-01	126	

L51
ESE
1/2 - 1 Mile
Higher

FED USGS USGS40001279677

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480019122303001		
Monloc name:	29N/02E-14A02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0050927
Longitude:	-122.5095928	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	150
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19790130	Welldepth:	171
Welldepth units:	ft	Wellholedepth:	171
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1979-01-30	136	

52
SW
1/2 - 1 Mile
Lower

FED USGS USGS40001279575

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480008122315801		
Monloc name:	29N/02E-15H01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0020367
Longitude:	-122.5340388	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	95
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19720710	Welldepth:	98
Welldepth units:	ft	Wellholedepth:	98
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1972-07-10	65		1972-07-10	65	

M53
East
1/2 - 1 Mile
Higher

FED USGS USGS40001279813

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480031122302401		
Monloc name:	29N/02E-11R02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0084261
Longitude:	-122.5079262	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	115
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19010101	Welldepth:	134
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-08-13	105	

54
East
1/2 - 1 Mile
Higher

FED USGS USGS40001279882

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480038122302301		
Monloc name:	29N/02E-11R03		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0103706
Longitude:	-122.5076485	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	135
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19720701	Welldepth:	138
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1972-07-01	108	

55

West
1/2 - 1 Mile
Lower

WA WELLS

WA8000000030607

Fid:	30606	Lerootid:	61782
Srrootid:	18050	Pwsid:	45117
Srnum:	01	Pwssrcid:	4511701
Systemname:	WGH WELL	Systemgrou:	B
Systemtype:	GRPB	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	0	Resconnect:	0
Totalconne:	1	Srname:	WELL #1 APH047
Srctype:	W	Srusecode:	P
Srwelldep:	100	Township:	29
Range :	02E	Section:	10
Qtrqtrsect:	NWSE		
Longitude:	-122.539316		
Latitude:	48.011585		
Latlongmet:	GPS	Srcsuscept:	H
Srsvulnioc:	H	Srsvulnvoc:	H
Srsvulsoc:	U	Doewelltag:	APH047
Srctot6mo:	0	Srctot1yr:	0
Srctot5yr:	0	Srctot10yr:	0
Protection:	Assigned	Pricontact:	3606785151

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Priconta 1:	WHIDBEY GENERAL HOSPITAL	Priconta 2:	101 N MAIN ST
Priconta 3:	COUPEVILLE	Priconta 4:	WA
Priconta 5:	98239		
Priconta 6:	Not Reported		
Pwseffecti:	01-NOV-87	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srcstatusi:	A
Srcseffecti:	01-JAN-70	Srcinactiv:	Not Reported
Floodzonei:	N	Priconta 7:	TOM TOMASINO
Srcswinflu:	U	Latlongdat:	Not Reported
Site id:	WA8000000030607		

56
WNW
1/2 - 1 Mile
Lower

WA WELLS WA8000000008879

Fid:	8878	Lerootid:	56121
Srcrootid:	10613	Pwsid:	12327
Srcnum:	01	Pwssrcid:	1232701
Systemname:	GRAHAM W. S.	Systemgrou:	B
Systemtype:	GRPB	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	6	Resconnect:	2
Totalconne:	2	Srcname:	DRILLED WELL
Srcype:	W	Srcusecode:	P
Srcwelldep:	170	Township:	29
Range :	02E	Section:	10
Qtrqtrsect:	Not Reported		
Longitude:	-122.538		
Latitude:	48.01485		
Latlongmet:	Section	Srcsuscept:	U
Srcvulnioc:	Not Reported	Srcvulnvoc:	Not Reported
Srcvulnsoc:	Not Reported	Doewelltag:	Not Reported
Srctot6mo:	0	Srctot1yr:	0
Srctot5yr:	0	Srctot10yr:	0
Protection:	Assigned	Priconta:	0000000000
Priconta 1:	Not Reported	Priconta 2:	5232 S HONEYMOON BAY RD
Priconta 3:	FREELAND	Priconta 4:	WA
Priconta 5:	98239		
Priconta 6:	Not Reported		
Pwseffecti:	01-AUG-85	Pwsstatusi:	I
Pwsinactiv:	01-AUG-85	Srcstatusi:	I
Srcseffecti:	01-JAN-70	Srcinactiv:	01-AUG-85
Floodzonei:	Y	Priconta 7:	PRIMARY CONTACT WS# 12327 GRAHAM W.
Srcswinflu:	U	Latlongdat:	Not Reported
Site id:	WA8000000008879		

57
NNE
1/2 - 1 Mile
Lower

FED USGS USGS40001280287

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480113122305701		
Monloc name:	29N/02E-11B01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.020093
Longitude:	-122.517094	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	110
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19580421	Welldepth:	161
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-08-16	114	

58
SSE
1/2 - 1 Mile
Higher

WA WELLS WA8000000026450

Fid:	26449	Lerootid:	54623
Srrootid:	8674	Pwsid:	07851
Srnum:	01	Pwssrcid:	0785101
Systemname:	MAPLE HILL COMMUNITY ASSOCIATION	Systemtype:	B
Systemtype:	GRPB	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	15	Resconnect:	6
Totalconne:	6	Srname:	WELL #1 APH046
Srctype:	W	Srusecode:	P
Srwelldep:	381	Township:	29
Range :	02E	Section:	14
Qtrqtrsect:	NESW		
Longitude:	-122.519932		
Latitude:	47.99879		
Latlongmet:	GPS	Srcsuscept:	N
Srsvulnioc:	M	Srsvulnvoc:	H
Srsvulsoc:	X	Doewelltag:	APH046
Srctot6mo:	0	Srctot1yr:	0
Srctot5yr:	0	Srctot10yr:	0
Protection:	Assigned	Pricontact:	3605791956

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Priconta 1:	WHIDBEY WATER SERVICES	Priconta 2:	5421 WOODARD AVE
Priconta 3:	FREELAND	Priconta 4:	WA
Priconta 5:	98249		
Priconta 6:	Not Reported		
Pwseffecti:	01-JUL-81	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srcstatusi:	A
Srcseffecti:	01-JAN-70	Srcinactiv:	Not Reported
Floodzonei:	N	Priconta 7:	ANDY CAMPBELL
Srswinflu:	U	Latlongdat:	Not Reported
Site id:	WA8000000026450		

59
ESE
1/2 - 1 Mile
Lower

FED USGS USGS40001279676

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480019122302401		
Monloc name:	29N/02E-14A01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0050927
Longitude:	-122.507926	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	95
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19160101	Welldepth:	92
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1950-01-01	90	

60
NE
1/2 - 1 Mile
Higher

WA WELLS WA8000000029701

Fid:	29700	Lerootid:	97791
Srcrootid:	32743	Pwsid:	AD166
Srcnum:	01	Pwssrcid:	AD16601
Systemname:	Dancing Fish Farm	Systemgrou:	B
Systemtype:	GRPB	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	4	Resconnect:	3
Totalconne:	3	Srcname:	WELL BCB791
Srctype:	W	Srcusecode:	P
Srcwelldep:	111	Township:	29

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Range :	02E	Section:	11
Qtrqtrsect:	NESE		
Longitude:	-122.509606		
Latitude:	48.016849		
Latlongmet:	QtrQtrSection	Srctot10yr:	0
Srctot6mo:	0	Srctot10yr:	0
Srctot5yr:	0	Priconata 2:	1953 NEWMAN ROAD
Protection:	Assigned	Priconata 4:	WA
Priconata 1:	Not Reported		
Priconata 3:	FREELAND		
Priconata 5:	Not Reported		
Priconata 6:	brad@dancingfishfarm.com		
Pwseffecti:	20-MAR-14	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srctstatusi:	A
Srceffecti:	17-MAR-14	Srctstatusi:	Not Reported
Floodzonei:	Not Reported	Priconata 7:	BRAD THOMPSON
Srctswinfl:	Not Reported	Latlongdat:	01-SEP-14
Site id:	WA8000000029701		

61
WSW
1/2 - 1 Mile
Lower

WA WELLS WA8000000001271

Fid:	1270	Lerootid:	48789
Srctrootid:	2247	Pwsid:	02017
Srctnum:	01	Pwssrcid:	0201701
Systemname:	GABLEIN ROSS WATER SYSTEM	Memgrou:	B
Systemtype:	GRPB	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopl:	12	Resconnect:	4
Totalconne:	4	Srctname:	WELL #1 ALQ092
Srcttype:	W	Srctusecode:	P
Srctwelldep:	103	Township:	29
Range :	02W	Section:	15
Qtrqtrsect:	SWNE		
Longitude:	-122.540431		
Latitude:	48.007135		
Latlongmet:	GPS	Srctstatusi:	U
Srctvulnioc:	Not Reported	Srctvulnvoc:	Not Reported
Srctvulnsoc:	Not Reported	Doewelltag:	ALQ092
Srctot6mo:	0	Srctot10yr:	0
Srctot5yr:	0	Srctot10yr:	0
Protection:	Assigned	Priconata 2:	2877 CEDAR SPRING LN
Priconata 1:	Not Reported	Priconata 4:	WA
Priconata 3:	CLINTON		
Priconata 5:	98236		
Priconata 6:	Not Reported		
Pwseffecti:	10-NOV-92	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srctstatusi:	A
Srceffecti:	10-NOV-92	Srctstatusi:	Not Reported
Floodzonei:	N	Priconata 7:	VERLANE GABLEIN
Srctswinfl:	U	Latlongdat:	Not Reported
Site id:	WA8000000001271		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

62
SSW
1/2 - 1 Mile
Higher

WA WELLS WA8000000004773

Fid:	4772	Lerootid:	56214
Srcrootid:	10742	Pwsid:	12939
Srcnum:	01	Pwssrcid:	1293901
Systemname:	MISTY MEADOWS	Systemgrou:	B
Systemtype:	GRPB	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	16	Resconnect:	8
Totalconne:	8	Srcname:	WELL # 1
Srctype:	W	Srcusecode:	P
Srcwellddep:	120	Township:	29
Range :	02E	Section:	15
Qtrqtrsect:	SWNE		
Longitude:	-122.53		
Latitude:	47.99889		
Latlongmet:	QtrQtrSe	Srctot1yr:	0
Srcvulnioc:	H	Srctot10yr:	0
Srcvulnsoc:	U	Priconat:	3603312056
Srctot6mo:	0	Priconat 2:	5814 FISH RD #17
Srctot5yr:	0	Priconat 4:	WA
Protection:	Assigned		
Priconat 1:	Not Reported		
Priconat 3:	FREELAND		
Priconat 5:	98249		
Priconat 6:	Not Reported		
Pwseffecti:	01-JUN-82	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srctatusi:	A
Srceffecti:	01-JAN-70	Srctinactiv:	Not Reported
Floodzonei:	N	Priconat 7:	PEGGY BERTO
Srctwinflu:	U	Latlongdat:	Not Reported
Site id:	WA8000000004773		

63
SE
1/2 - 1 Mile
Lower

WA WELLS WA80000000025912

Fid:	25911	Lerootid:	58747
Srcrootid:	29656	Pwsid:	26450
Srcnum:	04	Pwssrcid:	2645004
Systemname:	FREELAND WATER AND SEWER SYSTEM	Systemgrou:	A
Systemtype:	Comm	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	617	Resconnect:	433
Totalconne:	533	Srcname:	WELL #3 AFJ868
Srctype:	W	Srcusecode:	P
Srcwellddep:	368	Township:	29

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Range :	02E	Section:	14
Qtrqtrsect:	NESW		
Longitude:	-122.509		
Latitude:	48.00274		
Latlongmet:	QtrQtrSe	Srctot1yr:	601
Srctot6mo:	425	Srctot10yr:	1900
Srctot5yr:	1343	Priconata 1:	WHIDBEY WATER SERVICES
Protection:	CFR	Priconata 2:	5421 WOODARD AVE
Priconata 1:	WHIDBEY WATER SERVICES	Priconata 3:	FREELAND
Priconata 3:	FREELAND	Priconata 4:	WA
Priconata 5:	98249		
Priconata 6:	Not Reported		
Pwseffecti:	01-JAN-70	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srctstatusi:	A
Srceffecti:	07-DEC-05	Srctinactiv:	Not Reported
Floodzonei:	N	Priconata 7:	ANDY CAMPBELL
Srctswinfl:	U	Latlongdat:	Not Reported
Site id:	WA8000000025912		

64
East
1/2 - 1 Mile
Higher

FED USGS USGS40001279873

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480036122301401		
Monloc name:	29N/02E-12N01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0098151
Longitude:	-122.5051483	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	105
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19560101	Welldepth:	112
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
------	--------------------	------------------

1956-11-27 86

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

N65
SE
1/2 - 1 Mile
Lower

WA WELLS WA8000000024660

Fid:	24659	Lerootid:	59004
Srcrootid:	14477	Pwsid:	27849
Srcnum:	01	Pwssrcid:	2784901
Systemname:	BAYVIEW MEADOWS WATER SYSTEM	Systemgrou:	A
Systemtype:	Comm	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	39	Resconnect:	16
Totalconne:	16	Srcname:	ALT171 WELL 1
Srctype:	W	Srcusecode:	P
Srcwelldep:	200	Township:	29
Range :	02E	Section:	14
Qtrqtrsect:	SESE		
Longitude:	-122.512178		
Latitude:	47.999986		
Latlongmet:	GPS	Srctot1yr:	310
Srcvulnioc:	M	Srctot10yr:	980
Srcvulsoc:	L	Pricontact:	3605791956
Srctot6mo:	220	Pricontra 2:	5421 WOODARD AVE
Srctot5yr:	700	Pricontra 4:	WA
Protection:	CFR		
Pricontra 1:	WHIDBEY WATER SERVICES		
Pricontra 3:	FREELAND		
Pricontra 5:	98249		
Pricontra 6:	Not Reported		
Pwseffecti:	01-MAY-85	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srctstatusi:	A
Srceffecti:	01-JAN-70	Srctinactiv:	Not Reported
Floodzonei:	N	Pricontra 7:	ANDY CAMPBELL
Srctswinfl:	U	Latlongdat:	09-FEB-01
Site id:	WA8000000024660		

66
ESE
1/2 - 1 Mile
Lower

FED USGS USGS40001279739

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480025122301501		
Monloc name:	29N/02E-13D01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0067594
Longitude:	-122.5054259	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	100
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19350101	Welldepth:	14.7
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-08-14	10.2	

O67
SE
1/2 - 1 Mile
Lower

FED USGS USGS40001279556

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480006122303001		
Monloc name:	29N/02E-14H02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0014814
Longitude:	-122.5095926	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	105
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19550128	Welldepth:	120
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1959-01-01	102		1959-01-01	102	

N68
SE
1/2 - 1 Mile
Higher

FED USGS USGS40001279505

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480001122303701		
Monloc name:	29N/02E-14L02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0000925
Longitude:	-122.511537	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	158
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19790714	Welldepth:	381
Welldepth units:	ft	Wellholedepth:	381
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1979-07-14	331		1979-07-14	331	

O69
SE
1/2 - 1 Mile
Lower

FED USGS USGS40001279548

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480005122303001		
Monloc name:	29N/02E-14H01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0012037
Longitude:	-122.5095926	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	105
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	105
Construction date:	19100101	Wellholedepth:	Not Reported
Welldepth units:	ft		
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1963-08-14	102		1963-08-14	102	

70
SW
1/2 - 1 Mile
Lower

FED USGS USGS40001279506

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480001122320601		
Monloc name:	29N/02E-15K01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0000922
Longitude:	-122.536261	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	78
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19430101	Welldepth:	71.6
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1963-08-05	68.5		1963-08-05	68.5	

71
WNW
1/2 - 1 Mile
Lower

FED USGS USGS40001279948

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480046122323001		
Monloc name:	29N/02E-10L01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0125925
Longitude:	-122.5429288	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	19
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19010101	Welldepth:	14
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1963-08-07	10.1	

**72
NW
1/2 - 1 Mile
Lower**

WA WELLS WA8000000027225

Fid:	27224	Lerootid:	90990
Srctootid:	31109	Pwsid:	AC164
Srctnum:	01	Pwssrcid:	AC16401
Systemname:	St Augustines in the Woods WS	Systemgrou:	B
Systemtype:	GRPB	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	0	Resconnect:	0
Totalconne:	1	Srctname:	WELL
Srcttype:	W	Srctusecode:	P
Srctwelldep:	124	Township:	29
Range :	02E	Section:	10
Qtrqtrsect:	NENW		
Longitude:	-122.536		
Latitude:	48.02031		
Latlongmet:	QtrQtrSe	Srctsuscept:	U
Srctvulnioc:	Not Reported	Srctvulnvoc:	Not Reported
Srctvulnsoc:	Not Reported	Doewelltag:	Not Reported
Srctot6mo:	0	Srctot1yr:	0
Srctot5yr:	0	Srctot10yr:	0
Protection:	Assigned	Prictotact:	3603315904
Prictonta 1:	Not Reported	Prictonta 2:	331 WINDANTIDE PLACE
Prictonta 3:	FREELAND	Prictonta 4:	WA
Prictonta 5:	982499683		
Prictonta 6:	heiken@whidbey.com		
Pwseffecti:	07-OCT-08	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srctstatusi:	A
Srceffecti:	26-SEP-08	Srctinactiv:	Not Reported
Floodzonei:	Y	Prictonta 7:	GRANT HEIKEN
Srctswinfl:	Not Reported	Latlongdat:	Not Reported
Site id:	WA8000000027225		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

73
SSE
1/2 - 1 Mile
Higher

WA WELLS WA8000000014201

Fid:	14200	Lerootid:	63559
Srcrootid:	20340	Pwsid:	55707
Srcnum:	01	Pwssrcid:	5570701
Systemname:	HARRIS WELL #1	Systemgrou:	B
Systemtype:	GRPB	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	8	Resconnect:	3
Totalconne:	3	Srcname:	WELL #1 ALQ093
Srctype:	W	Srcusecode:	P
Srcwelldp:	325	Township:	29
Range :	02E	Section:	14
Qtrqtrsect:	NWSE		
Longitude:	-122.51275		
Latitude:	47.998676		
Latlongmet:	GPS	Srctot6mo:	0
Srcvulnioc:	H	Srctot5yr:	0
Srcvulsoc:	U	Protection:	Assigned
Srctot6mo:	0	Priconata 1:	Not Reported
Srctot5yr:	0	Priconata 3:	FREELAND
Protection:	Assigned	Priconata 5:	98249
Priconata 1:	Not Reported	Priconata 6:	ttuttle@comcast.net
Priconata 3:	FREELAND	Pwseffecti:	01-NOV-88
Priconata 5:	98249	Pwsinactiv:	Not Reported
Priconata 6:	ttuttle@comcast.net	Srceffecti:	01-JAN-70
Pwseffecti:	01-NOV-88	Floodzonei:	N
Pwsinactiv:	Not Reported	Srcswinfl:	U
Srceffecti:	01-JAN-70	Site id:	WA8000000014201
Floodzonei:	N		
Srcswinfl:	U		
Site id:	WA8000000014201		

P74
ESE
1/2 - 1 Mile
Lower

FED USGS USGS40001279611

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480012122301801		
Monloc name:	29N/02E-13E03		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0031482
Longitude:	-122.506259	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	85
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19800811	Welldepth:	110
Welldepth units:	ft	Wellholedepth:	110
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1980-08-11	76		1980-08-11	76	

75
SSE
1/2 - 1 Mile
Higher

FED USGS USGS40001279422

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-475951122305501		
Monloc name:	29N/02E-14K01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	47.9973147
Longitude:	-122.5165373	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	240
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19760912	Welldepth:	261
Welldepth units:	ft	Wellholedepth:	261
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1976-09-28	233		1976-09-28	233	

Q76
ENE
1/2 - 1 Mile
Lower

FED USGS USGS40001279964

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480048122301001		
Monloc name:	29N/02E-12M01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0131485
Longitude:	-122.5040372	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	88
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19440813	Welldepth:	81.6
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1963-08-13	78	

77
SW
1/2 - 1 Mile
Lower

WA WELLS WA8000000008906

Fid:	8905	Lerootid:	63889
Srrootid:	20774	Pwsid:	57750
Srnum:	01	Pwssrcid:	5775001
Systemname:	MUTINY BAY RESORT	Systemgrou:	A
Systemtype:	TNC	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	6	Resconnect:	4
Totalconne:	4	Srname:	WELL # 1
Srctype:	W	Srusecode:	P
Srwelldep:	57	Township:	29
Range :	02E	Section:	15
Qtrqtrsect:	Not Reported		
Longitude:	-122.538		
Latitude:	48.00047		
Latlongmet:	Section	Srcsuscept:	U
Srsvulnioc:	Not Reported	Srsvulnvoc:	Not Reported
Srsvulnsoc:	Not Reported	Doewelltag:	Not Reported
Srctot6mo:	0	Srctot1yr:	0
Srctot5yr:	0	Srctot10yr:	0
Protection:	Assigned	Pricontact:	3603214500

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Priconta 1:	Not Reported	Priconta 2:	P O BOX 249
Priconta 3:	FREELAND	Priconta 4:	WA
Priconta 5:	98249		
Priconta 6:	Not Reported		
Pwseffecti:	01-AUG-85	Pwsstatusi:	I
Pwsinactiv:	01-AUG-85	Srcstatusi:	I
Srcseffecti:	01-JAN-70	Srcinactiv:	01-AUG-85
Floodzonei:	N	Priconta 7:	ART SCHUPPEL
Srcswinfl:	U	Latlongdat:	Not Reported
Site id:	WA8000000008906		

Q78
ENE
1/2 - 1 Mile
Lower

FED USGS USGS40001279963

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480048122300901		
Monloc name:	29N/02E-12M02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0131485
Longitude:	-122.5037595	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	85
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19590101	Welldepth:	92
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-08-13	77	

79
WNW
1/2 - 1 Mile
Lower

WA WELLS WA8000000009396

Fid:	9395	Lerootid:	57329
Srcrootid:	12235	Pwsid:	18851
Srcnum:	01	Pwssrcid:	1885101
Systemname:	HARBOR SHORES WATER SYSTEM	Systemgrou:	B
Systemtype:	GRPB	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	15	Resconnect:	9
Totalconne:	9	Srcname:	WELL #1 APH028
Srctype:	W	Srcusecode:	P
Srcwelldep:	94	Township:	29

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Range :	02E	Section:	10
Qtrqtrsect:	SENW		
Longitude:	-122.542082		
Latitude:	48.01577		
Latlongmet:	GPS	Srctot10yr:	0
Srctot6mo:	0	Srctot10yr:	0
Srctot5yr:	0	Prcontact:	00000-000
Protection:	Assigned	Prcontact 2:	3784 SARATOGA RD
Prcontact 1:	Not Reported	Prcontact 4:	WA
Prcontact 3:	LANGLEY		
Prcontact 5:	982609654		
Prcontact 6:	Not Reported		
Pwseffecti:	01-AUG-83	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srctstatusi:	A
Srceffecti:	01-JAN-70	Srctstatusi:	Not Reported
Floodzonei:	N	Prcontact 7:	STEVEN GRAN
Srctswinfl:	U	Latlongdat:	Not Reported
Site id:	WA8000000009396		

R80
ENE
1/2 - 1 Mile
Lower

WA WELLS WA8000000027262

Fid:	27261	Lerootid:	62788
Srctrootid:	19329	Pwsid:	51115
Srctnum:	01	Pwssrcid:	5111501
Systemname:	MAPLE GLEN COMMUNITY ASSOCIATION	Systemname:	A
Systemtype:	Comm	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopol:	130	Resconnect:	56
Totalconne:	56	Srctname:	AGA864 WELL 1
Srcttype:	W	Srctusecode:	P
Srctwelldep:	150	Township:	29
Range :	02E	Section:	12
Qtrqtrsect:	SWNW		
Longitude:	-122.504865		
Latitude:	48.015554		
Latlongmet:	GPS	Srctot10yr:	980
Srctot6mo:	220	Srctot10yr:	980
Srctot5yr:	700	Prcontact:	3603211582
Protection:	CFR	Prcontact 2:	PO BOX 1062
Prcontact 1:	Not Reported	Prcontact 4:	WA
Prcontact 3:	FREELAND		
Prcontact 5:	98249		
Prcontact 6:	lutch@whidbey.com		
Pwseffecti:	01-JAN-70	Pwsstatusi:	A
Pwsinactiv:	Not Reported	Srctstatusi:	A
Srceffecti:	01-JAN-70	Srctstatusi:	Not Reported
Floodzonei:	N	Prcontact 7:	JOHN LUTCH
Srctswinfl:	U	Latlongdat:	09-FEB-01
Site id:	WA8000000027262		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

R81
ENE
1/2 - 1 Mile
Lower

WA WELLS WA8000000014163

Fid:	14162	Lerootid:	62788
Srcrootid:	19330	Pwsid:	51115
Srcnum:	02	Pwssrcid:	5111502
Systemname:	MAPLE GLEN COMMUNITY ASSOCIATION	System:	A
Systemtype:	Comm	Region:	NW
County:	ISLAND	Smaid:	Not Reported
Ftrespopul:	130	Resconnect:	56
Totalconne:	56	Srcname:	AGA959 WELL 2
Srctype:	W	Srcusecode:	P
Srcwelldp:	140	Township:	29
Range :	02E	Section:	12
Qtrqtrsect:	SWNW		
Longitude:	-122.504803		
Latitude:	48.015606		
Latlongmet:	GPS	Srctot1yr:	310
Srcvulnioc:	M	Srctot10yr:	980
Srcvulsoc:	L	Prcontact:	3603211582
Srctot6mo:	220	Prconta 2:	PO BOX 1062
Srctot5yr:	700	Prconta 4:	WA
Protection:	CFR		
Prconta 1:	Not Reported	Pwsstatusi:	A
Prconta 3:	FREELAND	Srcstatusi:	A
Prconta 5:	98249	Srcinactiv:	Not Reported
Prconta 6:	lutch@whidbey.com	Prconta 7:	JOHN LUTCH
Pwseffecti:	01-JAN-70	Latlongdat:	09-FEB-01
Pwsinactiv:	Not Reported		
Srceffecti:	01-JAN-70		
Floodzonei:	N		
Srcswinflu:	U		
Site id:	WA8000000014163		

82
SSW
1/2 - 1 Mile
Higher

FED USGS USGS40001279385

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-475947122313601		
Monloc name:	29N/02E-14N01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	47.9962035
Longitude:	-122.5279269	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	221
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19801002	Welldepth:	248
Welldepth units:	ft	Wellholedepth:	248
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1980-10-02	218		1980-10-02	218	

P83
ESE
1/2 - 1 Mile
Lower

FED USGS USGS40001279596

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480010122301601		
Monloc name:	29N/02E-13E01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0025926
Longitude:	-122.5057035	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	71.5
Vert measure units:	feet	Vertacc measure val:	0.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19120101	Welldepth:	70.2
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1963-08-14	67.1		1963-08-14	67.1	

P84
ESE
1/2 - 1 Mile
Lower

FED USGS USGS40001279595

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480010122301501		
Monloc name:	29N/02E-13E02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0025926
Longitude:	-122.5054257	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	71
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19560101	Welldepth:	84
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1963-08-14	66.6		1963-08-14	66.6	

85
SW
1/2 - 1 Mile
Lower

FED USGS USGS40001279550

Org. Identifier:	USGS-WA		
Formal name:	USGS Washington Water Science Center		
Monloc Identifier:	USGS-480005122322201		
Monloc name:	29N/02E-15F02		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	17110019	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	48.0012033
Longitude:	-122.5407059	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	95
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type: Not Reported
Construction date: 19800917
Welldepth units: ft
Wellholedepth units: ft

Welldepth: 168
Wellholedepth: 170

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel
1980-09-17	20	

Date	Feet below Surface	Feet to Sealevel
1980-09-17	20	

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for ISLAND County: 3

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for ISLAND COUNTY, WA

Number of sites tested: 6

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.000 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.267 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Ecology

Telephone: 360-407-6121

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Wells

Source: Department of Health

Telephone: 360-236-3148

Group A and B well locations.

Water Well Listing

Source: Public Utility District

Telephone: 206-779-7656

A listing of water well locations in Kitsap County.

OTHER STATE DATABASE INFORMATION

Oil and Gas Well Listing

Source: Department of Natural Resources

Telephone: 360-902-1450

Locations that represent oil and gas test well sites in Washington State from 1890 to present.

RADON

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Whidbey Marine and Auto

1695 Main Street

Freeland, WA 98249

Inquiry Number: 4988633.3

July 10, 2017

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

07/10/17

Site Name:

Whidbey Marine and Auto
1695 Main Street
Freeland, WA 98249
EDR Inquiry # 4988633.3

Client Name:

Sound Earth Strategies
2811 Fairview Avenue East
Seattle, WA 98102
Contact: Kevin Bartelt



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Sound Earth Strategies were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # D66D-4AC0-AD9B

PO # 1303-001

Project Whidbey Marine and Auto

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: D66D-4AC0-AD9B

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- ☒ Library of Congress
- ☒ University Publications of America
- ☒ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Whidbey Marine and Auto

1695 Main Street

Freeland, WA 98249

Inquiry Number: 4988633.4

July 10, 2017

EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

07/10/17

Site Name:

Whidbey Marine and Auto
1695 Main Street
Freeland, WA 98249
EDR Inquiry # 4988633.4

Client Name:

Sound Earth Strategies
2811 Fairview Avenue East
Seattle, WA 98102
Contact: Kevin Bartelt



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Sound Earth Strategies were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:**Coordinates:**

P.O.#	1303-001	Latitude:	48.009908 48° 0' 36" North
Project:	Whidbey Marine and Auto	Longitude:	-122.523556 -122° 31' 25" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	535533.73
		UTM Y Meters:	5317511.27
		Elevation:	119.00' above sea level

Maps Provided:

2014
1997, 1998
1978
1968
1953
1937, 1939
1936

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2014 Source Sheets



Freeland
2014
7.5-minute, 24000



Langley
2014
7.5-minute, 24000

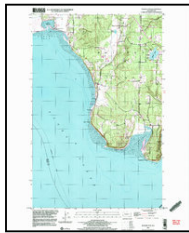


Hansville
2014
7.5-minute, 24000



Maxwelton
2014
7.5-minute, 24000

1997, 1998 Source Sheets



Maxwelton
1997
7.5-minute, 24000
Aerial Photo Revised 1968



Hansville
1997
7.5-minute, 24000
Aerial Photo Revised 1997



Freeland
1998
7.5-minute, 24000
Aerial Photo Revised 1998

1978 Source Sheets



Maxwelton
1978
7.5-minute, 24000
Aerial Photo Revised 1968



Freeland
1978
7.5-minute, 24000
Aerial Photo Revised 1978

1968 Source Sheets



Freeland
1968
7.5-minute, 24000
Aerial Photo Revised 1968



Maxwelton
1968
7.5-minute, 24000
Aerial Photo Revised 1968



Hansville
1968
7.5-minute, 24000
Aerial Photo Revised 1968



Langley
1968
7.5-minute, 24000
Aerial Photo Revised 1968

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1953 Source Sheets



Hansville
1953
7.5-minute, 24000
Aerial Photo Revised 1951



Freeland
1953
7.5-minute, 24000
Aerial Photo Revised 1951



Maxwelton
1953
7.5-minute, 24000
Aerial Photo Revised 1952

1937, 1939 Source Sheets



Port Gamble
1937
15-minute, 62500
Aerial Photo Revised 1936



Coupeville
1939
15-minute, 62500
Aerial Photo Revised 1936

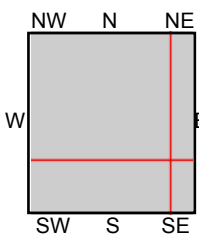
1936 Source Sheets



COUPEVILLE
1936
15-minute, 50000



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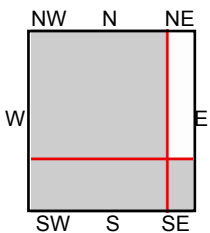
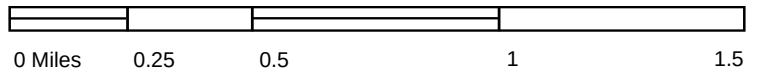
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NE, Langley, 2014, 7.5-minute
SE, Maxwelton, 2014, 7.5-minute
S, Hansville, 2014, 7.5-minute

SITE NAME: Whidbey Marine and Auto
ADDRESS: 1695 Main Street
Freeland, WA 98249
CLIENT: Sound Earth Strategies





This report includes information from the following map sheet(s).



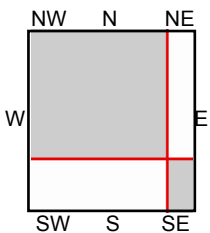
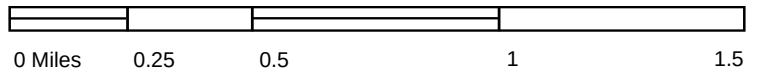
TP, Freeland, 1998, 7.5-minute
SE, Maxwellton, 1997, 7.5-minute
S, Hansville, 1997, 7.5-minute

SITE NAME: Whidbey Marine and Auto
ADDRESS: 1695 Main Street
Freeland, WA 98249
CLIENT: Sound Earth Strategies





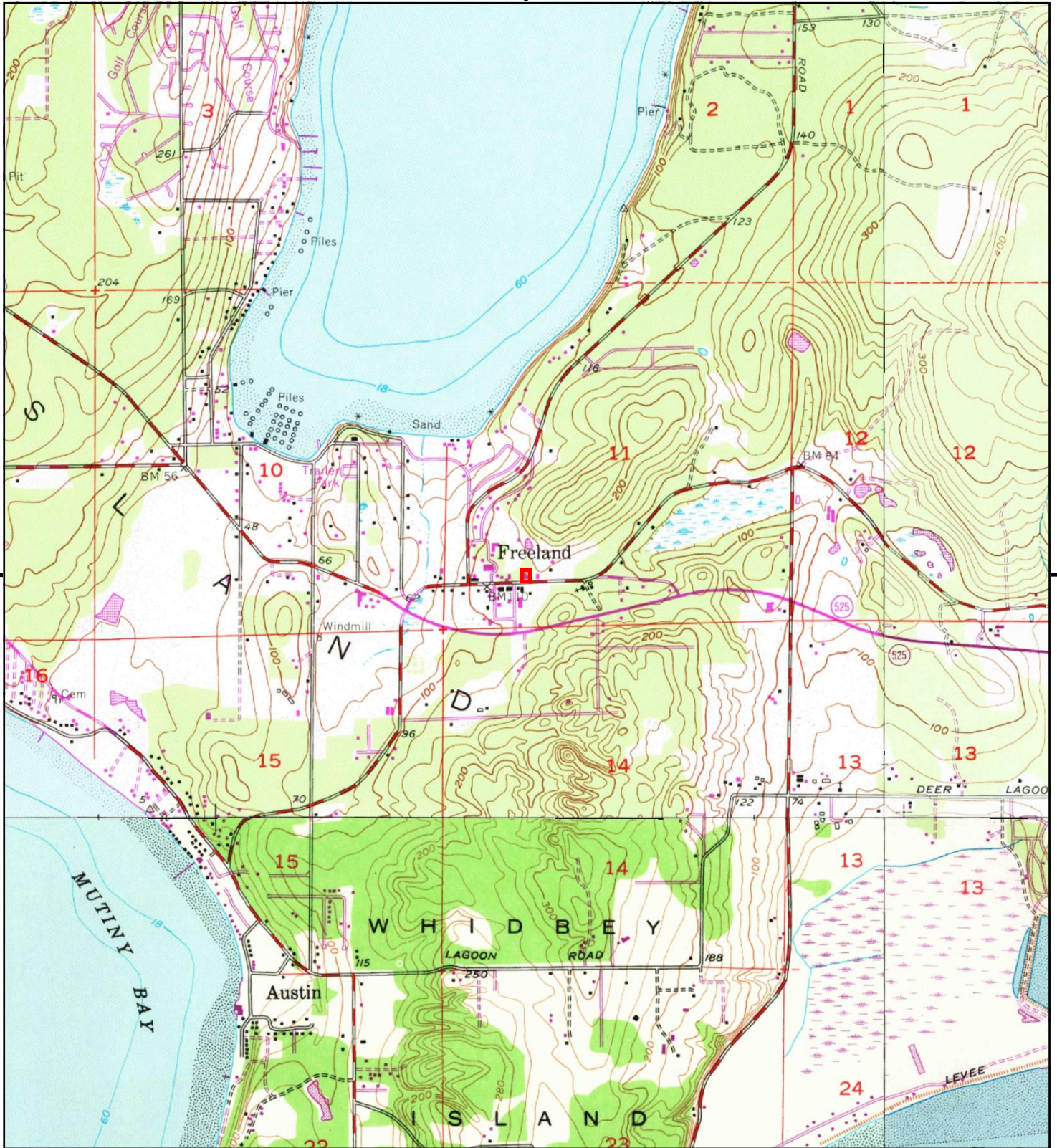
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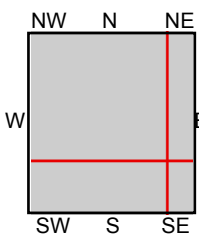
TP, Freeland, 1978, 7.5-minute
SE, Maxwellton, 1978, 7.5-minute

SITE NAME: Whidbey Marine and Auto
ADDRESS: 1695 Main Street
Freeland, WA 98249
CLIENT: Sound Earth Strategies





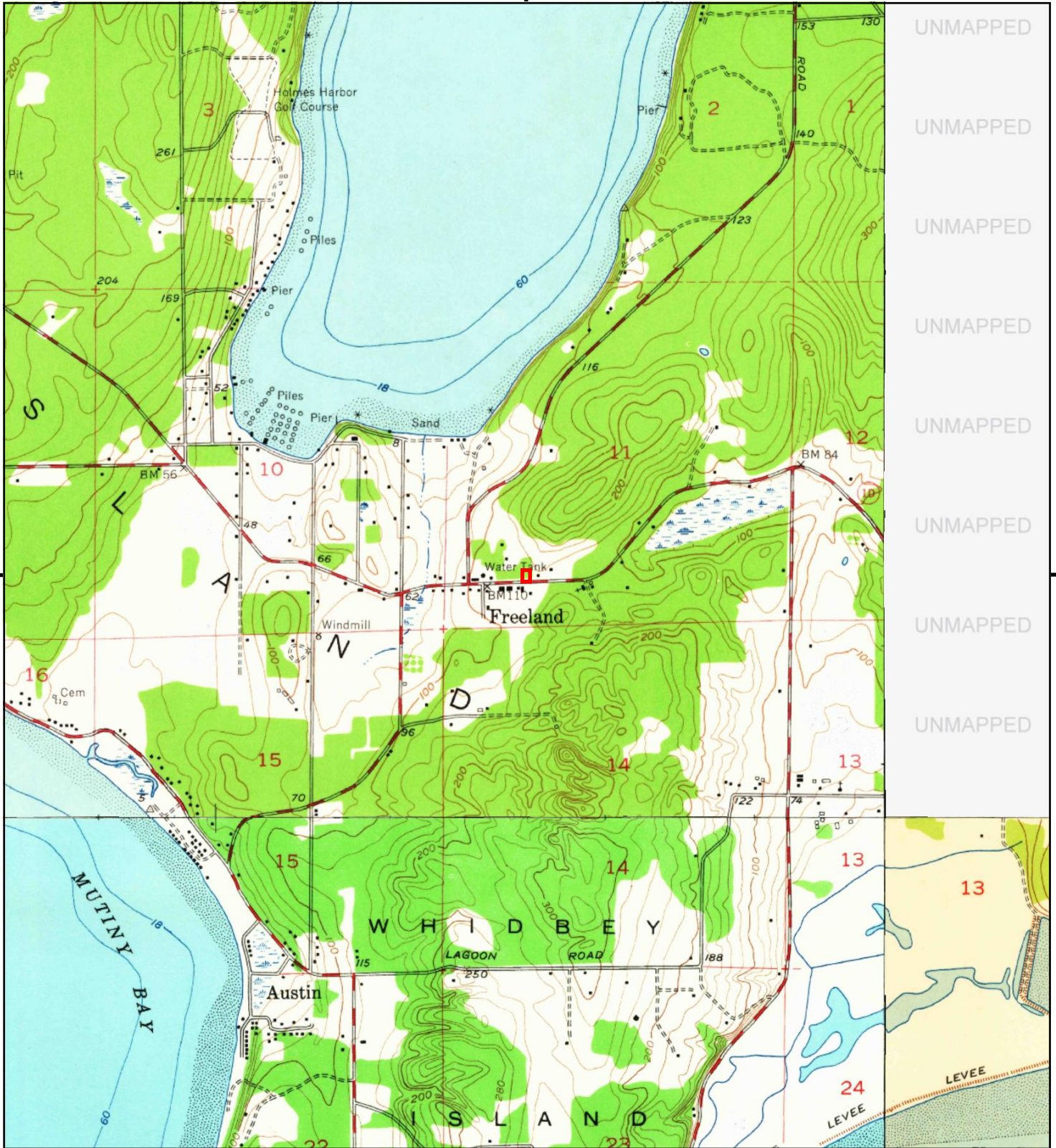
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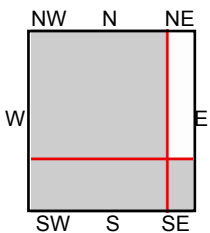
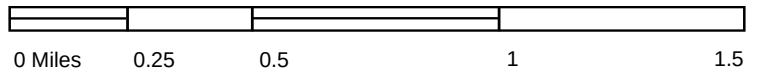
TP, Freeland, 1968, 7.5-minute
NE, Langley, 1968, 7.5-minute
SE, Maxwelton, 1968, 7.5-minute
S, Hansville, 1968, 7.5-minute

SITE NAME: Whidbey Marine and Auto
ADDRESS: 1695 Main Street
Freeland, WA 98249
CLIENT: Sound Earth Strategies





This report includes information from the following map sheet(s).



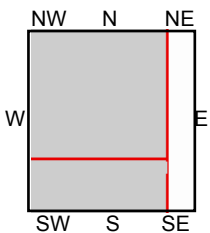
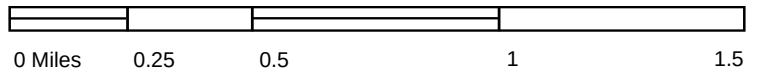
TP, Freeland, 1953, 7.5-minute
SE, Maxwellton, 1953, 7.5-minute
S, Hansville, 1953, 7.5-minute

SITE NAME: Whidbey Marine and Auto
ADDRESS: 1695 Main Street
Freeland, WA 98249
CLIENT: Sound Earth Strategies





This report includes information from the following map sheet(s).



TP, Coupeville, 1939, 15-minute
SW, Port Gamble, 1937, 15-minute

SITE NAME: Whidbey Marine and Auto
ADDRESS: 1695 Main Street
Freeland, WA 98249
CLIENT: Sound Earth Strategies





APPENDIX B
BORING LOGS (SOUNDEARTH 2017)



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 7/26/17
Surface Conditions: Asphalt
Well Location N/S: 12' S of well MW-2
Well Location E/W: 0' E-W of well MW-2
Reviewed by: EBF
Date Completed: 7/26/17

BORING LOG | **B08**
--

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling 55 feet bgs
▼ Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
0						Asphalt		~5-inches asphalt at surface.	
						SW-SM		0 to 2 feet bgs: Moist, dark brown, SAND with silt and gravel, no hydrocarbon odor (10-70-20).	
			100	0.1		SP-SM		2 to 6 feet bgs: Moist, light gray-brown, fine to medium SAND with silt and gravel, no hydrocarbon odor (10-75-15).	
				0.2					
5						SP-SM		6 to 8 feet bgs: Moist, light gray-brown, fine to medium SAND with silt, no hydrocarbon odor (10-80-10).	
			80						
				0.0		SP-SM			
			80						
				1.1		SP-SM		8 to 20 feet bgs: Moist, medium gray, SAND with silt and gravel, no hydrocarbon odor (10-70-20).	
10					B08-10				
			80						
				0.7					
				0.3					
15									

Drilling Co./Driller: Cascade / Zane
Drilling Equipment: Track Sonic
Sampler Type: Core Barrel
Hammer Type/Weight: -- / -- lbs
Total Boring Depth: 66 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: -- inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: --

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 7/26/17
Surface Conditions: Asphalt
Well Location N/S: 12' S of well MW-2
Well Location E/W: 0' E-W of well MW-2
Reviewed by: EBF
Date Completed: 7/26/17

BORING LOG | **B08**
 --

Site Address: 1695 E Main Street
 Freeland, Washington

Water Depth At Time of Drilling 55 feet bgs
 Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
15						SP-SM		8 to 20 feet bgs: Moist, medium gray, SAND with silt and gravel, no hydrocarbon odor (10-70-20).	
20			100	22.8					
				50.3	B08-20	SP-SM		20 to 28 feet bgs: Moist, light gray, SAND with gravel and silt, no hydrocarbon odor (10-70-20).	
				0.8					
25			100	0.3					
				1.1					
						SP-SM		28 to 32 feet bgs: Moist, gray-brown, medium SAND with silt, no hydrocarbon odor (10-80-10).	
30				0.9	B08-30				

Drilling Co./Driller: Cascade / Zane
Drilling Equipment: Track Sonic
Sampler Type: Core Barrel
Hammer Type/Weight: -- / -- lbs
Total Boring Depth: 66 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: -- inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: --

Notes/Comments:
 (15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 7/26/17
Surface Conditions: Asphalt
Well Location N/S: 12' S of well MW-2
Well Location E/W: 0' E-W of well MW-2
Reviewed by: EBF
Date Completed: 7/26/17

BORING LOG | **B08**
--

Site Address: 1695 E Main Street
Freeland, Washington

Water Depth At Time of Drilling 55 feet bgs
Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
30						SP-SM		28 to 32 feet bgs: Moist, gray-brown, medium SAND with silt, no hydrocarbon odor (10-80-10).	
				0.4		SP-SM		32 to 36 feet bgs: Moist, gray-brown, fine to medium SAND with silt, no hydrocarbon odor (10-85-5).	
				1.1					
35			100			SP-SM		36 to 42 feet bgs: Moist, gray-brown, medium SAND with gravel and silt, no hydrocarbon odor (10-70-20).	
				0.3					
				0.0					
40					B08-40				
				0.2		SP-SM		42 to 48 feet bgs: Moist, gray, medium SAND with silt, no hydrocarbon odor (15-75-10).	
			100						
45				0.4					

Drilling Co./Driller: Cascade / Zane
Drilling Equipment: Track Sonic
Sampler Type: Core Barrel
Hammer Type/Weight: -- / -- lbs
Total Boring Depth: 66 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: -- inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: --

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 7/26/17
Surface Conditions: Asphalt
Well Location N/S: 12' S of well MW-2
Well Location E/W: 0' E-W of well MW-2
Reviewed by: EBF
Date Completed: 7/26/17

BORING LOG | **B08** | --

Site Address: 1695 E Main Street
Freeland, Washington

Water Depth At Time of Drilling 55 feet bgs
Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
45			100	0.6		SP-SM		42 to 48 feet bgs: Moist, gray, medium SAND with silt, no hydrocarbon odor (15-75-10).	
				1.0	B08-50			48 to 54 feet bgs: Moist, gray, SAND with gravel and silt, no hydrocarbon odor (10-65-25).	
50				4.8					
				373				(grades to wet at 53 feet bgs).	
						SP		54 to 57 feet bgs: Wet to saturated, gray-brown, medium to coarse SAND, trace silt and gravel, moderate to strong hydrocarbon odor (5-90-5). (grades to saturated at 55 feet bgs).	
55			100	15000 (over range)	B08-55				
				14.2		SM		57 to 62 feet bgs: Wet to saturated, gray-brown, silty SAND, trace gravel, faint hydrocarbon odor (35-60-5).	
60				4.0	B08-60				

Drilling Co./Driller: Cascade / Zane
Drilling Equipment: Track Sonic
Sampler Type: Core Barrel
Hammer Type/Weight: -- / -- lbs
Total Boring Depth: 66 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: -- inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: --

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 7/26/17
Surface Conditions: Asphalt
Well Location N/S: 12' S of well MW-2
Well Location E/W: 0' E-W of well MW-2
Reviewed by: EBF
Date Completed: 7/26/17

BORING LOG | **B08**
--

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling 55 feet bgs
▼ Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
60			100		B08-65	SM		57 to 62 feet bgs: Wet to saturated, gray-brown, silty SAND, trace gravel, faint hydrocarbon odor (35-60-5).	
65						ML		62 to 65 feet bgs: Moist to wet, dark gray-brown, SILT with sand, no hydrocarbon odor (80-20-0).	
65								Boring terminated at 66 feet bgs. Perched groundwater zone encountered at 55 feet bgs at time of drilling.	
70									
75									

Drilling Co./Driller: Cascade / Zane
Drilling Equipment: Track Sonic
Sampler Type: Core Barrel
Hammer Type/Weight: -- / -- lbs
Total Boring Depth: 66 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: -- inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: --

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 8/15/17
Surface Conditions: Asphalt
Well Location N/S: 55' S of East Main Street
Well Location E/W: 3.5' W of E curb
Reviewed by: EBF
Date Completed: 8/15/17

BORING LOG | **B09**
--

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling -- feet bgs
▽ Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
0						Asphalt		~7-inches asphalt at surface.	
10	7 9 11		100	0.0	B09-10	SP-SM		Moist, gray-brown, medium SAND with silt, no hydrocarbon odor (10-90-0).	
15									

Drilling Co./Driller: Cascade / Muddy Waters
Drilling Equipment: Truck HSA
Sampler Type: CAL
Hammer Type/Weight: In-hole / 300 lbs
Total Boring Depth: 71.5 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: -- / 4.5 ID inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: --

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.

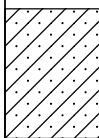


Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 8/15/17
Surface Conditions: Asphalt
Well Location N/S: 55' S of East Main Street
Well Location E/W: 3.5' W of E curb
Reviewed by: EBF
Date Completed: 8/15/17

BORING LOG | **B09**
--

Site Address: 1695 E Main Street
Freeland, Washington

 Water Depth At Time of Drilling -- feet bgs
 Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
15									
20		7 10 14	80	0.2	B09-20	SP-SM		Moist, gray-brown, medium SAND with silt, no hydrocarbon odor (10-90-0).	
25									
30									

Drilling Co./Driller: Cascade / Muddy Waters
Drilling Equipment: Truck HSA
Sampler Type: CAL
Hammer Type/Weight: In-hole / 300 lbs
Total Boring Depth: 71.5 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: -- / 4.5 ID inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: --

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 8/15/17
Surface Conditions: Asphalt
Well Location N/S: 55' S of East Main Street
Well Location E/W: 3.5' W of E curb
Reviewed by: EBF
Date Completed: 8/15/17

BORING LOG | **B09**
 --

Site Address: 1695 E Main Street
 Freeland, Washington

Water Depth At Time of Drilling -- feet bgs
 Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
30	8 12 16		100	0.1	B09-30	SP-SM		Moist, gray-brown, medium SAND with silt, no hydrocarbon odor (10-90-0).	
35									
40	10 12 16		100	0.1	B09-40	SM		Moist, gray, SAND with silt, no hydrocarbon odor (15-85-0).	
45									

Drilling Co./Driller: Cascade / Muddy Waters
Drilling Equipment: Truck HSA
Sampler Type: CAL
Hammer Type/Weight: In-hole / 300 lbs
Total Boring Depth: 71.5 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: -- / 4.5 ID inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: --

Notes/Comments:
 (15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 8/15/17
Surface Conditions: Asphalt
Well Location N/S: 55' S of East Main Street
Well Location E/W: 3.5' W of E curb
Reviewed by: EBF
Date Completed: 8/15/17

BORING LOG | **B09**
 --

Site Address: 1695 E Main Street
 Freeland, Washington

Water Depth At Time of Drilling -- feet bgs
 Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
45	10 14 18		100	0.2	B09-45	SP-SM		Moist, gray, fine to medium SAND with silt, no hydrocarbon odor (10-90-0).	
50	12 15 18		100	0.3	B09-50	SP-SM		Moist, gray, fine to medium SAND with silt, no hydrocarbon odor (10-90-0).	
55	11 12 16		100	0.1	B09-55	SP-SM		Moist, gray, fine to medium SAND with silt, no hydrocarbon odor (10-90-0).	
60									

Drilling Co./Driller: Cascade / Muddy Waters
Drilling Equipment: Truck HSA
Sampler Type: CAL
Hammer Type/Weight: In-hole / 300 lbs
Total Boring Depth: 71.5 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: -- / 4.5 ID inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: --

Notes/Comments:
 (15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 8/15/17
Surface Conditions: Asphalt
Well Location N/S: 55' S of East Main Street
Well Location E/W: 3.5' W of E curb
Reviewed by: EBF
Date Completed: 8/15/17

BORING LOG | **B09**
 --

Site Address: 1695 E Main Street
 Freeland, Washington

Water Depth At Time of Drilling -- feet bgs
 Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
60	14 17 21		100	0.1	B09-60	SP-SM		Moist, gray, fine to medium SAND with silt, no hydrocarbon odor (10-90-0).	
	14 17 15		90	0.1	B09-62.5	SP-SM		Moist, gray-brown, SAND with gravel and silt, no hydrocarbon odor (10-55-35).	
65	50/3"		60	0.2	B09-65	SP-SM		Moist, brown, SAND with gravel and silt, no hydrocarbon odor (10-80-10).	
	17 23 12		60	0.4	B09-67.5	SM / ML		Moist to wet, interbedded gray, SAND with gravel and silt, and brown, sandy SILT, no hydrocarbon odor (15-65-20) / (80-20-0).	
70	10 16 26		70	0.2	B09-70	SP-SM		Moist, medium gray, SAND with silt, trace gravel, no hydrocarbon odor (10-85-5).	
								Boring terminated at 71.5 feet bgs. No groundwater encountered at time of drilling.	
75									

Drilling Co./Driller: Cascade / Muddy Waters
Drilling Equipment: Truck HSA
Sampler Type: CAL
Hammer Type/Weight: In-hole / 300 lbs
Total Boring Depth: 71.5 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: -- / 4.5 inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: --

Notes/Comments:
 (15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 07/26/17
Surface Conditions: Gravel
Well Location N/S: 18' S of S edge of awning
Well Location E/W: 4' W of E edge of building
Reviewed by: EBF
Date Completed: 07/28/17

BORING LOG | **MW-17**
 MW-17

Site Address: 1695 E Main Street
 Freeland, Washington

Water Depth At Time of Drilling 102 feet bgs
 Water Depth After Completion 102.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
0						Gravel		Gravel at surface.	
						SW-SM		0 to 3 feet bgs: Moist, dark gray, SAND with gravel and silt, no hydrocarbon odor (10-60-30).	
			90	0.0					
						SP		3 to 10 feet bgs: Moist, brown, SAND, trace gravel and silt, no hydrocarbon odor (5-90-5).	
				0.2					
5									
				0.3					
			70						
						SW		10 to 12 feet bgs: Moist, brown, SAND with gravel, trace silt, no hydrocarbon odor (5-80-15).	
10									
				0.7					
						SP-SM		12 to 20 feet bgs: Moist, gray, SAND with silt, trace gravel, no hydrocarbon odor (10-85-5).	
				0.7					
			100						
15				0.0	MW17-15				

Drilling Co./Driller: Cascade / Zane
Drilling Equipment: Track Sonic
Sampler Type: Core Barrel
Hammer Type/Weight: -- / -- lbs
Total Boring Depth: 116 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BIM 578

Well/Auger Diameter: 2 / 4 inches
Well Screened Interval: 100 - 115 feet bgs
Screen Slot Size: 0.10 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite grout
Monument Type: Flush Mount

Notes/Comments:
 (15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 07/26/17
Surface Conditions: Gravel
Well Location N/S: 18' S of S edge of awning
Well Location E/W: 4' W of E edge of building
Reviewed by: EBF
Date Completed: 07/28/17

BORING LOG | **MW-17**
MW-17

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling 102 feet bgs
▼ Water Depth After Completion 102.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
15						SP-SM		12 to 20 feet bgs: Moist, gray, SAND with silt, trace gravel, no hydrocarbon odor (10-85-5).	
			100	0.0					
				0.4					
			100						
20				2.3		SW-SM		20 to 25 feet bgs: Moist, brown, SAND with gravel and silt, no hydrocarbon odor (10-70-20).	
				0.7					
								(grades from brown to light gray)	
25				3.0		SP-SM		25 to 32 feet bgs: Moist, light gray, fine SAND with silt, no hydrocarbon odor (10-80-10).	
			100						
				0.2					
30				2.3	MW17-30				

Drilling Co./Driller: Cascade / Zane
Drilling Equipment: Track Sonic
Sampler Type: Core Barrel
Hammer Type/Weight: -- / -- lbs
Total Boring Depth: 116 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BIM 578

Well/Auger Diameter: 2 / 4 inches
Well Screened Interval: 100 - 115 feet bgs
Screen Slot Size: 0.10 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite grout
Monument Type: Flush Mount

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 07/26/17
Surface Conditions: Gravel
Well Location N/S: 18' S of S edge of awning
Well Location E/W: 4' W of E edge of building
Reviewed by: EBF
Date Completed: 07/28/17

BORING LOG | **MW-17**
MW-17

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling 102 feet bgs
▼ Water Depth After Completion 102.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
30						SP-SM		25 to 32 feet bgs: Moist, light gray, fine SAND with silt, no hydrocarbon odor (10-80-10).	
			100	0.1		SM		32 to 40 feet bgs: Moist, medium gray, SAND with silt, no hydrocarbon odor (15-75-10).	
				0.0					
35									
			100	0.0					
				0.1	MW17-40	SP-SM		40 to 45 feet bgs: Moist, gray, fine to medium SAND with gravel and silt, no hydrocarbon odor (10-75-15).	
				0.0					
			90	0.4					
				1.1					
45									

Drilling Co./Driller: Cascade / Zane
Drilling Equipment: Track Sonic
Sampler Type: Core Barrel
Hammer Type/Weight: -- / -- lbs
Total Boring Depth: 116 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BIM 578

Well/Auger Diameter: 2 / 4 inches
Well Screened Interval: 100 - 115 feet bgs
Screen Slot Size: 0.10 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite grout
Monument Type: Flush Mount

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 07/26/17
Surface Conditions: Gravel
Well Location N/S: 18' S of S edge of awning
Well Location E/W: 4' W of E edge of building
Reviewed by: EBF
Date Completed: 07/28/17

BORING LOG | **MW-17**
 MW-17

Site Address: 1695 E Main Street
 Freeland, Washington

Water Depth At Time of Drilling 102 feet bgs
 Water Depth After Completion 102.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
45						SP-SM		45 to 48 feet bgs: Moist, gray, fine to medium SAND with silt, no hydrocarbon odor (10-85-5).	
				5.6					
				47.8		SP-SM		48 to 53.5 feet bgs: Moist to wet, gray SAND with silt, trace gravel (10-85-5).	
			100	157.3	MW17-50			(faint hydrocarbon odor from 50 feet bgs)	
50								(grades to wet to saturated at 51 feet bgs)	
				387				(moderate hydrocarbon odor from 51.5 feet bgs)	
								(strong hydrocarbon odor from 53 feet bgs)	
				15000 (over range)	MW17-54	SM		53.5 to 54 feet bgs: wet to saturated, gray silty SAND, trace gravel, very strong hydrocarbon odor (35-60-5).	
			100			ML		54 to 55.5 feet bgs: Moist, light brown, SILT, trace sand and oxidation staining, no hydrocarbon odor (95-5-0).	
55				57.6					
				0.7		ML		55.5 to 68 feet bgs: Moist to wet, dark gray, SILT with sand, some stringers of sandy SILT, no hydrocarbon odor (85-15-0).	
				0.2					
			90						
				0.0					
60									

Drilling Co./Driller: Cascade / Zane
Drilling Equipment: Track Sonic
Sampler Type: Core Barrel
Hammer Type/Weight: -- / -- lbs
Total Boring Depth: 116 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BIM 578

Well/Auger Diameter: 2 / 4 inches
Well Screened Interval: 100 - 115 feet bgs
Screen Slot Size: 0.10 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite grout
Monument Type: Flush Mount

Notes/Comments:
 (15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 07/26/17
Surface Conditions: Gravel
Well Location N/S: 18' S of S edge of awning
Well Location E/W: 4' W of E edge of building
Reviewed by: EBF
Date Completed: 07/28/17

BORING LOG | **MW-17**
MW-17

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling 102 feet bgs
▼ Water Depth After Completion 102.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
60			90	0.0	MW17-61	ML		55.5 to 68 feet bgs: Moist to wet, dark gray, SILT with sand, some stringers of sandy SILT, no hydrocarbon odor (85-15-0).	
65			90	0.0				(Paused drilling at 66 feet bgs to set bentonite conductor casing from 54 to 66 feet bgs. Allowed bentonite seal to set for 1.2 hours before drilling through silt layer.)	
70			100	0.2	MW17-70	SM		68 to 77 feet bgs: Moist, light gray-brown, fine silty SAND, no hydrocarbon odor (20-80-0).	
75				0.0					

Drilling Co./Driller: Cascade / Zane
Drilling Equipment: Track Sonic
Sampler Type: Core Barrel
Hammer Type/Weight: -- / -- lbs
Total Boring Depth: 116 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BIM 578

Well/Auger Diameter: 2 / 4 inches
Well Screened Interval: 100 - 115 feet bgs
Screen Slot Size: 0.10 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite grout
Monument Type: Flush Mount

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 07/26/17
Surface Conditions: Gravel
Well Location N/S: 18' S of S edge of awning
Well Location E/W: 4' W of E edge of building
Reviewed by: EBF
Date Completed: 07/28/17

BORING LOG | **MW-17**
MW-17

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling 102 feet bgs
▼ Water Depth After Completion 102.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
75						SM		68 to 77 feet bgs: Moist, light gray-brown, fine silty SAND, no hydrocarbon odor (20-80-0).	
			100	0.0		SP-SM		77 to 85 feet bgs: Moist, light gray SAND with silt, no hydrocarbon odor (10-80-10).	
80				0.0	MW17-80				
			100	0.0					
				0.0					
85				0.0		SP		85 to 100 feet bgs: Moist, light gray, medium to fine SAND with gravel, no hydrocarbon odor (5-80-15).	
				0.1					
			50						
90				0.0					

Drilling Co./Driller: Cascade / Zane
Drilling Equipment: Track Sonic
Sampler Type: Core Barrel
Hammer Type/Weight: -- / -- lbs
Total Boring Depth: 116 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BIM 578

Well/Auger Diameter: 2 / 4 inches
Well Screened Interval: 100 - 115 feet bgs
Screen Slot Size: 0.10 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite grout
Monument Type: Flush Mount

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.

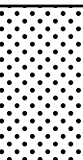
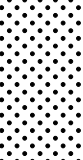
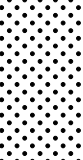


Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 07/26/17
Surface Conditions: Gravel
Well Location N/S: 18' S of S edge of awning
Well Location E/W: 4' W of E edge of building
Reviewed by: EBF
Date Completed: 07/28/17

BORING LOG | MW-17

Site Address: 1695 E Main Street
Freeland, Washington

 Water Depth At Time of Drilling 102 feet bgs
 Water Depth After Completion 102.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
90			50	0.2	MW17-91	SP		85 to 100 feet bgs: Moist, light gray, medium to fine SAND with gravel, no hydrocarbon odor (5-80-15).	
95				0.0					
				6.0					
100			90	9.9	MW17-100	SP		100 to 102 feet bgs: Wet, medium to coarse SAND, trace silt and gravel, no hydrocarbon odor (5-90-5).	
				230		SP		102 to 105 feet bgs: Saturated, medium to coarse SAND, trace silt and gravel, faint hydrocarbon odor (5-90-5).	
105				15000 (over range)	MW17-105				

Drilling Co./Driller: Cascade / Zane
Drilling Equipment: Track Sonic
Sampler Type: Core Barrel
Hammer Type/Weight: -- / -- lbs
Total Boring Depth: 116 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BIM 578

Well/Auger Diameter: 2 / 4 inches
Well Screened Interval: 100 - 115 feet bgs
Screen Slot Size: 0.10 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite grout
Monument Type: Flush Mount

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 07/26/17
Surface Conditions: Gravel
Well Location N/S: 18' S of S edge of awning
Well Location E/W: 4' W of E edge of building
Reviewed by: EBF
Date Completed: 07/28/17

BORING LOG | MW-17

Site Address: 1695 E Main Street
 Freeland, Washington

Water Depth At Time of Drilling 102 feet bgs
 Water Depth After Completion 102.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
105						SP		105 to 114 feet bgs: Saturated, gray, coarse SAND, trace silt and gravel, strong hydrocarbon odor (5-90-5).	
			90	349				(grades to moderate hydrocarbon odor from 108 feet)	
				3.7				(grades to very faint hydrocarbon odor from 110 feet)	
110				3.2					
			90	4.4					
				5.1		SM		114 to 116 feet bgs: Saturated, gray, SAND with silt, trace gravel, moderate hydrocarbon odor (15-80-5).	
115				33.5	MW17-116				
								Boring terminated at 116 feet bgs. Installed groundwater monitoring well MW-17, screened 100 to 115 feet bgs.	
120									

Drilling Co./Driller: Cascade / Zane
Drilling Equipment: Track Sonic
Sampler Type: Core Barrel
Hammer Type/Weight: -- / -- lbs
Total Boring Depth: 116 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BIM 578

Well/Auger Diameter: 2 / 4 inches
Well Screened Interval: 100 - 115 feet bgs
Screen Slot Size: 0.10 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite grout
Monument Type: Flush Mount

Notes/Comments:
 (15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.

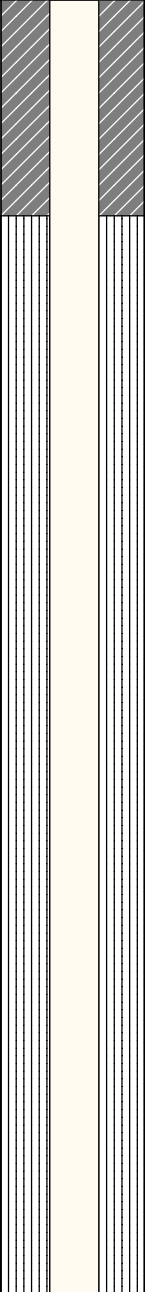


Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 8/14/17
Surface Conditions: Asphalt
Well Location N/S: 5' W of E curb
Well Location E/W: 212' S of East Main Street
Reviewed by: EBF
Date Completed: 8/14/17

BORING LOG | **MW-18**
MW-18

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling 104 feet bgs
▼ Water Depth After Completion 102.3 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
0						Asphalt		~6-inches asphalt at surface.	
5									
10									
15									

Drilling Co./Driller: Cascade / Muddy Waters
Drilling Equipment: Truck HSA
Sampler Type: CAL
Hammer Type/Weight: In-hole / 300 lbs
Total Boring Depth: 115.5 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BKA 280

Well/Auger Diameter: 2 / 4.5 inches
Well Screened Interval: 100-115 feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: Flush Mount

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.

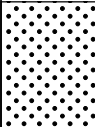


Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 8/14/17
Surface Conditions: Asphalt
Well Location N/S: 5' W of E curb
Well Location E/W: 212' S of East Main Street
Reviewed by: EBF
Date Completed: 8/14/17

BORING LOG | **MW-18**
MW-18

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling 104 feet bgs
▼ Water Depth After Completion 102.3 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
15									
20	7 10 11		100	0.0	MW18-20	SP		Moist, light gray, fine to medium SAND, trace silt, no hydrocarbon odor (5-95-0).	
25									
30									

Drilling Co./Driller: Cascade / Muddy Waters
Drilling Equipment: Truck HSA
Sampler Type: CAL
Hammer Type/Weight: In-hole / 300 lbs
Total Boring Depth: 115.5 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BKA 280

Well/Auger Diameter: 2 / 4.5 ID inches
Well Screened Interval: 100-115 feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: Flush Mount

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 8/14/17
Surface Conditions: Asphalt
Well Location N/S: 5' W of E curb
Well Location E/W: 212' S of East Main Street
Reviewed by: EBF
Date Completed: 8/14/17

BORING LOG | **MW-18**
MW-18

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling 104 feet bgs
▼ Water Depth After Completion 102.3 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
30									
35									
40	7 17 21		100	0.0	MW18-40	SM		Moist, gray, fine to medium SAND with silt and gravel, no hydrocarbon odor (15-70-15).	
45									

Drilling Co./Driller: Cascade / Muddy Waters
Drilling Equipment: Truck HSA
Sampler Type: CAL
Hammer Type/Weight: In-hole / 300 lbs
Total Boring Depth: 115.5 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BKA 280

Well/Auger Diameter: 2 / 4.5 ID inches
Well Screened Interval: 100-115 feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: Flush Mount

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 8/14/17
Surface Conditions: Asphalt
Well Location N/S: 5' W of E curb
Well Location E/W: 212' S of East Main Street
Reviewed by: EBF
Date Completed: 8/14/17

BORING LOG | **MW-18**
MW-18

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling 104 feet bgs
▼ Water Depth After Completion 102.3 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
45									
50									
55	15 20 26		100	0.1	MW18-55	SP-SM		Moist, gray, fine SAND with silt, no hydrocarbon odor (10-90-0).	
60									

Drilling Co./Driller: Cascade / Muddy Waters
Drilling Equipment: Truck HSA
Sampler Type: CAL
Hammer Type/Weight: In-hole / 300 lbs
Total Boring Depth: 115.5 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BKA 280

Well/Auger Diameter: 2 / 4.5 ID inches
Well Screened Interval: 100-115 feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: Flush Mount

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 8/14/17
Surface Conditions: Asphalt
Well Location N/S: 5' W of E curb
Well Location E/W: 212' S of East Main Street
Reviewed by: EBF
Date Completed: 8/14/17

BORING LOG | **MW-18**
MW-18

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling 104 feet bgs
▼ Water Depth After Completion 102.3 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
60									
65									
70									
75									

Drilling Co./Driller: Cascade / Muddy Waters
Drilling Equipment: Truck HSA
Sampler Type: CAL
Hammer Type/Weight: In-hole / 300 lbs
Total Boring Depth: 115.5 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BKA 280

Well/Auger Diameter: 2 / 4.5 ID inches
Well Screened Interval: 100-115 feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: Flush Mount

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 8/14/17
Surface Conditions: Asphalt
Well Location N/S: 5' W of E curb
Well Location E/W: 212' S of East Main Street
Reviewed by: EBF
Date Completed: 8/14/17

BORING LOG | **MW-18**
MW-18

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling 104 feet bgs
▽ Water Depth After Completion 102.3 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
75	8 16 24		100	0.0	MW18-75	SP-SM		Moist, gray, fin to medium SAND with silt, no hydrocarbon odor (10-90-0).	
80									
85									
90									

Drilling Co./Driller: Cascade / Muddy Waters
Drilling Equipment: Truck HSA
Sampler Type: CAL
Hammer Type/Weight: In-hole / 300 lbs
Total Boring Depth: 115.5 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BKA 280

Well/Auger Diameter: 2 / 4.5 ID inches
Well Screened Interval: 100-115 feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: Flush Mount

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.



Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 8/14/17
Surface Conditions: Asphalt
Well Location N/S: 5' W of E curb
Well Location E/W: 212' S of East Main Street
Reviewed by: EBF
Date Completed: 8/14/17

BORING LOG | **MW-18**
MW-18

Site Address: 1695 E Main Street
Freeland, Washington

▽ Water Depth At Time of Drilling 104 feet bgs
▽ Water Depth After Completion 102.3 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
90									
95									
100		26 50/6"	100	0.1	MW18-100	SP-SM		Moist, gray, fine to medium SAND with silt, with lenses of gray-brown silty fine SAND, no hydrocarbon odor (10-90-0) / (35-65-0).	
105									

Drilling Co./Driller: Cascade / Muddy Waters
Drilling Equipment: Truck HSA
Sampler Type: CAL
Hammer Type/Weight: In-hole / 300 lbs
Total Boring Depth: 115.5 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BKA 280

Well/Auger Diameter: 2 / 4.5 ID inches
Well Screened Interval: 100-115 feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: Flush Mount

Notes/Comments:
(15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.

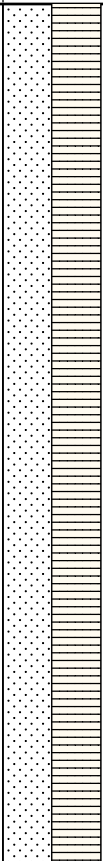


Project: Former Whidbey Marine & Auto
Project Number: 1303-001-01
Logged by: LDS
Date Started: 8/14/17
Surface Conditions: Asphalt
Well Location N/S: 5' W of E curb
Well Location E/W: 212' S of East Main Street
Reviewed by: EBF
Date Completed: 8/14/17

BORING LOG | **MW-18**
 MW-18

Site Address: 1695 E Main Street
 Freeland, Washington

Water Depth At Time of Drilling 104 feet bgs
 Water Depth After Completion 102.3 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth	
105		50/6"	140	0.3	MW18-105	SP-SM		Wet, gray, fine to medium SAND with silt, no hydrocarbon odor (10-90-0).		
110		50/6"	50	0.2	MW18-110	SP				Saturated, gray, medium SAND, trace silt, no hydrocarbon odor (5-95-0).
115		50/6"	200	0.2	MW18-115	SP				Saturated, gray, medium SAND, trace silt, no hydrocarbon odor (5-95-0).
120								Boring terminated at 115.5 feet bgs. Installed groundwater monitoring well MW-18, screened 100 to 115 feet bgs.		

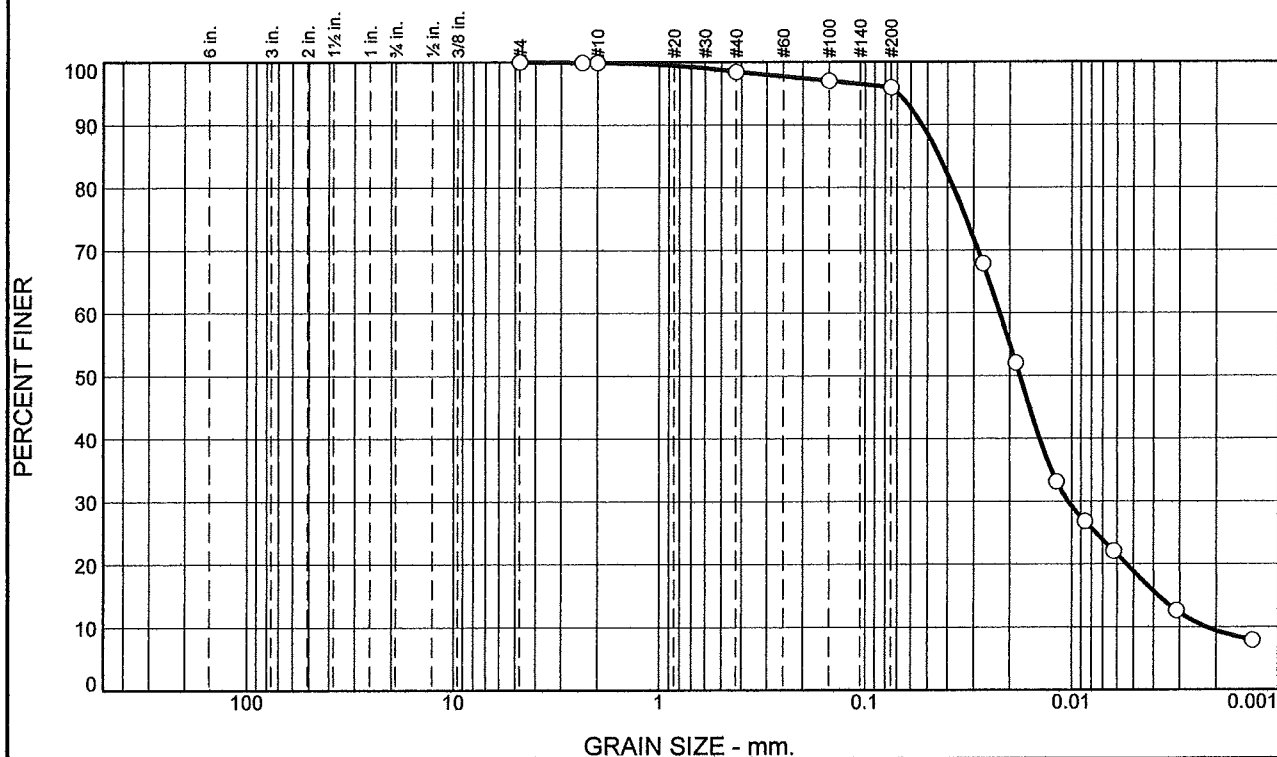
Drilling Co./Driller: Cascade / Muddy Waters
Drilling Equipment: Truck HSA
Sampler Type: CAL
Hammer Type/Weight: In-hole / 300 lbs
Total Boring Depth: 115.5 feet bgs
Total Well Depth: 115 feet bgs
State Well ID No.: BKA 280

Well/Auger Diameter: 2 / 4.5 ID inches
Well Screened Interval: 100-115 feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Colorado Silica Sand
Surface Seal: Cement
Annular Seal: Bentonite
Monument Type: Flush Mount

Notes/Comments:
 (15-80-5) indicates the approximate percentages of fine, sand, and gravel particle sizes, respectively.

APPENDIX C
PARTICLE SIZE DISTRIBUTION REPORTS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	0	0	2	2	77	19

Test Results (ASTM D 422 & ASTM D 1140)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
#4	100		
#8	100		
#10	100		
#40	98		
#100	97		
#200	96		
0.0271 mm.	68		
0.0187 mm.	52		
0.0118 mm.	33		
0.0086 mm.	27		
0.0062 mm.	22		
0.0031 mm.	13		
0.0013 mm.	7.9		

* (no specification provided)

Material Description Sample 7279: Gray silt MW 17, 54' - 55' (Upper silty clay)		
Atterberg Limits (ASTM D 4318) PL= LL= PI=		
Classification USCS (D 2487)= AASHTO (M 145)=		
Coefficients D ₉₀ = 0.0531 D ₈₅ = 0.0440 D ₆₀ = 0.0224 D ₅₀ = 0.0179 D ₃₀ = 0.0104 D ₁₅ = 0.0038 D ₁₀ = 0.0022 C _u = 10.02 C _c = 2.16		
Remarks Was sample soaked?: Yes Moisture Content: 25.4%		
Date Received: 8/4/2017		Date Tested: 8/4/2017
Tested By: A. Duong		
Checked By: A. Coyne		<i>Anthony Coyne</i>
Title: Professional Engineer		

Source of Sample: Whidbey Island
 Sample Number: 7279

Date Sampled: 8/4/2017

**OTTO ROSENAU
 & ASSOCIATES, INC.**

Client: SoundEarth Strategies, Inc.
 Project: SoundEarth Misc 2017

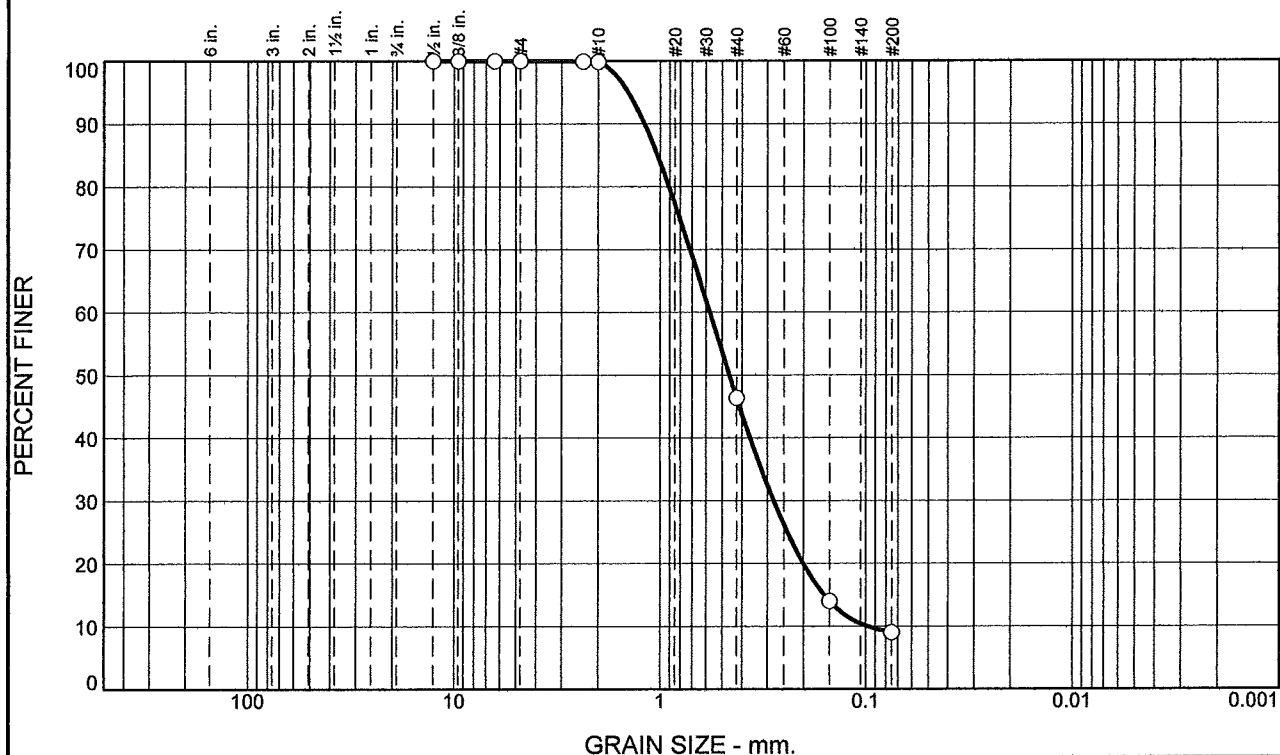
Project No: 17-0635

Figure 7279

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 Classification: ASTM D2487 Natural Moisture: ASTM D2216

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	0	0	54	37	9	

Test Results (ASTM D 422 & ASTM D 1140)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.50	100		
.375	100		
.25	100		
#4	100		
#8	100		
#10	100		
#40	46		
#100	14		
#200	9.0		

* (no specification provided)

Material Description		
Sample 7280: Gray poorly graded sand with silt(petroleum impacted)		
Atterberg Limits (ASTM D 4318)		
PL=	LL=	PI=
Classification		
USCS (D 2487)= SP-SM AASHTO (M 145)= A-1-b		
Coefficients		
D ₉₀ = 1.1926	D ₈₅ = 1.0309	D ₆₀ = 0.5755
D ₅₀ = 0.4617	D ₃₀ = 0.2799	D ₁₅ = 0.1594
D ₁₀ = 0.0983	C _u = 5.85	C _c = 1.38
Remarks		
Test Equipment ID: 5		
Was sample soaked?: Not required		
Moisture Content: 14.5%		
Date Received: 8/4/2017		Date Tested: 8/9/2017
Tested By: A. Duong		
Checked By: A. Coyne <i>Anthony Coyne</i>		
Title: Professional Engineer		

Source of Sample: Whidbey Island
Sample Number: 7280

Date Sampled: 8/4/2017

**OTTO ROSENAU
& ASSOCIATES, INC.**

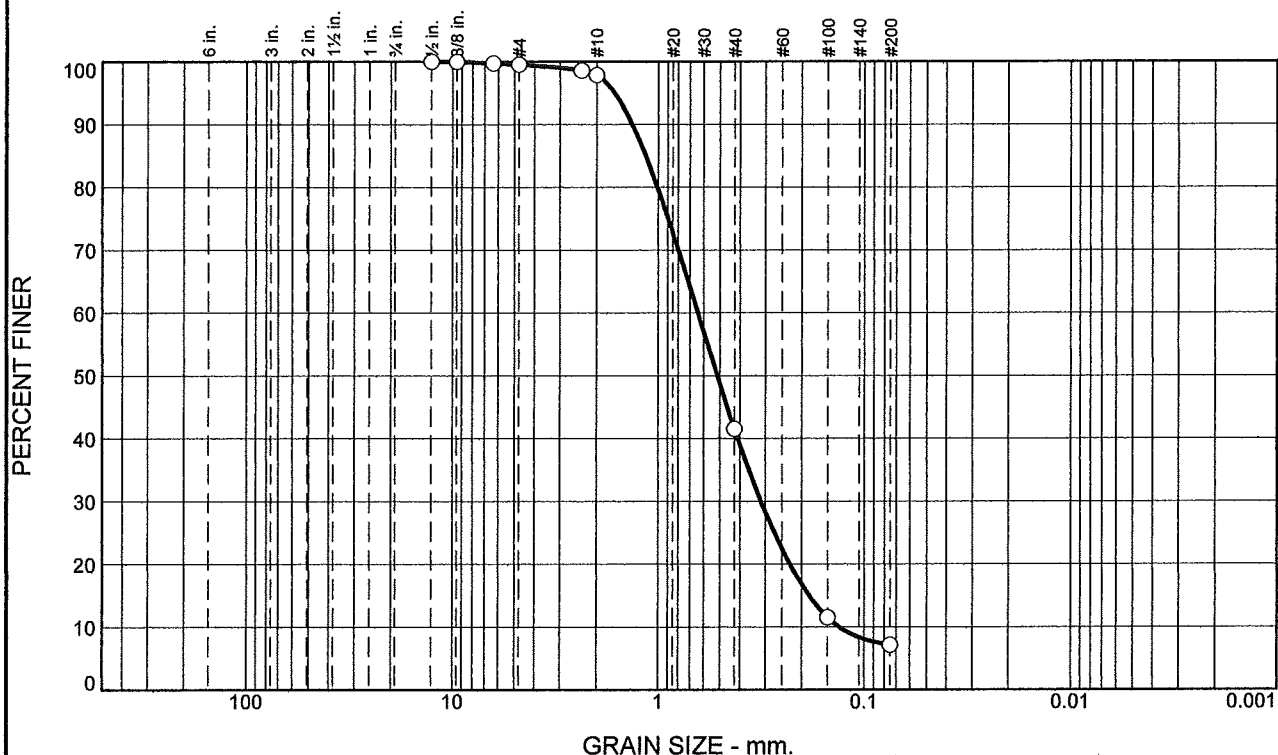
Client: SoundEarth Strategies, Inc.
Project: SoundEarth Misc 2017

Project No: 17-0635

Figure 7280

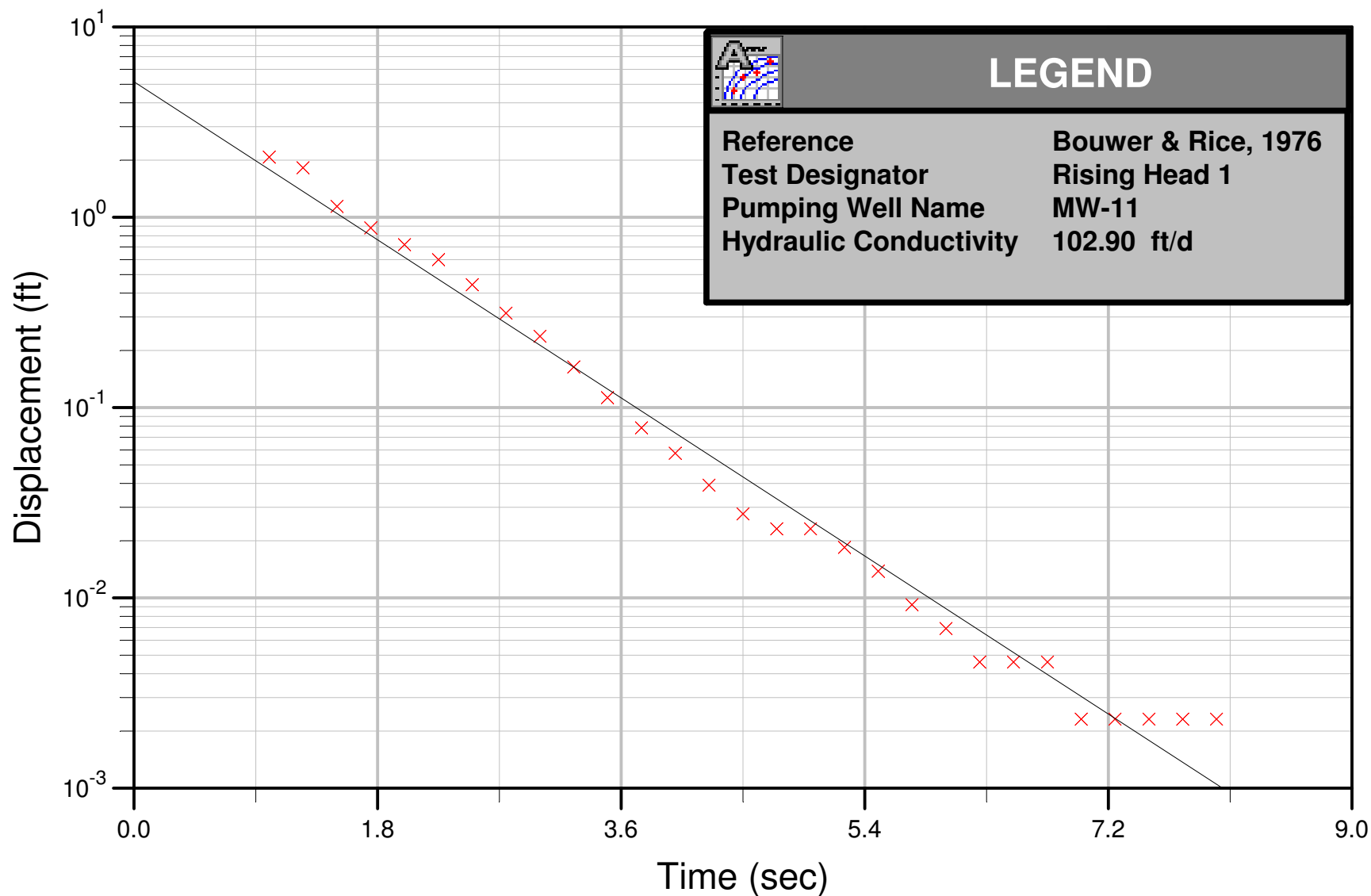
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Particle Size Distribution Report



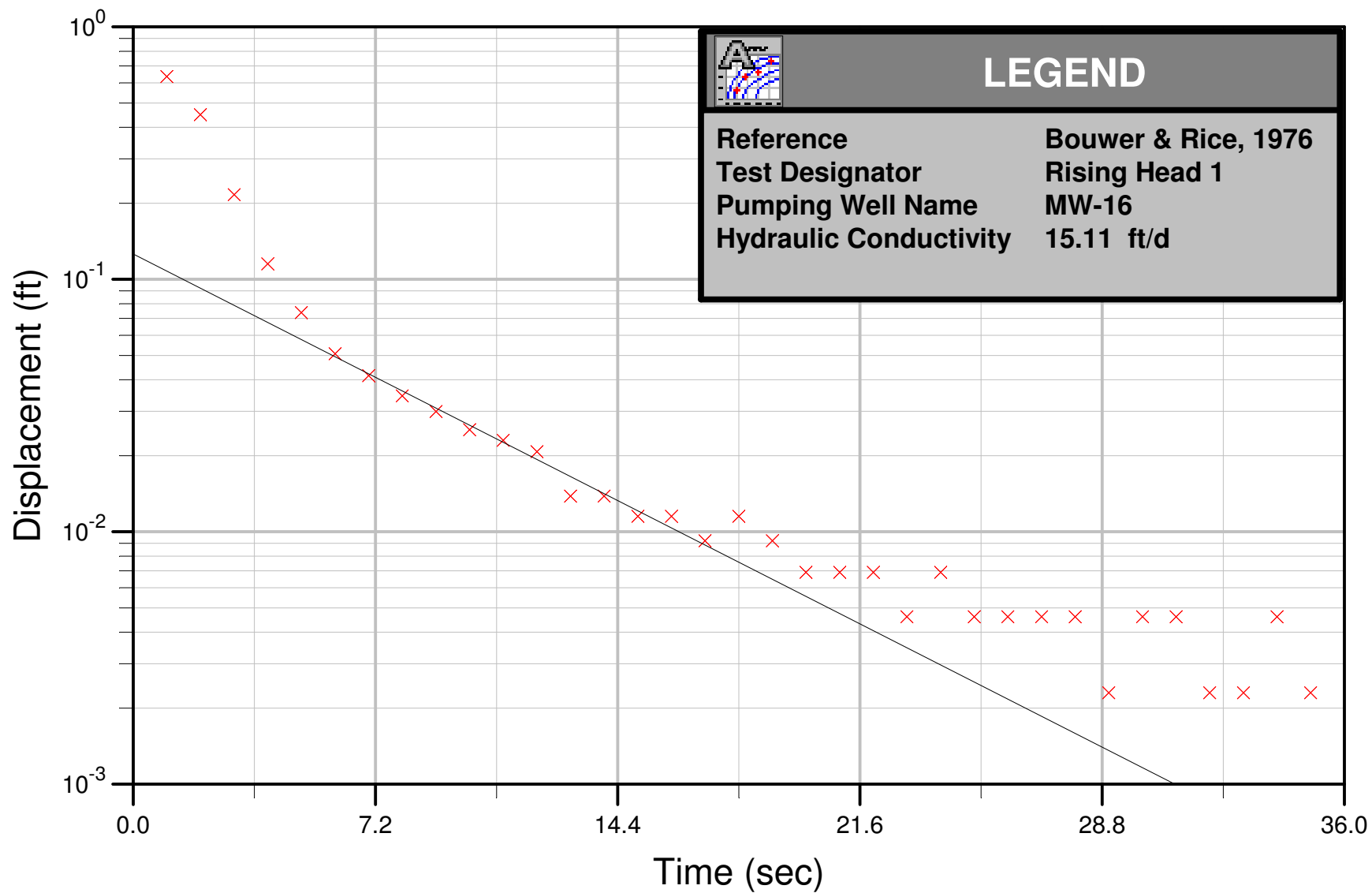
APPENDIX D
HYDRAULIC CONDUCTIVITY ANALYSIS

Bouwer & Rice



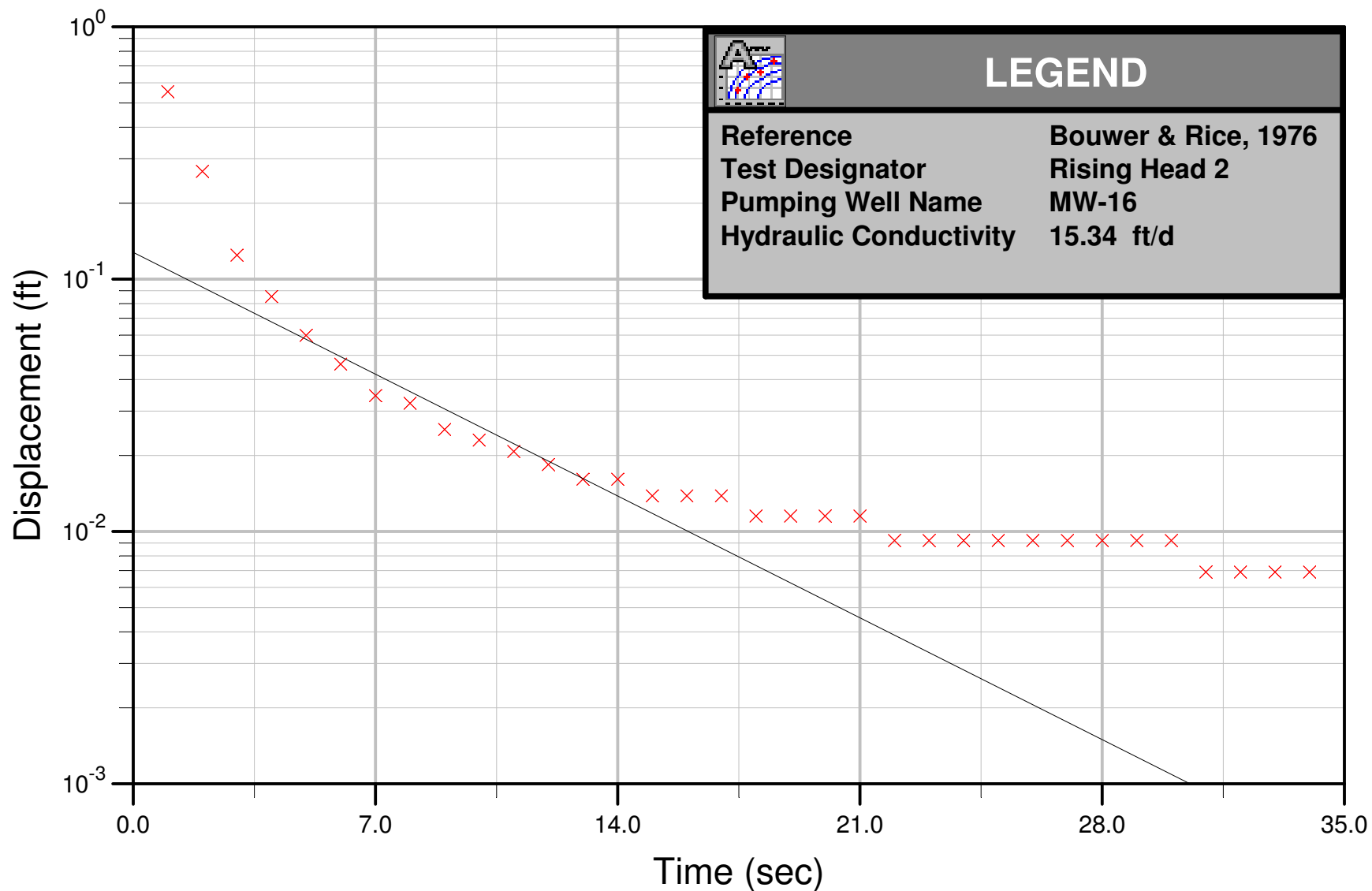
	Time (sec)	Drawdown (ft)
1	1	2.07309
2	1.25	1.82174
3	1.5	1.14147
4	1.75	0.880892
5	2	0.719472
6	2.25	0.59956
7	2.5	0.442752
8	2.75	0.313616
9	3	0.237518
10	3.25	0.163726
11	3.5	0.112994
12	3.75	0.078404
13	4	0.05765
14	4.25	0.039202
15	4.5	0.027672
16	4.75	0.02306
17	5	0.02306
18	5.25	0.018448
19	5.5	0.013836
20	5.75	0.009224
21	6	0.006918
22	6.25	0.004612
23	6.5	0.004612
24	6.75	0.004612
25	7	0.002306
26	7.25	0.002306
27	7.5	0.002306
28	7.75	0.002306
29	8	0.002306

Bouwer & Rice



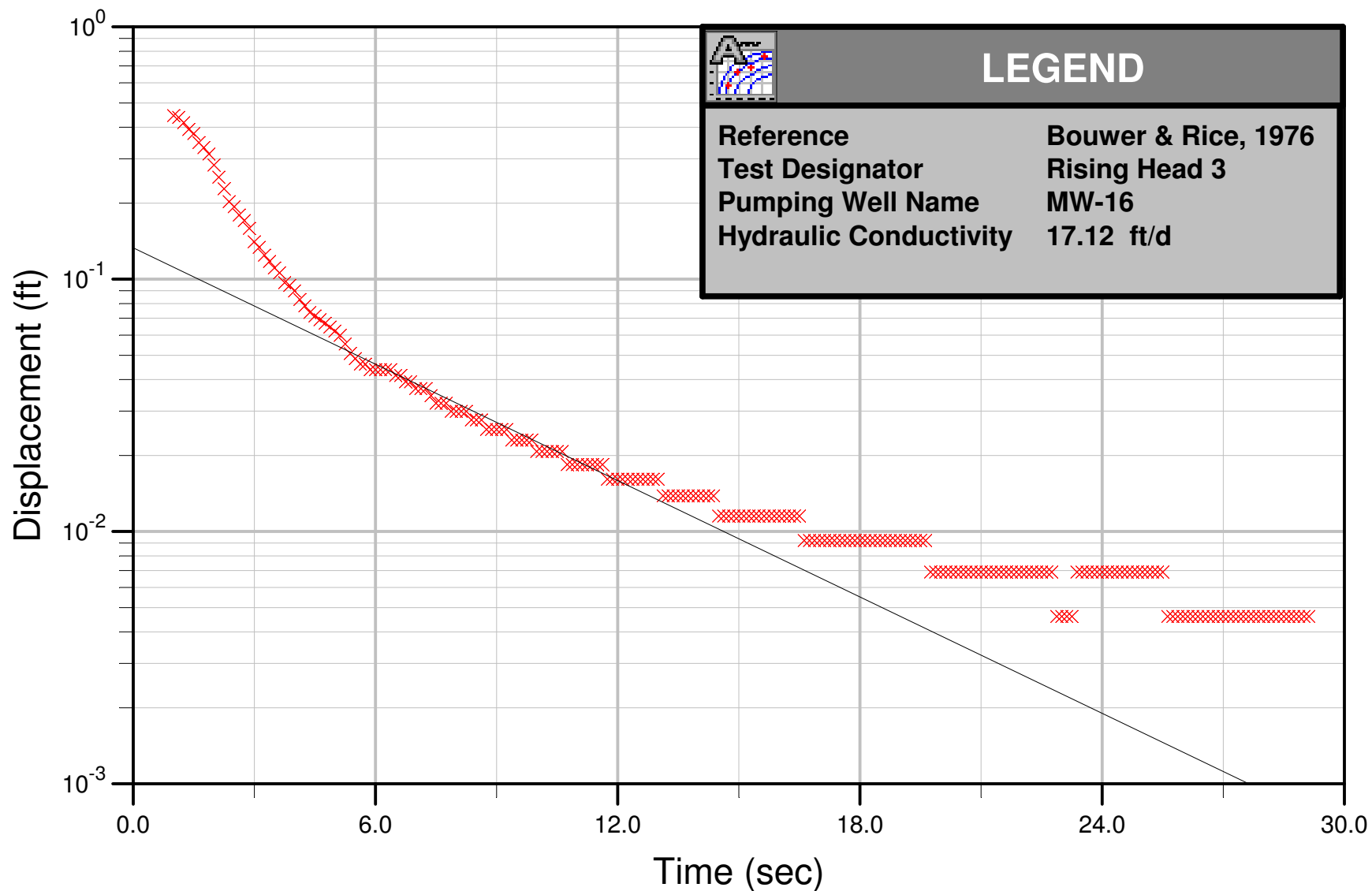
	Time (sec)	Drawdown (ft)
1	1	0.636456
2	2	0.44967
3	3	0.216764
4	4	0.1153
5	5	0.073792
6	6	0.050732
7	7	0.041508
8	8	0.03459
9	9	0.029978
10	10	0.025366
11	11	0.02306
12	12	0.020754
13	13	0.013836
14	14	0.013836
15	15	0.01153
16	16	0.01153
17	17	0.009224
18	18	0.01153
19	19	0.009224
20	20	0.006918
21	21	0.006918
22	22	0.006918
23	23	0.004612
24	24	0.006918
25	25	0.004612
26	26	0.004612
27	27	0.004612
28	28	0.004612
29	29	0.002306
30	30	0.004612
31	31	0.004612
32	32	0.002306
33	33	0.002306
34	34	0.004612
35	35	0.002306

Bouwer & Rice



	Time (sec)	Drawdown (ft)
1	1	0.55344
2	2	0.267496
3	3	0.124524
4	4	0.085322
5	5	0.059956
6	6	0.04612
7	7	0.03459
8	8	0.032284
9	9	0.025366
10	10	0.02306
11	11	0.020754
12	12	0.018448
13	13	0.016142
14	14	0.016142
15	15	0.013836
16	16	0.013836
17	17	0.013836
18	18	0.01153
19	19	0.01153
20	20	0.01153
21	21	0.01153
22	22	0.009224
23	23	0.009224
24	24	0.009224
25	25	0.009224
26	26	0.009224
27	27	0.009224
28	28	0.009224
29	29	0.009224
30	30	0.009224
31	31	0.006918
32	32	0.006918
33	33	0.006918
34	34	0.006918

Bouwer & Rice



	Time (sec)	Drawdown (ft)
1	1	0.445058
2	1.125	0.43814
3	1.25	0.417386
4	1.375	0.39202
5	1.5	0.378184
6	1.625	0.348206
7	1.75	0.332064
8	1.875	0.313616
9	2	0.283638
10	2.125	0.25366
11	2.25	0.228294
12	2.375	0.202928
13	2.5	0.193704
14	2.625	0.179868
15	2.75	0.170644
16	2.875	0.159114
17	3	0.140666
18	3.125	0.133748
19	3.25	0.124524
20	3.375	0.117606
21	3.5	0.110688
22	3.625	0.106076
23	3.75	0.096852
24	3.875	0.094546
25	4	0.089934
26	4.125	0.083016
27	4.25	0.078404
28	4.375	0.073792
29	4.5	0.071486
30	4.625	0.06918
31	4.75	0.066874
32	4.875	0.064568
33	5	0.062262
34	5.125	0.059956
35	5.25	0.055344
36	5.375	0.050732
37	5.5	0.048426
38	5.625	0.04612
39	5.75	0.04612
40	5.875	0.043814
41	6	0.043814
42	6.125	0.043814
43	6.25	0.043814
44	6.375	0.043814
45	6.5	0.041508
46	6.625	0.041508
47	6.75	0.039202

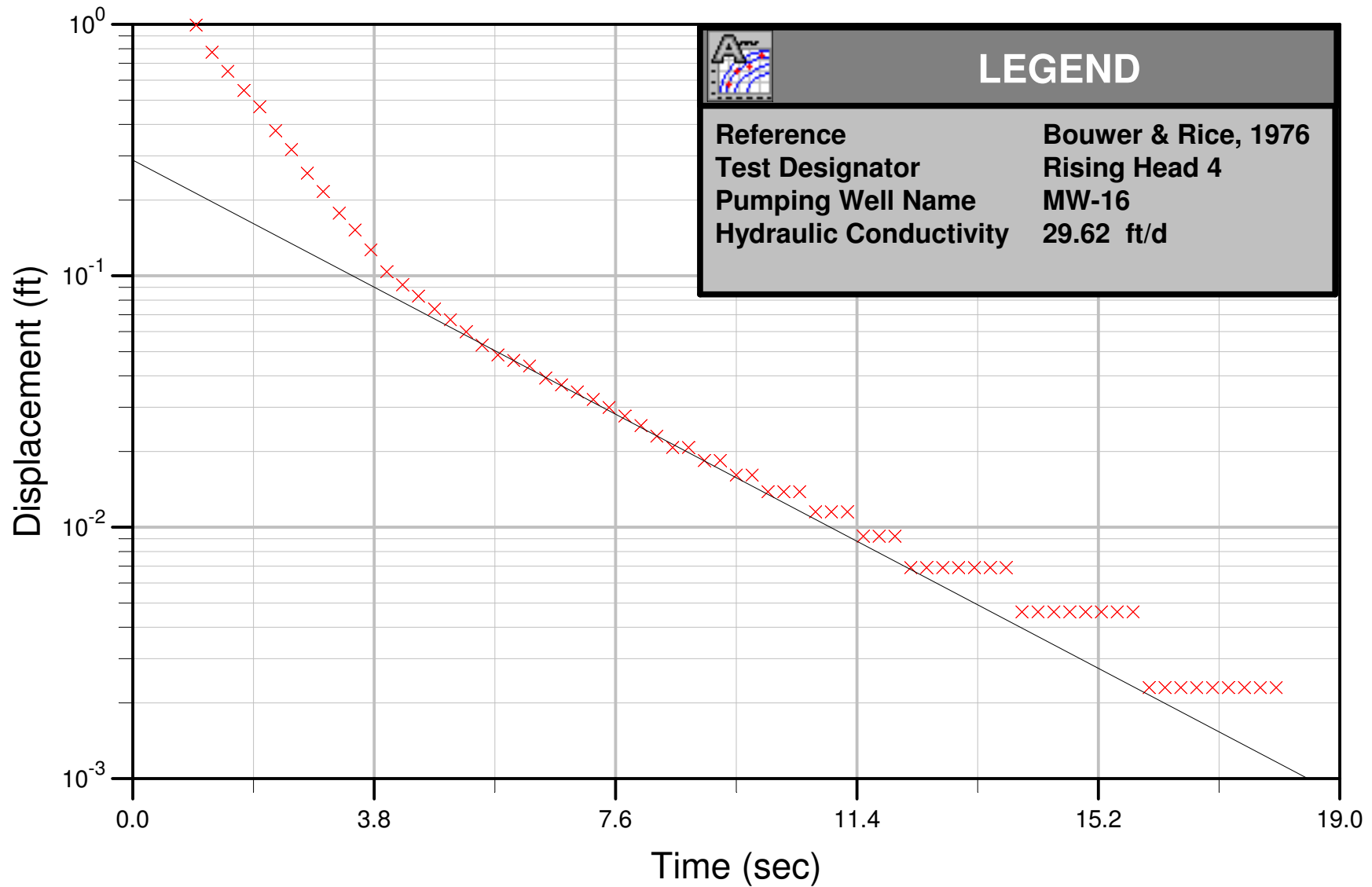
	Time (sec)	Drawdown (ft)
48	6.875	0.039202
49	7	0.036896
50	7.125	0.036896
51	7.25	0.036896
52	7.375	0.03459
53	7.5	0.032284
54	7.625	0.032284
55	7.75	0.032284
56	7.875	0.029978
57	8	0.029978
58	8.125	0.029978
59	8.25	0.029978
60	8.375	0.027672
61	8.5	0.027672
62	8.625	0.027672
63	8.75	0.025366
64	8.875	0.025366
65	9	0.025366
66	9.125	0.025366
67	9.25	0.025366
68	9.375	0.02306
69	9.5	0.02306
70	9.625	0.02306
71	9.75	0.02306
72	9.875	0.02306
73	10	0.020754
74	10.125	0.020754
75	10.25	0.020754
76	10.375	0.020754
77	10.5	0.020754
78	10.625	0.020754
79	10.75	0.018448
80	10.875	0.018448
81	11	0.018448
82	11.125	0.018448
83	11.25	0.018448
84	11.375	0.018448
85	11.5	0.018448
86	11.625	0.018448
87	11.75	0.016142
88	11.875	0.016142
89	12	0.016142
90	12.125	0.016142
91	12.25	0.016142
92	12.375	0.016142
93	12.5	0.016142
94	12.625	0.016142

	Time (sec)	Drawdown (ft)
95	12.75	0.016142
96	12.875	0.016142
97	13	0.016142
98	13.125	0.013836
99	13.25	0.013836
100	13.375	0.013836
101	13.5	0.013836
102	13.625	0.013836
103	13.75	0.013836
104	13.875	0.013836
105	14	0.013836
106	14.125	0.013836
107	14.25	0.013836
108	14.375	0.013836
109	14.5	0.01153
110	14.625	0.01153
111	14.75	0.01153
112	14.875	0.01153
113	15	0.01153
114	15.125	0.01153
115	15.25	0.01153
116	15.375	0.01153
117	15.5	0.01153
118	15.625	0.01153
119	15.75	0.01153
120	15.875	0.01153
121	16	0.01153
122	16.125	0.01153
123	16.25	0.01153
124	16.375	0.01153
125	16.5	0.01153
126	16.625	0.009224
127	16.75	0.009224
128	16.875	0.009224
129	17	0.009224
130	17.125	0.009224
131	17.25	0.009224
132	17.375	0.009224
133	17.5	0.009224
134	17.625	0.009224
135	17.75	0.009224
136	17.875	0.009224
137	18	0.009224
138	18.125	0.009224
139	18.25	0.009224
140	18.375	0.009224
141	18.5	0.009224

	Time (sec)	Drawdown (ft)
142	18.625	0.009224
143	18.75	0.009224
144	18.875	0.009224
145	19	0.009224
146	19.125	0.009224
147	19.25	0.009224
148	19.375	0.009224
149	19.5	0.009224
150	19.625	0.009224
151	19.75	0.006918
152	19.875	0.006918
153	20	0.006918
154	20.125	0.006918
155	20.25	0.006918
156	20.375	0.006918
157	20.5	0.006918
158	20.625	0.006918
159	20.75	0.006918
160	20.875	0.006918
161	21	0.006918
162	21.125	0.006918
163	21.25	0.006918
164	21.375	0.006918
165	21.5	0.006918
166	21.625	0.006918
167	21.75	0.006918
168	21.875	0.006918
169	22	0.006918
170	22.125	0.006918
171	22.25	0.006918
172	22.375	0.006918
173	22.5	0.006918
174	22.625	0.006918
175	22.75	0.006918
176	22.875	0.004612
177	23	0.004612
178	23.125	0.004612
179	23.25	0.004612
180	23.375	0.006918
181	23.5	0.006918
182	23.625	0.006918
183	23.75	0.006918
184	23.875	0.006918
185	24	0.006918
186	24.125	0.006918
187	24.25	0.006918
188	24.375	0.006918

	Time (sec)	Drawdown (ft)
189	24.5	0.006918
190	24.625	0.006918
191	24.75	0.006918
192	24.875	0.006918
193	25	0.006918
194	25.125	0.006918
195	25.25	0.006918
196	25.375	0.006918
197	25.5	0.006918
198	25.625	0.004612
199	25.75	0.004612
200	25.875	0.004612
201	26	0.004612
202	26.125	0.004612
203	26.25	0.004612
204	26.375	0.004612
205	26.5	0.004612
206	26.625	0.004612
207	26.75	0.004612
208	26.875	0.004612
209	27	0.004612
210	27.125	0.004612
211	27.25	0.004612
212	27.375	0.004612
213	27.5	0.004612
214	27.625	0.004612
215	27.75	0.004612
216	27.875	0.004612
217	28	0.004612
218	28.125	0.004612
219	28.25	0.004612
220	28.375	0.004612
221	28.5	0.004612
222	28.625	0.004612
223	28.75	0.004612
224	28.875	0.004612
225	29	0.004612
226	29.125	0.004612

Bouwer & Rice



	Time (sec)	Drawdown (ft)
1	1	0.993886
2	1.25	0.774816
3	1.5	0.650292
4	1.75	0.546522
5	2	0.470424
6	2.25	0.378184
7	2.5	0.318228
8	2.75	0.255966
9	3	0.216764
10	3.25	0.177562
11	3.5	0.152196
12	3.75	0.12683
13	4	0.10377
14	4.25	0.09224
15	4.5	0.083016
16	4.75	0.073792
17	5	0.066874
18	5.25	0.059956
19	5.5	0.053038
20	5.75	0.048426
21	6	0.04612
22	6.25	0.043814
23	6.5	0.039202
24	6.75	0.036896
25	7	0.03459
26	7.25	0.032284
27	7.5	0.029978
28	7.75	0.027672
29	8	0.025366
30	8.25	0.02306
31	8.5	0.020754
32	8.75	0.020754
33	9	0.018448
34	9.25	0.018448
35	9.5	0.016142
36	9.75	0.016142
37	10	0.013836
38	10.25	0.013836
39	10.5	0.013836
40	10.75	0.01153
41	11	0.01153
42	11.25	0.01153
43	11.5	0.009224
44	11.75	0.009224
45	12	0.009224
46	12.25	0.006918
47	12.5	0.006918

	Time (sec)	Drawdown (ft)
48	12.75	0.006918
49	13	0.006918
50	13.25	0.006918
51	13.5	0.006918
52	13.75	0.006918
53	14	0.004612
54	14.25	0.004612
55	14.5	0.004612
56	14.75	0.004612
57	15	0.004612
58	15.25	0.004612
59	15.5	0.004612
60	15.75	0.004612
61	16	0.002306
62	16.25	0.002306
63	16.5	0.002306
64	16.75	0.002306
65	17	0.002306
66	17.25	0.002306
67	17.5	0.002306
68	17.75	0.002306
69	18	0.002306

APPENDIX E
LABORATORY ANALYTICAL REPORTS

Apex Labs #A7H0009

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Monday, August 7, 2017

Elizabeth Forbes
Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

RE: PLIA-Widbey Island / 1303-001

Enclosed are the results of analyses for work order A7H0009, which was received by the laboratory on 8/1/2017 at 10:12:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: ldomenighini@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/07/17 15:17

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B08-55	A7H0009-06	Soil	07/26/17 13:20	08/01/17 10:12
B08-60	A7H0009-07	Soil	07/26/17 13:25	08/01/17 10:12
MW17-30	A7H0009-10	Soil	07/26/17 16:50	08/01/17 10:12
MW17-54	A7H0009-13	Soil	07/27/17 09:00	08/01/17 10:12
MW17-61	A7H0009-14	Soil	07/27/17 09:15	08/01/17 10:12
MW17-105	A7H0009-19	Soil	07/27/17 17:20	08/01/17 10:12
MW17-116	A7H0009-20	Soil	07/27/17 17:40	08/01/17 10:12

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/07/17 15:17

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
B08-55 (A7H0009-06)			Matrix: Soil		Batch: 7080340			
Diesel	113	---	25.0	mg/kg dry	1	08/02/17 21:02	NWTPH-Dx	F-18
Oil	ND	---	50.0	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 97 %</i>		<i>Limits: 50-150 %</i>		"	"	"
B08-60 (A7H0009-07)			Matrix: Soil		Batch: 7080340			
Diesel	ND	---	25.0	mg/kg dry	1	08/02/17 21:48	NWTPH-Dx	
Oil	ND	---	50.0	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 95 %</i>		<i>Limits: 50-150 %</i>		"	"	"
MW17-30 (A7H0009-10)			Matrix: Soil		Batch: 7080340			
Diesel	ND	---	25.0	mg/kg dry	1	08/02/17 22:11	NWTPH-Dx	
Oil	ND	---	50.0	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 50-150 %</i>		"	"	"
MW17-54 (A7H0009-13)			Matrix: Soil		Batch: 7080340			
Diesel	357	---	25.0	mg/kg dry	1	08/02/17 22:34	NWTPH-Dx	F-18
Oil	ND	---	50.0	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 50-150 %</i>		"	"	"
MW17-61 (A7H0009-14)			Matrix: Soil		Batch: 7080340			
Diesel	ND	---	25.0	mg/kg dry	1	08/02/17 22:57	NWTPH-Dx	
Oil	ND	---	50.0	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 92 %</i>		<i>Limits: 50-150 %</i>		"	"	"
MW17-105 (A7H0009-19)			Matrix: Soil		Batch: 7080340			
Diesel	244	---	25.0	mg/kg dry	1	08/02/17 23:20	NWTPH-Dx	F-18
Oil	ND	---	50.0	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 50-150 %</i>		"	"	"
MW17-116 (A7H0009-20)			Matrix: Soil		Batch: 7080402			
Diesel	ND	---	25.0	mg/kg dry	1	08/04/17 19:39	NWTPH-Dx	
Oil	ND	---	50.0	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 75 %</i>		<i>Limits: 50-150 %</i>		"	"	"

Apex Laboratories

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Lisa Domenighini, Client Services Manager

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/07/17 15:17

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
B08-55 (A7H0009-06)			Matrix: Soil		Batch: 7071023			
Gasoline Range Organics	1870	---	118	mg/kg dry	1000	08/01/17 19:29	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 102 %	Limits: 50-150 %	1	"	"	
1,4-Difluorobenzene (Sur)			83 %	Limits: 50-150 %	"	"	"	
B08-60 (A7H0009-07)			Matrix: Soil		Batch: 7071023			
Gasoline Range Organics	ND	---	5.32	mg/kg dry	50	08/01/17 17:49	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 100 %	Limits: 50-150 %	1	"	"	
1,4-Difluorobenzene (Sur)			85 %	Limits: 50-150 %	"	"	"	
MW17-30 (A7H0009-10)			Matrix: Soil		Batch: 7071023			
Gasoline Range Organics	ND	---	5.02	mg/kg dry	50	08/01/17 18:18	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 98 %	Limits: 50-150 %	1	"	"	
1,4-Difluorobenzene (Sur)			83 %	Limits: 50-150 %	"	"	"	
MW17-54 (A7H0009-13)			Matrix: Soil		Batch: 7071023			
Gasoline Range Organics	8850	---	101	mg/kg dry	1000	08/01/17 20:29	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 99 %	Limits: 50-150 %	1	"	"	
1,4-Difluorobenzene (Sur)			98 %	Limits: 50-150 %	"	"	"	
MW17-61 (A7H0009-14)			Matrix: Soil		Batch: 7071023			
Gasoline Range Organics	ND	---	5.74	mg/kg dry	50	08/01/17 19:01	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 97 %	Limits: 50-150 %	1	"	"	
1,4-Difluorobenzene (Sur)			84 %	Limits: 50-150 %	"	"	"	
MW17-105 (A7H0009-19)			Matrix: Soil		Batch: 7071023			
Gasoline Range Organics	3820	---	104	mg/kg dry	1000	08/01/17 20:02	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 101 %	Limits: 50-150 %	1	"	"	
1,4-Difluorobenzene (Sur)			87 %	Limits: 50-150 %	"	"	"	
MW17-116 (A7H0009-20)			Matrix: Soil		Batch: 7080406			
Gasoline Range Organics	30.4	---	5.02	mg/kg dry	50	08/04/17 12:10	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 101 %	Limits: 50-150 %	1	"	"	
1,4-Difluorobenzene (Sur)			91 %	Limits: 50-150 %	"	"	"	

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Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
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Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/07/17 15:17

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
B08-55 (A7H0009-06)			Matrix: Soil	Batch: 7071023				
Benzene	ND	---	0.236	mg/kg dry	1000	08/01/17 19:29	5035A/8260B	
Toluene	ND	---	1.18	"	"	"	"	
Ethylbenzene	15.9	---	0.589	"	"	"	"	
Xylenes, total	70.9	---	1.77	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 91 %</i>	<i>Limits: 70-130 %</i>	1	"	"	
<i>Toluene-d8 (Surr)</i>			<i>95 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>98 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
B08-60 (A7H0009-07)			Matrix: Soil	Batch: 7071023				
Benzene	ND	---	0.0106	mg/kg dry	50	08/01/17 17:49	5035A/8260B	
Toluene	ND	---	0.0532	"	"	"	"	
Ethylbenzene	ND	---	0.0266	"	"	"	"	
Xylenes, total	ND	---	0.0798	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 94 %</i>	<i>Limits: 70-130 %</i>	1	"	"	
<i>Toluene-d8 (Surr)</i>			<i>97 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>104 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
MW17-30 (A7H0009-10)			Matrix: Soil	Batch: 7071023				
Benzene	ND	---	0.0100	mg/kg dry	50	08/01/17 18:18	5035A/8260B	
Toluene	ND	---	0.0502	"	"	"	"	
Ethylbenzene	ND	---	0.0251	"	"	"	"	
Xylenes, total	ND	---	0.0753	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 93 %</i>	<i>Limits: 70-130 %</i>	1	"	"	
<i>Toluene-d8 (Surr)</i>			<i>96 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>103 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
MW17-54 (A7H0009-13)			Matrix: Soil	Batch: 7071023				
Benzene	ND	---	0.203	mg/kg dry	1000	08/01/17 20:29	5035A/8260B	
Toluene	ND	---	1.01	"	"	"	"	
Ethylbenzene	ND	---	0.507	"	"	"	"	
Xylenes, total	ND	---	1.52	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 93 %</i>	<i>Limits: 70-130 %</i>	1	"	"	
<i>Toluene-d8 (Surr)</i>			<i>98 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>106 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
MW17-61 (A7H0009-14)			Matrix: Soil	Batch: 7071023				
Benzene	ND	---	0.0115	mg/kg dry	50	08/01/17 19:01	5035A/8260B	
Toluene	ND	---	0.0574	"	"	"	"	

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Lisa Domenighini, Client Services Manager

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/07/17 15:17

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW17-61 (A7H0009-14)			Matrix: Soil		Batch: 7071023			
Ethylbenzene	ND	---	0.0287	mg/kg dry	50	"	5035A/8260B	
Xylenes, total	ND	---	0.0861	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 93 %</i>	<i>Limits: 70-130 %</i>	1	"	"	
<i>Toluene-d8 (Surr)</i>			<i>97 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>105 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
MW17-105 (A7H0009-19)			Matrix: Soil		Batch: 7071023			
Benzene	1.03	---	0.208	mg/kg dry	1000	08/01/17 20:02	5035A/8260B	
Toluene	50.0	---	1.04	"	"	"	"	
Ethylbenzene	30.9	---	0.521	"	"	"	"	
Xylenes, total	165	---	1.56	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 94 %</i>	<i>Limits: 70-130 %</i>	1	"	"	
<i>Toluene-d8 (Surr)</i>			<i>95 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>104 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
MW17-116 (A7H0009-20)			Matrix: Soil		Batch: 7080406			
Benzene	0.0481	---	0.0100	mg/kg dry	50	08/04/17 12:10	5035A/8260B	
Toluene	0.792	---	0.0502	"	"	"	"	
Ethylbenzene	0.300	---	0.0251	"	"	"	"	
Xylenes, total	1.40	---	0.0752	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 97 %</i>	<i>Limits: 70-130 %</i>	1	"	"	
<i>Toluene-d8 (Surr)</i>			<i>98 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>105 %</i>	<i>Limits: 70-130 %</i>	"	"	"	

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Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/07/17 15:17

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight								
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
B08-55 (A7H0009-06)			Matrix: Soil		Batch: 7080306			
% Solids	84.9	---	1.00	% by Weight	1	08/02/17 07:12	EPA 8000C	
B08-60 (A7H0009-07)			Matrix: Soil		Batch: 7080306			
% Solids	82.3	---	1.00	% by Weight	1	08/02/17 07:12	EPA 8000C	
MW17-30 (A7H0009-10)			Matrix: Soil		Batch: 7080306			
% Solids	97.3	---	1.00	% by Weight	1	08/02/17 07:12	EPA 8000C	
MW17-54 (A7H0009-13)			Matrix: Soil		Batch: 7080306			
% Solids	89.4	---	1.00	% by Weight	1	08/02/17 07:12	EPA 8000C	
MW17-61 (A7H0009-14)			Matrix: Soil		Batch: 7080306			
% Solids	79.0	---	1.00	% by Weight	1	08/02/17 07:12	EPA 8000C	
MW17-105 (A7H0009-19)			Matrix: Soil		Batch: 7080306			
% Solids	91.7	---	1.00	% by Weight	1	08/02/17 07:12	EPA 8000C	
MW17-116 (A7H0009-20)			Matrix: Soil		Batch: 7080426			
% Solids	86.8	---	1.00	% by Weight	1	08/07/17 07:12	EPA 8000C	

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Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/07/17 15:17

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080340 - EPA 3546 (Fuels)						Soil						
Blank (7080340-BLK1)						Prepared: 08/02/17 13:36 Analyzed: 08/02/17 21:01						
NWTPH-Dx												
Diesel	ND	---	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	50.0	"	"	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
LCS (7080340-BS1)						Prepared: 08/02/17 13:36 Analyzed: 08/02/17 21:21						
NWTPH-Dx												
Diesel	120	---	25.0	mg/kg wet	1	125	---	96	76-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 105 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (7080340-DUP1)						Prepared: 08/02/17 13:36 Analyzed: 08/02/17 21:25						
QC Source Sample: B08-55 (A7H0009-06)												
NWTPH-Dx												
Diesel	101	---	25.0	mg/kg dry	1	---	113	---	---	12	30%	F-18
Oil	ND	---	50.0	"	"	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 97 %		Limits: 50-150 %		Dilution: 1x						
Batch 7080402 - EPA 3546 (Fuels)						Soil						
Blank (7080402-BLK1)						Prepared: 08/04/17 08:04 Analyzed: 08/04/17 10:34						
NWTPH-Dx												
Diesel	ND	---	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	50.0	"	"	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x						
LCS (7080402-BS1)						Prepared: 08/04/17 08:04 Analyzed: 08/04/17 10:54						
NWTPH-Dx												
Diesel	112	---	25.0	mg/kg wet	1	125	---	89	76-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x						

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Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/07/17 15:17

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071023 - EPA 5035A						Soil						
Blank (7071023-BLK1)						Prepared: 07/31/17 09:40 Analyzed: 08/01/17 11:53						
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Surr)		Recovery: 94 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		89 %		50-150 %		"						
LCS (7071023-BS2)						Prepared: 07/31/17 09:40 Analyzed: 08/01/17 11:27						
NWTPH-Gx (MS)												
Gasoline Range Organics	20.3	---	5.00	mg/kg wet	50	25.0	---	81	70-130%	---	---	
Surr: 4-Bromofluorobenzene (Surr)		Recovery: 92 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		87 %		50-150 %		"						

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Project Manager: Elizabeth ForbesReported:
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QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080406 - EPA 5035A						Soil						
Blank (7080406-BLK1)						Prepared: 08/04/17 09:00		Analyzed: 08/04/17 11:43				
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		90 %		50-150 %		"						
LCS (7080406-BS2)						Prepared: 08/04/17 09:00		Analyzed: 08/04/17 11:17				
NWTPH-Gx (MS)												
Gasoline Range Organics	24.3	---	5.00	mg/kg wet	50	25.0	---	97	70-130%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 100 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		92 %		50-150 %		"						
Duplicate (7080406-DUP1)						Prepared: 07/27/17 17:40		Analyzed: 08/04/17 12:37				
QC Source Sample: MW17-116 (A7H0009-20)												
NWTPH-Gx (MS)												
Gasoline Range Organics	31.9	---	5.15	mg/kg dry	50	---	30.4	---	---	5	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 101 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		92 %		50-150 %		"						

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Project Number: 1303-001
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08/07/17 15:17

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071023 - EPA 5035A						Soil						
Blank (7071023-BLK1)						Prepared: 07/31/17 09:40		Analyzed: 08/01/17 11:53				
5035A/8260B												
Benzene	ND	---	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0333	"	"	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0167	"	"	---	---	---	---	---	---	
Xylenes, total	ND	---	0.0500	"	"	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			Recovery:	98 %	Limits:	70-130 %	Dilution: 1x					
Toluene-d8 (Surr)				99 %		70-130 %	"					
4-Bromofluorobenzene (Surr)				102 %		70-130 %	"					
LCS (7071023-BS1)						Prepared: 07/31/17 09:40		Analyzed: 08/01/17 11:00				
5035A/8260B												
Benzene	0.981	---	0.0100	mg/kg wet	50	1.00	---	98	65-135%	---	---	
Toluene	0.970	---	0.0500	"	"	"	---	97	"	---	---	
Ethylbenzene	1.03	---	0.0250	"	"	"	---	103	"	---	---	
Xylenes, total	3.20	---	0.0750	"	"	3.00	---	107	"	---	---	
Surr: 1,4-Difluorobenzene (Surr)			Recovery:	95 %	Limits:	70-130 %	Dilution: 1x					
Toluene-d8 (Surr)				96 %		70-130 %	"					
4-Bromofluorobenzene (Surr)				99 %		70-130 %	"					



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Reported:
08/07/17 15:17

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080406 - EPA 5035A						Soil						
Blank (7080406-BLK1)						Prepared: 08/04/17 09:00		Analyzed: 08/04/17 11:43				
5035A/8260B												
Benzene	ND	---	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0333	"	"	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0167	"	"	---	---	---	---	---	---	
Xylenes, total	ND	---	0.0500	"	"	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		102 %		70-130 %		"						
LCS (7080406-BS1)						Prepared: 08/04/17 09:00		Analyzed: 08/04/17 10:50				
5035A/8260B												
Benzene	0.929	---	0.0100	mg/kg wet	50	1.00	---	93	65-135%	---	---	
Toluene	0.896	---	0.0500	"	"	"	---	90	"	---	---	
Ethylbenzene	0.968	---	0.0250	"	"	"	---	97	"	---	---	
Xylenes, total	3.08	---	0.0750	"	"	3.00	---	103	"	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		105 %		70-130 %		"						
Duplicate (7080406-DUP1)						Prepared: 07/27/17 17:40		Analyzed: 08/04/17 12:37				
QC Source Sample: MW17-116 (A7H0009-20)												
5035A/8260B												
Benzene	0.0432	---	0.0103	mg/kg dry	50	---	0.0481	---	---	11	30%	
Toluene	0.684	---	0.0515	"	"	---	0.792	---	---	15	30%	
Ethylbenzene	0.279	---	0.0257	"	"	---	0.300	---	---	7	30%	
Xylenes, total	1.26	---	0.0772	"	"	---	1.40	---	---	10	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		106 %		70-130 %		"						

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Project: **PLIA-Widbey Island**
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Project Manager: Elizabeth Forbes

Reported:
08/07/17 15:17

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080306 - Total Solids (Dry Weight)							Soil					
Batch 7080426 - Total Solids (Dry Weight)							Soil					
Duplicate (7080426-DUP1)					Prepared: 08/04/17 12:25		Analyzed: 08/07/17 07:12					
QC Source Sample: MW17-116 (A7H0009-20)												
EPA 8000C												
% Solids	86.3	---	1.00	% by Weight	1	---	86.8	---	---	0.6	10%	

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Project Manager: Elizabeth Forbes

Reported:
08/07/17 15:17

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7080340							
A7H0009-06	Soil	NWTPH-Dx	07/26/17 13:20	08/02/17 13:36	10.19g/5mL	10g/5mL	0.98
A7H0009-07	Soil	NWTPH-Dx	07/26/17 13:25	08/02/17 13:36	10.34g/5mL	10g/5mL	0.97
A7H0009-10	Soil	NWTPH-Dx	07/26/17 16:50	08/02/17 13:36	10.54g/5mL	10g/5mL	0.95
A7H0009-13	Soil	NWTPH-Dx	07/27/17 09:00	08/02/17 13:36	10.89g/5mL	10g/5mL	0.92
A7H0009-14	Soil	NWTPH-Dx	07/27/17 09:15	08/02/17 13:36	10.58g/5mL	10g/5mL	0.95
A7H0009-19	Soil	NWTPH-Dx	07/27/17 17:20	08/02/17 13:36	10.51g/5mL	10g/5mL	0.95
Batch: 7080402							
A7H0009-20	Soil	NWTPH-Dx	07/27/17 17:40	08/04/17 13:37	10.83g/5mL	10g/5mL	0.92

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7071023							
A7H0009-06	Soil	NWTPH-Gx (MS)	07/26/17 13:20	07/26/17 13:20	5.88g/5mL	5g/5mL	0.85
A7H0009-07	Soil	NWTPH-Gx (MS)	07/26/17 13:25	07/26/17 13:25	7.15g/5mL	5g/5mL	0.70
A7H0009-10	Soil	NWTPH-Gx (MS)	07/26/17 16:50	07/26/17 16:50	5.27g/5mL	5g/5mL	0.95
A7H0009-13	Soil	NWTPH-Gx (MS)	07/27/17 09:00	07/27/17 09:00	6.24g/5mL	5g/5mL	0.80
A7H0009-14	Soil	NWTPH-Gx (MS)	07/27/17 09:15	07/27/17 09:15	7.16g/5mL	5g/5mL	0.70
A7H0009-19	Soil	NWTPH-Gx (MS)	07/27/17 17:20	07/27/17 17:20	5.73g/5mL	5g/5mL	0.87
Batch: 7080406							
A7H0009-20	Soil	NWTPH-Gx (MS)	07/27/17 17:40	07/27/17 17:40	6.76g/5mL	5g/5mL	0.74

BTEX Compounds by EPA 8260B

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7071023							
A7H0009-06	Soil	5035A/8260B	07/26/17 13:20	07/26/17 13:20	5.88g/5mL	5g/5mL	0.85
A7H0009-07	Soil	5035A/8260B	07/26/17 13:25	07/26/17 13:25	7.15g/5mL	5g/5mL	0.70
A7H0009-10	Soil	5035A/8260B	07/26/17 16:50	07/26/17 16:50	5.27g/5mL	5g/5mL	0.95
A7H0009-13	Soil	5035A/8260B	07/27/17 09:00	07/27/17 09:00	6.24g/5mL	5g/5mL	0.80
A7H0009-14	Soil	5035A/8260B	07/27/17 09:15	07/27/17 09:15	7.16g/5mL	5g/5mL	0.70
A7H0009-19	Soil	5035A/8260B	07/27/17 17:20	07/27/17 17:20	5.73g/5mL	5g/5mL	0.87
Batch: 7080406							

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08/07/17 15:17

SAMPLE PREPARATION INFORMATION

BTEX Compounds by EPA 8260B

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A7H0009-20	Soil	5035A/8260B	07/27/17 17:40	07/27/17 17:40	6.76g/5mL	5g/5mL	0.74

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7080306							
A7H0009-06	Soil	EPA 8000C	07/26/17 13:20	08/01/17 16:52	1N/A/1N/A	1N/A/1N/A	NA
A7H0009-07	Soil	EPA 8000C	07/26/17 13:25	08/01/17 16:52	1N/A/1N/A	1N/A/1N/A	NA
A7H0009-10	Soil	EPA 8000C	07/26/17 16:50	08/01/17 16:52	1N/A/1N/A	1N/A/1N/A	NA
A7H0009-13	Soil	EPA 8000C	07/27/17 09:00	08/01/17 16:52	1N/A/1N/A	1N/A/1N/A	NA
A7H0009-14	Soil	EPA 8000C	07/27/17 09:15	08/01/17 16:52	1N/A/1N/A	1N/A/1N/A	NA
A7H0009-19	Soil	EPA 8000C	07/27/17 17:20	08/01/17 16:52	1N/A/1N/A	1N/A/1N/A	NA
Batch: 7080426							
A7H0009-20	Soil	EPA 8000C	07/27/17 17:40	08/04/17 12:25	1N/A/1N/A	1N/A/1N/A	NA

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Project: **PLIA-Widbey Island**
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Project Manager: Elizabeth Forbes

Reported:
08/07/17 15:17

Notes and Definitions

Qualifiers:

F-18 Result for Diesel (Diesel Range Organics, C12-C24) is due to overlap from Gasoline or a Gasoline Range product.

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.

RPD Relative Percent Difference

MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

--- QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

*** Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).



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Reported:
08/07/17 15:17

COC 2 of 2

Lab # A7H0009

CHAIN OF CUSTODY

APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: Sound Earth Strategies, Inc.		Project Mgr: Liz Forbes		Project Name: Forms Widbey Area + Auto		Project # 1303-001	
Address: 2811 Fairview Ave E, Suite 2000, Seattle, WA		Phone: 206-306-1900		Fax: 206-306-1907		Email: EForbes@SoundEarthInc.com	
Sampled by: Logan Schumacher		DATE: 7/24/17		TIME: 0855		LAB ID #	
Site Location: OR		DATE: 7/24/17		TIME: 0855		LAB ID #	
Other: WA		DATE: 7/24/17		TIME: 0855		LAB ID #	
SAMPLE ID		DATE		TIME		LAB ID #	
1 MW17-40		7/24/17		0855		1740	
2 MW17-60		7/24/17		0855		1740	
3 MW17-54		7/24/17		0855		1740	
4 MW17-61		7/24/17		0855		1740	
5 MW17-70		7/24/17		0855		1740	
6 MW17-80		7/24/17		0855		1740	
7 MW17-91		7/24/17		0855		1740	
8 MW17-100		7/24/17		0855		1740	
9 MW17-105		7/24/17		0855		1740	
10 MW17-116		7/24/17		0855		1740	
Normal Turn Around Time (TAT) = 10 Business Days		1 Day		2 Day		3 Day	
TAT Requested (circle)		4 DAY		5 DAY		Other:	
SAMPLES ARE HELD FOR 30 DAYS		1 DAY		2 DAY		3 DAY	
RECEIVED BY: [Signature]		DATE: 7/24/17		SIGNATURE: [Signature]		DATE: 7/24/17	
PRINTED NAME: Logan Schumacher		TIME: 10:10		PRINTED NAME: Bill		TIME: 10:10	
COMPANY: SES		COMPANY: APEX		COMPANY: APEX		COMPANY: APEX	
RECEIVED BY: [Signature]		DATE: 7/31/17		SIGNATURE: [Signature]		DATE: 7/31/17	
PRINTED NAME: Bill		TIME: 10:10		PRINTED NAME: Bill		TIME: 10:10	
COMPANY: APEX		COMPANY: APEX		COMPANY: APEX		COMPANY: APEX	

Apex Laboratories

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Lisa Domenighini

Lisa Domenighini, Client Services Manager

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/07/17 15:17

APEX LABS COOLER RECEIPT FORM

Client: Sound Earth Strategies Element WO#: A7 H0009

Project/Project #: Former Whidbey Marine + Auto

Delivery info:

Date/Time Received: 8/1/17 @ 10:12 By: WJ

Delivered by: Apex ☐ Client ☐ ESS ☐ FedEx ☒ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐

Cooler Inspection Inspected by: WJ : 8/1/17 @ 10:16

Chain of Custody Included? Yes ☒ No ☐ Custody Seals? Yes ☐ No ☒

Signed/Dated by Client? Yes ☒ No ☐

Signed/Dated by Apex? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (deg. C)	<u>4.6</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. Blanks? (Y/N)	<u>Y</u>						
Ice Type: (Gel/Real/Other)	<u>Real</u>						
Condition:	<u>Good</u>						
Cooler out of temp? (Y/N)	<u>N</u>						
Possible reason why:	<u>Temp blank away from samples/ice</u>						
If some coolers are in temp and some out, were green dot applied to out of temperature samples? Yes/No/NA	<u>NA</u>						

Samples Inspection: Inspected by: WJ : 8/1/17 @ 11:28

All Samples Intact? Yes ☒ No ☐ Comments: No jar

Bottle Labels/COCs agree? Yes ☐ No ☒ Comments: No jar provided for sample

MW17-70*, Trip blank #1559 received, not noted on CoC

Containers/Volumes Received Appropriate for Analysis? Yes ☒ No ☐ Comments:

Do VOA Vials have Visible Headspace? Yes ☐ No ☐ NA ☒

Comments:

Water Samples: pH Checked and Appropriate (except VOAs): Yes ☐ No ☐ NA ☒

Comments:

Additional Information: * CoC states 3 containers per sample, only 2 provided for

MW17-70

Labeled by: WJ Witness: WJ Cooler Inspected by: WJ See Project Contact Form: Y

Apex Labs #A7H0552

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Friday, August 25, 2017

Elizabeth Forbes
Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

RE: PLIA-Widbey Island / 1303-001

Enclosed are the results of analyses for work order A7H0552, which was received by the laboratory on 8/18/2017 at 9:50:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: ldomenighini@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:37

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW18-55	A7H0552-03	Soil	08/14/17 09:55	08/18/17 09:50
MW18-105	A7H0552-06	Soil	08/14/17 13:15	08/18/17 09:50

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:37

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW18-55 (A7H0552-03)			Matrix: Soil		Batch: 7080856			
Diesel	ND	---	25.0	mg/kg dry	1	08/23/17 01:25	NWTPH-Dx	
Oil	ND	---	50.0	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 93 %</i>		<i>Limits: 50-150 %</i>		"	"	"
MW18-105 (A7H0552-06)			Matrix: Soil		Batch: 7080856			
Diesel	ND	---	25.0	mg/kg dry	1	08/23/17 01:47	NWTPH-Dx	
Oil	ND	---	50.0	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 89 %</i>		<i>Limits: 50-150 %</i>		"	"	"

Apex Laboratories



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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:37

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW18-55 (A7H0552-03)			Matrix: Soil		Batch: 7080676			
Gasoline Range Organics	ND	---	5.18	mg/kg dry	50	08/18/17 19:10	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 100 %</i>	<i>Limits: 50-150 %</i>	1	"	"	
<i>1,4-Difluorobenzene (Sur)</i>			<i>94 %</i>	<i>Limits: 50-150 %</i>	"	"	"	
MW18-105 (A7H0552-06)			Matrix: Soil		Batch: 7080676			
Gasoline Range Organics	ND	---	5.00	mg/kg dry	50	08/18/17 20:04	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 100 %</i>	<i>Limits: 50-150 %</i>	1	"	"	
<i>1,4-Difluorobenzene (Sur)</i>			<i>96 %</i>	<i>Limits: 50-150 %</i>	"	"	"	

Apex Laboratories



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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:37

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW18-55 (A7H0552-03)			Matrix: Soil		Batch: 7080676			
Benzene	ND	---	0.0104	mg/kg dry	50	08/18/17 19:10	5035A/8260B	
Toluene	ND	---	0.0518	"	"	"	"	
Ethylbenzene	ND	---	0.0259	"	"	"	"	
Xylenes, total	ND	---	0.0777	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 100 %</i>	<i>Limits: 70-130 %</i>	1	"	"	
<i>Toluene-d8 (Surr)</i>			<i>101 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>103 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
MW18-105 (A7H0552-06)			Matrix: Soil		Batch: 7080676			
Benzene	ND	---	0.0100	mg/kg dry	50	08/18/17 20:04	5035A/8260B	
Toluene	ND	---	0.0500	"	"	"	"	
Ethylbenzene	ND	---	0.0250	"	"	"	"	
Xylenes, total	ND	---	0.0750	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 102 %</i>	<i>Limits: 70-130 %</i>	1	"	"	
<i>Toluene-d8 (Surr)</i>			<i>100 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>102 %</i>	<i>Limits: 70-130 %</i>	"	"	"	

Apex Laboratories



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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:37

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight								
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW18-55 (A7H0552-03)			Matrix: Soil		Batch: 7080807			
% Solids	95.6	---	1.00	% by Weight	1	08/21/17 08:43	EPA 8000C	
MW18-105 (A7H0552-06)			Matrix: Soil		Batch: 7080807			
% Solids	94.0	---	1.00	% by Weight	1	08/21/17 08:43	EPA 8000C	

Apex Laboratories



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Sound Earth Strategies - Seattle
 2811 Fairview Ave E, Suite 2000
 Seattle, WA 98102

Project: **PLIA-Widbey Island**
 Project Number: 1303-001
 Project Manager: Elizabeth Forbes

Reported:
 08/25/17 11:37

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080856 - EPA 3546 (Fuels)							Soil					
Blank (7080856-BLK1)					Prepared: 08/22/17 12:55		Analyzed: 08/23/17 11:09					
NWTPH-Dx												
Diesel	ND	---	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	50.0	"	"	---	---	---	---	---	---	
Mineral Oil	ND	---	36.4	"	"	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 89 %		Limits: 50-150 %		Dilution: 1x						
LCS (7080856-BS1)					Prepared: 08/22/17 12:55		Analyzed: 08/23/17 11:29					
NWTPH-Dx												
Diesel	115	---	25.0	mg/kg wet	1	125	---	92	76-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 100 %		Limits: 50-150 %		Dilution: 1x						

Apex Laboratories



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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/25/17 11:37

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080676 - EPA 5035A						Soil						
Blank (7080676-BLK1)						Prepared: 08/18/17 16:00		Analyzed: 08/18/17 18:43				
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 100 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		95 %		50-150 %		"						
LCS (7080676-BS2)						Prepared: 08/18/17 16:00		Analyzed: 08/18/17 18:17				
NWTPH-Gx (MS)												
Gasoline Range Organics	25.8	---	5.00	mg/kg wet	50	25.0	---	103	70-130%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 101 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		96 %		50-150 %		"						
Duplicate (7080676-DUP1)						Prepared: 08/14/17 09:55		Analyzed: 08/18/17 19:37				
QC Source Sample: MW18-55 (A7H0552-03)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.10	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 101 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		96 %		50-150 %		"						

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/25/17 11:37

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 7080676 - EPA 5035A						Soil						
Blank (7080676-BLK1)			Prepared: 08/18/17 16:00 Analyzed: 08/18/17 18:43									
5035A/8260B												
Benzene	ND	---	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0333	"	"	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0167	"	"	---	---	---	---	---	---	
Xylenes, total	ND	---	0.0500	"	"	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		103 %		70-130 %		"						
LCS (7080676-BS1)						Prepared: 08/18/17 16:00 Analyzed: 08/18/17 17:50						
5035A/8260B												
Benzene	0.990	---	0.0100	mg/kg wet	50	1.00	---	99	65-135%	---	---	
Toluene	0.922	---	0.0500	"	"	"	---	92	"	---	---	
Ethylbenzene	0.970	---	0.0250	"	"	"	---	97	"	---	---	
Xylenes, total	2.93	---	0.0750	"	"	3.00	---	98	"	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		100 %		70-130 %		"						
Duplicate (7080676-DUP1)						Prepared: 08/14/17 09:55 Analyzed: 08/18/17 19:37						
QC Source Sample: MW18-55 (A7H0552-03)												
5035A/8260B												
Benzene	ND	---	0.0102	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.0510	"	"	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0255	"	"	---	ND	---	---	---	30%	
Xylenes, total	ND	---	0.0765	"	"	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		102 %		70-130 %		"						

Apex Laboratories



Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:37

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080807 - Total Solids (Dry Weight)							Soil					

Apex Laboratories



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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/25/17 11:37

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7080856							
A7H0552-03	Soil	NWTPH-Dx	08/14/17 09:55	08/22/17 12:55	10.56g/5mL	10g/5mL	0.95
A7H0552-06	Soil	NWTPH-Dx	08/14/17 13:15	08/22/17 12:55	10.73g/5mL	10g/5mL	0.93

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7080676							
A7H0552-03	Soil	NWTPH-Gx (MS)	08/14/17 09:55	08/14/17 09:55	5.28g/5mL	5g/5mL	0.95
A7H0552-06	Soil	NWTPH-Gx (MS)	08/14/17 13:15	08/14/17 13:15	5.68g/5mL	5g/5mL	0.88

BTEX Compounds by EPA 8260B

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7080676							
A7H0552-03	Soil	5035A/8260B	08/14/17 09:55	08/14/17 09:55	5.28g/5mL	5g/5mL	0.95
A7H0552-06	Soil	5035A/8260B	08/14/17 13:15	08/14/17 13:15	5.68g/5mL	5g/5mL	0.88

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7080807							
A7H0552-03	Soil	EPA 8000C	08/14/17 09:55	08/18/17 15:00	1N/A/1N/A	1N/A/1N/A	NA
A7H0552-06	Soil	EPA 8000C	08/14/17 13:15	08/18/17 15:00	1N/A/1N/A	1N/A/1N/A	NA

Apex Laboratories



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Lisa Domenighini, Client Services Manager

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:37

Notes and Definitions

Qualifiers:

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
---	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
***	Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories



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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:37

CHAIN OF CUSTODY

APEX LABS

Lab # **AMH0552**

COC 1 of 1

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2423 Fax: 503-718-0333

Company: SoundEarth Strategies, Inc.		Project Mgr: Liz Forbes		Project Name: Former Windy Farms - Auto		Project # 1303-001	
Address: 2811 Fairview Ave E, Suite 2000, Seattle, WA		Phone: 206.306.1400		Fax: 206.306.1407		Email: EForbes@SoundEarthStrat.com	
Sampled by: Loren Schumacher		DATE: 8/14/17		TIME: 0940		LAB ID # WA	
Site Location: OR		Matrix: 3		TAT Requested (circle): 1 Day		Normal Turn Around Time (TAT) = 10 Business Days	
Other: ---		TAT Requested (circle): 1 Day		TAT Requested (circle): 1 Day		TAT Requested (circle): 1 Day	
SAMPLE ID		DATE		TIME		# OF CONTAINERS	
1	MW18-20	8/14/17	0940	3			
2	MW18-40	8/14/17	0955	3			
3	MW18-55	8/14/17	1025	3			
4	MW18-75	8/14/17	1305	3			
5	MW18-80	8/14/17	1315	3			
6	MW18-100	8/14/17	1325	3			
7	MW18-110	8/14/17	1340	3			
8	MW18-115	8/14/17	1340	3			
9							
10							

ANALYSIS REQUEST	
1200-Z	
1200-COLS	
TOTAL DISS TCLP	
Hg, Ag, Na, Ti, V, Zn	
Cd, Cr, Cu, Fe, Pb, P, R	
Mn, Sb, As, Ba, Be, B, Ca, Co, Ni, Se, Si, Sn, Sr, Tl, U, W, Y	
TCLP Metals (8)	
RCA Metals (8)	
600 TTO	
8082 PCBs	
8270 SIDA PAHs	
8270 SVOC	
8260 BTEX VOCs	
8260 HVOCS	
8260 RBDN VOCs	
8260 VOCs Full List	
NWTPH-GS	
NWTPH-DS	
NWTPH-HCID	

SPECIAL INSTRUCTIONS: Also report to LSchumacher@SoundEarthStrat.com	
RECEIVED BY:	RECEIVED BY:
Signature: Rick	Signature: Sherry
Date: 8/17/17	Date: 8/18/17
Printed Name: Rick	Printed Name: Sherry
Time: 12:00	Time: 12:00
Company: Apex	Company: Apex

Lisa Domenighini

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:37

APEX LABS COOLER RECEIPT FORM

Client: Sound Earth Element WO#: A7 H0552

Project/Project #: Former Widby Marine + Auto / 1303-001

Delivery info:

Date/Time Received: 8/18/17 @ 950 By: SC

Delivered by: Apex ☐ Client ☐ ESS ☐ FedEx ☒ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐

Cooler Inspection Inspected by: SC : 8/18/17 @ 950

Chain of Custody Included? Yes ☒ No ☐ Custody Seals? Yes ☐ No ☒

Signed/Dated by Client? Yes ☒ No ☐

Signed/Dated by Apex? Yes ☒ No ☐

Cooler #1 Cooler #2 Cooler #3 Cooler #4 Cooler #5 Cooler #6 Cooler #7

Temperature (deg. C) 2.10 3.8 _____

Received on Ice? (Y/N) (Y) _____

Temp. Blanks? (Y/N) (Y) _____

Ice Type: (Gel/Real/Other) (Real) _____

Condition: good _____

Cooler out of temp? (Y/N) Possible reason why: _____

If some coolers are in temp and some out, were green dot applied to out of temperature samples? Yes/No/NA

Samples Inspection Inspected by: SC : 8/18/17 @ 1305

All Samples Intact? Yes ☒ No ☐ Comments: _____

Bottle Labels/COCs agree? Yes ☒ No ☐ Comments: MWRB-110 80 jar has no day

written w/ the date

Containers/Volumes Received Appropriate for Analysis? Yes ☒ No ☐ Comments: _____

Do VOA Vials have Visible Headspace? Yes ☐ No ☐ NA ☒

Comments: _____

Water Samples: pH Checked and Appropriate (except VOAs): Yes ☐ No ☐ NA ☒

Comments: _____

Additional Information: _____

Labeled by: SC Witness: KAR Cooler Inspected by: SC See Project Contact Form: Y

Apex Labs #A7H0554

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Friday, August 25, 2017

Elizabeth Forbes
Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

RE: PLIA-Widbey Island / 1303-001

Enclosed are the results of analyses for work order A7H0554, which was received by the laboratory on 8/18/2017 at 9:50:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: ldomenighini@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:46

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B09-45	A7H0554-05	Soil	08/15/17 09:30	08/18/17 09:50
B09-65	A7H0554-10	Soil	08/15/17 10:20	08/18/17 09:50

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/25/17 11:46

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
B09-45 (A7H0554-05)			Matrix: Soil		Batch: 7080856			
Diesel	ND	---	25.0	mg/kg dry	1	08/23/17 02:10	NWTPH-Dx	
Oil	ND	---	50.0	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 91 %</i>		<i>Limits: 50-150 %</i>		"	"	"
B09-65 (A7H0554-10)			Matrix: Soil		Batch: 7080856			
Diesel	ND	---	25.0	mg/kg dry	1	08/23/17 02:32	NWTPH-Dx	
Oil	ND	---	50.0	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 96 %</i>		<i>Limits: 50-150 %</i>		"	"	"

Apex Laboratories



Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/25/17 11:46

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
B09-45 (A7H0554-05)			Matrix: Soil		Batch: 7080676			
Gasoline Range Organics	ND	---	5.76	mg/kg dry	50	08/18/17 23:11	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 101 %</i>	<i>Limits: 50-150 %</i>	1	"	"	
<i>1,4-Difluorobenzene (Sur)</i>			<i>97 %</i>	<i>Limits: 50-150 %</i>	"	"	"	
B09-65 (A7H0554-10)			Matrix: Soil		Batch: 7080676			
Gasoline Range Organics	ND	---	5.11	mg/kg dry	50	08/19/17 00:04	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 100 %</i>	<i>Limits: 50-150 %</i>	1	"	"	
<i>1,4-Difluorobenzene (Sur)</i>			<i>97 %</i>	<i>Limits: 50-150 %</i>	"	"	"	

Apex Laboratories



Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/25/17 11:46

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
B09-45 (A7H0554-05)			Matrix: Soil		Batch: 7080676			
Benzene	ND	---	0.0115	mg/kg dry	50	08/18/17 23:11	5035A/8260B	
Toluene	ND	---	0.0576	"	"	"	"	
Ethylbenzene	ND	---	0.0288	"	"	"	"	
Xylenes, total	ND	---	0.0865	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 102 %</i>	<i>Limits: 70-130 %</i>	1	"	"	
<i>Toluene-d8 (Surr)</i>			<i>101 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>100 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
B09-65 (A7H0554-10)			Matrix: Soil		Batch: 7080676			
Benzene	ND	---	0.0102	mg/kg dry	50	08/19/17 00:04	5035A/8260B	
Toluene	ND	---	0.0511	"	"	"	"	
Ethylbenzene	ND	---	0.0255	"	"	"	"	
Xylenes, total	ND	---	0.0766	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 103 %</i>	<i>Limits: 70-130 %</i>	1	"	"	
<i>Toluene-d8 (Surr)</i>			<i>102 %</i>	<i>Limits: 70-130 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>102 %</i>	<i>Limits: 70-130 %</i>	"	"	"	



Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:46

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight								
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
B09-45 (A7H0554-05)			Matrix: Soil		Batch: 7080807			
% Solids	93.0	---	1.00	% by Weight	1	08/21/17 08:43	EPA 8000C	
B09-65 (A7H0554-10)			Matrix: Soil		Batch: 7080807			
% Solids	96.1	---	1.00	% by Weight	1	08/21/17 08:43	EPA 8000C	

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Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/25/17 11:46

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080856 - EPA 3546 (Fuels)						Soil						
Blank (7080856-BLK1)				Prepared: 08/22/17 12:55 Analyzed: 08/23/17 11:09								
NWTPH-Dx												
Diesel	ND	---	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	50.0	"	"	---	---	---	---	---	---	
Mineral Oil	ND	---	36.4	"	"	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 89 %		Limits: 50-150 %		Dilution: 1x						
LCS (7080856-BS1)				Prepared: 08/22/17 12:55 Analyzed: 08/23/17 11:29								
NWTPH-Dx												
Diesel	115	---	25.0	mg/kg wet	1	125	---	92	76-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 100 %		Limits: 50-150 %		Dilution: 1x						



Sound Earth Strategies - Seattle
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Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/25/17 11:46

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080676 - EPA 5035A						Soil						
Blank (7080676-BLK1)						Prepared: 08/18/17 16:00		Analyzed: 08/18/17 18:43				
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 100 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		95 %		50-150 %		"						
LCS (7080676-BS2)						Prepared: 08/18/17 16:00		Analyzed: 08/18/17 18:17				
NWTPH-Gx (MS)												
Gasoline Range Organics	25.8	---	5.00	mg/kg wet	50	25.0	---	103	70-130%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 101 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		96 %		50-150 %		"						
Duplicate (7080676-DUP2)						Prepared: 08/15/17 09:30		Analyzed: 08/18/17 23:38				
QC Source Sample: B09-45 (A7H0554-05)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.47	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		96 %		50-150 %		"						



Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/25/17 11:46

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080676 - EPA 5035A						Soil						
Blank (7080676-BLK1)			Prepared: 08/18/17 16:00 Analyzed: 08/18/17 18:43									
5035A/8260B												
Benzene	ND	---	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0333	"	"	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0167	"	"	---	---	---	---	---	---	
Xylenes, total	ND	---	0.0500	"	"	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			Recovery: 100 %	Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)			99 %	70-130 %		"						
4-Bromofluorobenzene (Surr)			103 %	70-130 %		"						
LCS (7080676-BS1)			Prepared: 08/18/17 16:00 Analyzed: 08/18/17 17:50									
5035A/8260B												
Benzene	0.990	---	0.0100	mg/kg wet	50	1.00	---	99	65-135%	---	---	
Toluene	0.922	---	0.0500	"	"	"	---	92	"	---	---	
Ethylbenzene	0.970	---	0.0250	"	"	"	---	97	"	---	---	
Xylenes, total	2.93	---	0.0750	"	"	3.00	---	98	"	---	---	
Surr: 1,4-Difluorobenzene (Surr)			Recovery: 102 %	Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)			97 %	70-130 %		"						
4-Bromofluorobenzene (Surr)			100 %	70-130 %		"						
Duplicate (7080676-DUP2)			Prepared: 08/15/17 09:30 Analyzed: 08/18/17 23:38									
QC Source Sample: B09-45 (A7H0554-05)												
5035A/8260B												
Benzene	ND	---	0.0109	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.0547	"	"	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0273	"	"	---	ND	---	---	---	30%	
Xylenes, total	ND	---	0.0820	"	"	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			Recovery: 102 %	Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)			101 %	70-130 %		"						
4-Bromofluorobenzene (Surr)			101 %	70-130 %		"						
Matrix Spike (7080676-MS1)			Prepared: 08/15/17 10:20 Analyzed: 08/19/17 00:31									
QC Source Sample: B09-65 (A7H0554-10)												
5035A/8260B												
Benzene	1.11	---	0.0102	mg/kg dry	50	1.02	ND	109	65-135%	---	---	
Toluene	1.03	---	0.0511	"	"	"	ND	101	"	---	---	
Ethylbenzene	1.08	---	0.0255	"	"	"	ND	106	"	---	---	

Apex Laboratories

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Lisa Domenighini, Client Services Manager

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/25/17 11:46

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080676 - EPA 5035A						Soil						
Matrix Spike (7080676-MS1)					Prepared: 08/15/17 10:20		Analyzed: 08/19/17 00:31					
QC Source Sample: B09-65 (A7H0554-10)												
5035A/8260B												
Xylenes, total	3.20	---	0.0766	mg/kg dry	"	3.06	ND	105	"	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		98 %		70-130 %		"						

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:46

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080807 - Total Solids (Dry Weight)							Soil					

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
08/25/17 11:46

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7080856							
A7H0554-05	Soil	NWTPH-Dx	08/15/17 09:30	08/22/17 12:55	10.51g/5mL	10g/5mL	0.95
A7H0554-10	Soil	NWTPH-Dx	08/15/17 10:20	08/22/17 12:55	10.22g/5mL	10g/5mL	0.98

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7080676							
A7H0554-05	Soil	NWTPH-Gx (MS)	08/15/17 09:30	08/15/17 09:30	4.99g/5mL	5g/5mL	1.00
A7H0554-10	Soil	NWTPH-Gx (MS)	08/15/17 10:20	08/15/17 10:20	5.31g/5mL	5g/5mL	0.94

BTEX Compounds by EPA 8260B

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7080676							
A7H0554-05	Soil	5035A/8260B	08/15/17 09:30	08/15/17 09:30	4.99g/5mL	5g/5mL	1.00
A7H0554-10	Soil	5035A/8260B	08/15/17 10:20	08/15/17 10:20	5.31g/5mL	5g/5mL	0.94

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7080807							
A7H0554-05	Soil	EPA 8000C	08/15/17 09:30	08/18/17 15:00	1N/A/1N/A	1N/A/1N/A	NA
A7H0554-10	Soil	EPA 8000C	08/15/17 10:20	08/18/17 15:00	1N/A/1N/A	1N/A/1N/A	NA

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Lisa Domenighini, Client Services Manager

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:46

Notes and Definitions

Qualifiers:

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMS	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
---	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
***	Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories



Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:46

CHAIN OF CUSTODY

APEX LABS Lab # **A7H0554** COC 1 of 2

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: Sound Earth Strategies, Inc.		Project Mgr: Liz Forbes		Project Name: Form including Marine Auto		Project # 1303-001	
Address: 2811 Fairview Ave E, Suite 2000, Seattle, WA		Phone: 206.306.1900		Fax: 206.306.1907		Email: EF@seasoundearth.com	
Sampled by: Logan Schumacher							
Site Location: OR (WA)		DATE: 8/15/17		TIME: 0900		MATRIX: Soil	
Other: -		LAB ID #		# OF CONTAINERS			
SAMPLE ID							
1 B09-10							
2 B09-20							
3 B09-30							
4 B09-40							
5 B09-45							
6 B09-50							
7 B09-55							
8 B09-60							
9 B09-62.5							
10 B09-65							
Normal Turn Around Time (TAT) - 10 Business Days		YES		NO			
TAT Requested (circle)		1 Day		2 Day		3 Day	
		4 DAY		5 DAY		Other:	
SAMPLES ARE HELD FOR 30 DAYS							
RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
Signature: Logan Schumacher		Signature: Bull		Signature: Bull		Signature: Bull	
Date: 8/17/17		Date: 8/17/17		Date: 8/17/17		Date: 8/18/17	
Printed Name: Logan Schumacher		Printed Name: Bull		Printed Name: Bull		Printed Name: Bull	
Time: 11:00		Time: 11:00		Time: 12:00		Time: 12:00	
Company: Sound Earth Strategies, Inc.		Company: Apex Labs		Company: Apex Labs		Company: Apex Labs	

SPECIAL INSTRUCTIONS: **Also report to LSchumacher@SoundEarth.com**

Apex Laboratories

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Lisa Domenighini

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:46

Lab # **A7H0554** COC 2 of 2

CHAIN OF CUSTODY

APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: SoundEarth Strategies, Inc.		Project Mgr: Liz Forbes		Project Name: Forbes Widbey Marine + Auto		PO# 1303-001	
Address: 2811 Fairview Ave E, Suite 2000 Seattle, WA		Phone: 206.306.1900		Fax: 206.306.1907		Project # 1303-001	
Sampled by: Logan Schumacher		Date: 8/15/17		Time: 10:30		Email: ELForbes@SoundEarth.com	
Site Location: OR (WA)		DATE		TIME		ANALYSIS REQUEST	
Other: ---		LAB ID #		MATRIX		# OF CONTAINERS	
SAMPLE ID		DATE		TIME		MATRIX	
1 B09-67.5		8/15/17		10:30		4	
2 B09-70		11		10:35		11	
3							
4							
5							
6							
7							
8							
9							
10							
Normal Turn Around Time (TAT) = 10 Business Days		YES		NO			
TAT Requested (circle)		1 Day		2 Day		3 Day	
		4 DAY		5 DAY		Other:	
SPECIAL INSTRUCTIONS:							
RECEIVED BY:		RECEIVED BY:					
Signature: Logan Schumacher		Signature: Elizabeth Forbes					
Date: 8/15/17		Date: 8/17/17					
Printed Name: Logan Schumacher		Printed Name: Elizabeth Forbes					
Time: 11:00		Time: 12:00					
Company: SoundEarth Strategies, Inc		Company: Apex					

Apex Laboratories

Lisa Domenighini

Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
08/25/17 11:46

APEX LABS COOLER RECEIPT FORM

Client: Sound Earth Element WO#: A7H0554

Project/Project #: Former Windy Marine + Auto / 1303-001

Delivery info:

Date/Time Received: 8/18/17 @ 950 By: SC

Delivered by: Apex ☐ Client ☐ ESS ☐ FedEx ☒ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐

Cooler Inspection Inspected by: SC : 8/18/17 @ 950

Chain of Custody Included? Yes ☒ No ☐ Custody Seals? Yes ☐ No ☒

Signed/Dated by Client? Yes ☒ No ☐

Signed/Dated by Apex? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (deg. C)	<u>2.10</u>	<u>3.8</u>					
Received on Ice? (Y/N)	<u>(N)</u>						
Temp. Blanks? (Y/N)	<u>(N)</u>						
Ice Type: (Gel/Real/Other)	<u>(N)</u>						
Condition:	<u>good</u>						

Cooler out of temp? (Y/N) Possible reason why: _____

If some coolers are in temp and some out, were green dot applied to out of temperature samples? Yes/No/NA

Samples Inspection Inspected by: SC : 8/18/17 @ 1305

All Samples Intact? Yes ☒ No ☐ Comments: _____

Bottle Labels/COCs agree? Yes ☐ No ☒ Comments: Trap Blank #1559 in cooler,

not noted on COC

Containers/Volumes Received Appropriate for Analysis? Yes ☒ No ☐ Comments: _____

Do VOA Vials have Visible Headpace? Yes ☐ No ☒ NA ☐

Comments: _____

Water Samples: pH Checked and Appropriate (except VOAs): Yes ☐ No ☐ NA ☒

Comments: _____

Additional Information: _____

Lisa A. Domenighini

Apex Labs #A7H0719

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Wednesday, September 6, 2017

Elizabeth Forbes
Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

RE: PLIA-Widbey Island / 1303-001

Enclosed are the results of analyses for work order A7H0719, which was received by the laboratory on 8/25/2017 at 9:55:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: ldomenighini@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
09/06/17 09:01

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01-20170821	A7H0719-01	Water	08/21/17 13:50	08/25/17 09:55
MW10-20170821	A7H0719-02	Water	08/21/17 14:18	08/25/17 09:55
MW03-20170821	A7H0719-03	Water	08/21/17 15:40	08/25/17 09:55
MW11-20170821	A7H0719-04	Water	08/21/17 15:45	08/25/17 09:55
MW06-20170822	A7H0719-05	Water	08/22/17 09:45	08/25/17 09:55
MW18-20170822	A7H0719-06	Water	08/22/17 10:30	08/25/17 09:55
MW04-20170822	A7H0719-07	Water	08/22/17 11:30	08/25/17 09:55
MW16-20170822	A7H0719-08	Water	08/22/17 12:10	08/25/17 09:55
MW08-20170822	A7H0719-09	Water	08/22/17 13:00	08/25/17 09:55
MW14-20170822	A7H0719-10	Water	08/22/17 14:25	08/25/17 09:55
MW02-20170822	A7H0719-11	Water	08/22/17 14:55	08/25/17 09:55
MW15-20170822	A7H0719-12	Water	08/22/17 16:00	08/25/17 09:55
MW07-20170822	A7H0719-13	Water	08/22/17 16:30	08/25/17 09:55
MW17-20170823	A7H0719-14	Water	08/23/17 10:20	08/25/17 09:55
MW12-20170823	A7H0719-15	Water	08/23/17 10:30	08/25/17 09:55
MW09-20170823	A7H0719-16	Water	08/23/17 12:30	08/25/17 09:55
MW99-20170823	A7H0719-17	Water	08/23/17 12:45	08/25/17 09:55
MW13-20170823	A7H0719-18	Water	08/23/17 13:15	08/25/17 09:55

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
09/06/17 09:01

ANALYTICAL CASE NARRATIVE

Work Order: A7H0719

NWTPH Dx was not analyzed for samples, MW 02-20170822 and MW-0720170822 due to insufficient volume at the time of receipt in the lab.

Apex Laboratories



Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
09/06/17 09:01

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW01-20170821 (A7H0719-01)			Matrix: Water		Batch: 7081009			
Diesel	ND	---	198	ug/L	1	08/30/17 23:29	NWTPH-Dx	
Oil	ND	---	396	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 97 %</i>		<i>Limits: 50-150 %</i>		"	"	"
MW10-20170821 (A7H0719-02)			Matrix: Water		Batch: 7081009			
Diesel	ND	---	196	ug/L	1	08/30/17 23:52	NWTPH-Dx	
Oil	ND	---	392	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 94 %</i>		<i>Limits: 50-150 %</i>		"	"	"
MW03-20170821 (A7H0719-03)			Matrix: Water		Batch: 7081009			
Diesel	ND	---	192	ug/L	1	08/31/17 00:14	NWTPH-Dx	
Oil	ND	---	385	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 96 %</i>		<i>Limits: 50-150 %</i>		"	"	"
MW11-20170821 (A7H0719-04)			Matrix: Water		Batch: 7081009			
Diesel	ND	---	194	ug/L	1	08/31/17 00:37	NWTPH-Dx	
Oil	ND	---	388	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 50-150 %</i>		"	"	"
MW06-20170822 (A7H0719-05)			Matrix: Water		Batch: 7081009			
Diesel	513	---	200	ug/L	1	08/31/17 01:00	NWTPH-Dx	F-18
Oil	ND	---	400	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 96 %</i>		<i>Limits: 50-150 %</i>		"	"	"
MW18-20170822 (A7H0719-06)			Matrix: Water		Batch: 7081066			
Diesel	ND	---	198	ug/L	1	08/31/17 02:53	NWTPH-Dx	
Oil	ND	---	396	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 95 %</i>		<i>Limits: 50-150 %</i>		"	"	"
MW04-20170822 (A7H0719-07)			Matrix: Water		Batch: 7081066			
Diesel	939	---	194	ug/L	1	08/31/17 06:02	NWTPH-Dx	F-18
Oil	ND	---	388	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 99 %</i>		<i>Limits: 50-150 %</i>		"	"	"
MW16-20170822 (A7H0719-08)			Matrix: Water		Batch: 7081066			
Diesel	ND	---	192	ug/L	1	08/31/17 06:25	NWTPH-Dx	
Oil	ND	---	385	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 95 %</i>		<i>Limits: 50-150 %</i>		"	"	"

Apex Laboratories

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Lisa Domenighini, Client Services Manager

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
09/06/17 09:01

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW08-20170822 (A7H0719-09)			Matrix: Water		Batch: 7081066			
Diesel	876	---	194	ug/L	1	08/31/17 08:18	NWTPH-Dx	F-18
Oil	ND	---	388	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>			<i>Recovery: 100 %</i>	<i>Limits: 50-150 %</i>	"	"	"	
MW14-20170822 (A7H0719-10)			Matrix: Water		Batch: 7081066			
Diesel	ND	---	202	ug/L	1	08/31/17 08:40	NWTPH-Dx	
Oil	ND	---	404	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>			<i>Recovery: 99 %</i>	<i>Limits: 50-150 %</i>	"	"	"	
MW15-20170822 (A7H0719-12)			Matrix: Water		Batch: 7081066			
Diesel	ND	---	192	ug/L	1	08/31/17 09:03	NWTPH-Dx	
Oil	ND	---	385	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>			<i>Recovery: 93 %</i>	<i>Limits: 50-150 %</i>	"	"	"	
MW17-20170823 (A7H0719-14)			Matrix: Water		Batch: 7081066			
Diesel	ND	---	194	ug/L	1	08/31/17 09:26	NWTPH-Dx	
Oil	ND	---	388	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>			<i>Recovery: 95 %</i>	<i>Limits: 50-150 %</i>	"	"	"	
MW12-20170823 (A7H0719-15)			Matrix: Water		Batch: 7081066			
Diesel	1530	---	190	ug/L	1	08/31/17 09:49	NWTPH-Dx	F-18
Oil	ND	---	381	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>			<i>Recovery: 96 %</i>	<i>Limits: 50-150 %</i>	"	"	"	
MW09-20170823 (A7H0719-16)			Matrix: Water		Batch: 7081066			
Diesel	2530	---	198	ug/L	1	08/31/17 10:12	NWTPH-Dx	F-18
Oil	ND	---	396	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>			<i>Recovery: 81 %</i>	<i>Limits: 50-150 %</i>	"	"	"	
MW99-20170823 (A7H0719-17)			Matrix: Water		Batch: 7081066			
Diesel	1750	---	200	ug/L	1	08/31/17 10:36	NWTPH-Dx	F-18
Oil	ND	---	400	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>			<i>Recovery: 74 %</i>	<i>Limits: 50-150 %</i>	"	"	"	
MW13-20170823 (A7H0719-18)			Matrix: Water		Batch: 7081066			
Diesel	870	---	194	ug/L	1	08/31/17 10:59	NWTPH-Dx	F-18
Oil	ND	---	388	"	"	"	"	
<i>Surrogate: o-Terphenyl (Surr)</i>			<i>Recovery: 90 %</i>	<i>Limits: 50-150 %</i>	"	"	"	

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
09/06/17 09:01

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW01-20170821 (A7H0719-01)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	ND	---	100	ug/L	1	08/25/17 15:12	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 96 %	Limits: 50-150 %	"	"	"	
1,4-Difluorobenzene (Sur)			101 %	Limits: 50-150 %	"	"	"	
MW10-20170821 (A7H0719-02)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	117	---	100	ug/L	1	08/25/17 16:10	NWTPH-Gx (MS)	F-12
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 96 %	Limits: 50-150 %	"	"	"	
1,4-Difluorobenzene (Sur)			102 %	Limits: 50-150 %	"	"	"	
MW03-20170821 (A7H0719-03)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	ND	---	100	ug/L	1	08/25/17 16:39	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 99 %	Limits: 50-150 %	"	"	"	
1,4-Difluorobenzene (Sur)			102 %	Limits: 50-150 %	"	"	"	
MW11-20170821 (A7H0719-04)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	ND	---	100	ug/L	1	08/25/17 17:07	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 97 %	Limits: 50-150 %	"	"	"	
1,4-Difluorobenzene (Sur)			102 %	Limits: 50-150 %	"	"	"	
MW06-20170822 (A7H0719-05)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	16200	---	1000	ug/L	10	08/25/17 17:36	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 100 %	Limits: 50-150 %	1	"	"	
1,4-Difluorobenzene (Sur)			102 %	Limits: 50-150 %	"	"	"	
MW18-20170822 (A7H0719-06)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	ND	---	100	ug/L	1	08/25/17 18:34	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 96 %	Limits: 50-150 %	"	"	"	
1,4-Difluorobenzene (Sur)			102 %	Limits: 50-150 %	"	"	"	
MW04-20170822 (A7H0719-07RE1)			Matrix: Water		Batch: 7080996			
Gasoline Range Organics	14200	---	1000	ug/L	10	08/28/17 17:20	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 103 %	Limits: 50-150 %	1	"	"	
1,4-Difluorobenzene (Sur)			104 %	Limits: 50-150 %	"	"	"	
MW16-20170822 (A7H0719-08)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	ND	---	100	ug/L	1	08/25/17 23:41	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 97 %	Limits: 50-150 %	"	"	"	
1,4-Difluorobenzene (Sur)			103 %	Limits: 50-150 %	"	"	"	

Apex Laboratories



Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
09/06/17 09:01

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW08-20170822 (A7H0719-09)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	14200	---	1000	ug/L	10	08/25/17 19:31	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 98 %	Limits: 50-150 %	1	"	"	
1,4-Difluorobenzene (Sur)			100 %	Limits: 50-150 %	"	"	"	
MW14-20170822 (A7H0719-10)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	ND	---	100	ug/L	1	08/25/17 19:59	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 98 %	Limits: 50-150 %	"	"	"	
1,4-Difluorobenzene (Sur)			99 %	Limits: 50-150 %	"	"	"	
MW02-20170822 (A7H0719-11)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	112	---	100	ug/L	1	08/25/17 20:27	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 98 %	Limits: 50-150 %	"	"	"	
1,4-Difluorobenzene (Sur)			101 %	Limits: 50-150 %	"	"	"	
MW15-20170822 (A7H0719-12)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	ND	---	100	ug/L	1	08/25/17 20:55	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 95 %	Limits: 50-150 %	"	"	"	
1,4-Difluorobenzene (Sur)			100 %	Limits: 50-150 %	"	"	"	
MW07-20170822 (A7H0719-13)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	6380	---	1000	ug/L	10	08/25/17 21:23	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 102 %	Limits: 50-150 %	1	"	"	
1,4-Difluorobenzene (Sur)			103 %	Limits: 50-150 %	"	"	"	
MW17-20170823 (A7H0719-14)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	6360	---	100	ug/L	1	08/25/17 21:51	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 113 %	Limits: 50-150 %	"	"	"	
1,4-Difluorobenzene (Sur)			111 %	Limits: 50-150 %	"	"	"	
MW12-20170823 (A7H0719-15)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	61800	---	1000	ug/L	10	08/25/17 22:19	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 97 %	Limits: 50-150 %	1	"	"	
1,4-Difluorobenzene (Sur)			101 %	Limits: 50-150 %	"	"	"	
MW09-20170823 (A7H0719-16)			Matrix: Water		Batch: 7080923			
Gasoline Range Organics	70200	---	5000	ug/L	50	08/25/17 22:46	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 94 %	Limits: 50-150 %	1	"	"	
1,4-Difluorobenzene (Sur)			101 %	Limits: 50-150 %	"	"	"	

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
09/06/17 09:01

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW99-20170823 (A7H0719-17)			Matrix: Water		Batch: 7080956			
Gasoline Range Organics	65300	---	1000	ug/L	10	08/26/17 01:54	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 108 %</i>	<i>Limits: 50-150 %</i>	1	"	"	
<i>1,4-Difluorobenzene (Sur)</i>			<i>94 %</i>	<i>Limits: 50-150 %</i>	"	"	"	
MW13-20170823 (A7H0719-18)			Matrix: Water		Batch: 7080956			
Gasoline Range Organics	83000	---	1000	ug/L	10	08/26/17 02:22	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 104 %</i>	<i>Limits: 50-150 %</i>	1	"	"	
<i>1,4-Difluorobenzene (Sur)</i>			<i>91 %</i>	<i>Limits: 50-150 %</i>	"	"	"	

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Reported:
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ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW01-20170821 (A7H0719-01)			Matrix: Water		Batch: 7080923			
Benzene	ND	---	0.200	ug/L	1	08/25/17 15:12	EPA 8260B	
Toluene	ND	---	1.00	"	"	"	"	
Ethylbenzene	ND	---	0.500	"	"	"	"	
Xylenes, total	ND	---	1.50	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 101 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>Toluene-d8 (Surr)</i>			<i>100 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>101 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
MW10-20170821 (A7H0719-02)			Matrix: Water		Batch: 7080923			
Benzene	ND	---	0.200	ug/L	1	08/25/17 16:10	EPA 8260B	
Toluene	ND	---	1.00	"	"	"	"	
Ethylbenzene	ND	---	0.500	"	"	"	"	
Xylenes, total	ND	---	1.50	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 102 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>Toluene-d8 (Surr)</i>			<i>100 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>100 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
MW03-20170821 (A7H0719-03)			Matrix: Water		Batch: 7080923			
Benzene	ND	---	0.200	ug/L	1	08/25/17 16:39	EPA 8260B	
Toluene	ND	---	1.00	"	"	"	"	
Ethylbenzene	ND	---	0.500	"	"	"	"	
Xylenes, total	ND	---	1.50	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 102 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>Toluene-d8 (Surr)</i>			<i>100 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>100 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
MW11-20170821 (A7H0719-04)			Matrix: Water		Batch: 7080923			
Benzene	ND	---	0.200	ug/L	1	08/25/17 17:07	EPA 8260B	
Toluene	ND	---	1.00	"	"	"	"	
Ethylbenzene	ND	---	0.500	"	"	"	"	
Xylenes, total	ND	---	1.50	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 102 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>101 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
MW06-20170822 (A7H0719-05)			Matrix: Water		Batch: 7080923			
Benzene	ND	---	2.00	ug/L	10	08/25/17 17:36	EPA 8260B	

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Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
09/06/17 09:01

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW06-20170822 (A7H0719-05)			Matrix: Water		Batch: 7080923			
Toluene	ND	---	10.0	ug/L	10	"	EPA 8260B	
Ethylbenzene	690	---	5.00	"	"	"	"	
Xylenes, total	2100	---	15.0	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 103 %</i>	<i>Limits: 80-120 %</i>	1	"	"	
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>98 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
MW18-20170822 (A7H0719-06)			Matrix: Water		Batch: 7080923			
Benzene	ND	---	0.200	ug/L	1	08/25/17 18:34	EPA 8260B	
Toluene	ND	---	1.00	"	"	"	"	
Ethylbenzene	ND	---	0.500	"	"	"	"	
Xylenes, total	ND	---	1.50	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 102 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>98 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
MW04-20170822 (A7H0719-07)			Matrix: Water		Batch: 7080923			
Benzene	0.250	---	0.200	ug/L	1	08/25/17 19:02	EPA 8260B	
Toluene	1.21	---	1.00	"	"	"	"	
Ethylbenzene	2.18	---	0.500	"	"	"	"	
Xylenes, total	310	---	1.50	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 97 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>Toluene-d8 (Surr)</i>			<i>96 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>96 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
MW16-20170822 (A7H0719-08)			Matrix: Water		Batch: 7080923			
Benzene	ND	---	0.200	ug/L	1	08/25/17 23:41	EPA 8260B	
Toluene	ND	---	1.00	"	"	"	"	
Ethylbenzene	ND	---	0.500	"	"	"	"	
Xylenes, total	ND	---	1.50	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 103 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>100 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
MW08-20170822 (A7H0719-09)			Matrix: Water		Batch: 7080923			
Benzene	ND	---	2.00	ug/L	10	08/25/17 19:31	EPA 8260B	
Toluene	ND	---	10.0	"	"	"	"	
Ethylbenzene	27.3	---	5.00	"	"	"	"	

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Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
09/06/17 09:01

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW08-20170822 (A7H0719-09)			Matrix: Water		Batch: 7080923			
Xylenes, total	777	---	15.0	ug/L	10	"	EPA 8260B	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 101 %</i>	<i>Limits: 80-120 %</i>	1	"	"	
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>103 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
MW14-20170822 (A7H0719-10)			Matrix: Water		Batch: 7080923			
Benzene	ND	---	0.200	ug/L	1	08/25/17 19:59	EPA 8260B	
Toluene	ND	---	1.00	"	"	"	"	
Ethylbenzene	ND	---	0.500	"	"	"	"	
Xylenes, total	ND	---	1.50	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 100 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>Toluene-d8 (Surr)</i>			<i>98 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>97 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
MW02-20170822 (A7H0719-11)			Matrix: Water		Batch: 7080923			
Benzene	0.280	---	0.200	ug/L	1	08/25/17 20:27	EPA 8260B	
Toluene	1.18	---	1.00	"	"	"	"	
Ethylbenzene	ND	---	0.500	"	"	"	"	
Xylenes, total	ND	---	1.50	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 102 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>Toluene-d8 (Surr)</i>			<i>100 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>102 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
MW15-20170822 (A7H0719-12)			Matrix: Water		Batch: 7080923			
Benzene	ND	---	0.200	ug/L	1	08/25/17 20:55	EPA 8260B	
Toluene	ND	---	1.00	"	"	"	"	
Ethylbenzene	ND	---	0.500	"	"	"	"	
Xylenes, total	ND	---	1.50	"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 100 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
<i>4-Bromofluorobenzene (Surr)</i>			<i>101 %</i>	<i>Limits: 80-120 %</i>	"	"	"	
MW07-20170822 (A7H0719-13)			Matrix: Water		Batch: 7080923			
Benzene	262	---	2.00	ug/L	10	08/25/17 21:23	EPA 8260B	
Toluene	944	---	10.0	"	"	"	"	
Ethylbenzene	61.5	---	5.00	"	"	"	"	
Xylenes, total	423	---	15.0	"	"	"	"	

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Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
09/06/17 09:01

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW07-20170822 (A7H0719-13)			Matrix: Water		Batch: 7080923			
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 104 %	Limits: 80-120 %	1	"	EPA 8260B	
Toluene-d8 (Surr)			99 %	Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)			100 %	Limits: 80-120 %	"	"	"	
MW17-20170823 (A7H0719-14)			Matrix: Water		Batch: 7080923			
Ethylbenzene	146	---	0.500	ug/L	1	08/25/17 21:51	EPA 8260B	
Xylenes, total	392	---	1.50	"	"	"	"	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 112 %	Limits: 80-120 %	"	"	"	
Toluene-d8 (Surr)			99 %	Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)			97 %	Limits: 80-120 %	"	"	"	
MW17-20170823 (A7H0719-14RE1)			Matrix: Water		Batch: 7080996			
Benzene	271	---	2.00	ug/L	10	08/28/17 17:51	EPA 8260B	
Toluene	345	---	10.0	"	"	"	"	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 105 %	Limits: 80-120 %	1	"	"	
Toluene-d8 (Surr)			98 %	Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)			99 %	Limits: 80-120 %	"	"	"	
MW12-20170823 (A7H0719-15)			Matrix: Water		Batch: 7080923			
Benzene	ND	---	6.80	ug/L	10	08/25/17 22:19	EPA 8260B	R-06
Ethylbenzene	1300	---	5.00	"	"	"	"	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 102 %	Limits: 80-120 %	1	"	"	
Toluene-d8 (Surr)			99 %	Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)			98 %	Limits: 80-120 %	"	"	"	
MW12-20170823 (A7H0719-15RE1)			Matrix: Water		Batch: 7080996			
Toluene	3840	---	100	ug/L	100	08/28/17 18:22	EPA 8260B	
Xylenes, total	9440	---	150	"	"	"	"	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 104 %	Limits: 80-120 %	1	"	"	
Toluene-d8 (Surr)			99 %	Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)			100 %	Limits: 80-120 %	"	"	"	
MW09-20170823 (A7H0719-16)			Matrix: Water		Batch: 7080923			
Benzene	ND	---	10.0	ug/L	50	08/25/17 22:46	EPA 8260B	
Toluene	2640	---	50.0	"	"	"	"	
Ethylbenzene	909	---	25.0	"	"	"	"	
Xylenes, total	7420	---	75.0	"	"	"	"	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 101 %	Limits: 80-120 %	1	"	"	

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ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
MW09-20170823 (A7H0719-16)			Matrix: Water		Batch: 7080923			
Surrogate: Toluene-d8 (Surr)			Recovery: 100 %	Limits: 80-120 %	1	"	EPA 8260B	
4-Bromofluorobenzene (Surr)			100 %	Limits: 80-120 %	"	"	"	
MW99-20170823 (A7H0719-17)			Matrix: Water		Batch: 7080956			
Benzene	ND	---	2.00	ug/L	10	08/26/17 01:54	EPA 8260B	
Ethylbenzene	845	---	5.00	"	"	"	"	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 103 %	Limits: 80-120 %	1	"	"	
Toluene-d8 (Surr)			99 %	Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)			92 %	Limits: 80-120 %	"	"	"	
MW99-20170823 (A7H0719-17RE1)			Matrix: Water		Batch: 7080995			
Toluene	2870	---	100	ug/L	100	08/28/17 11:20	EPA 8260B	
Xylenes, total	6740	---	150	"	"	"	"	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 106 %	Limits: 80-120 %	1	"	"	
Toluene-d8 (Surr)			100 %	Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)			98 %	Limits: 80-120 %	"	"	"	
MW13-20170823 (A7H0719-18)			Matrix: Water		Batch: 7080956			
Benzene	23.2	---	2.00	ug/L	10	08/26/17 02:22	EPA 8260B	
Ethylbenzene	1730	---	5.00	"	"	"	"	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 102 %	Limits: 80-120 %	1	"	"	
Toluene-d8 (Surr)			96 %	Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)			99 %	Limits: 80-120 %	"	"	"	
MW13-20170823 (A7H0719-18RE1)			Matrix: Water		Batch: 7080995			
Toluene	11100	---	100	ug/L	100	08/28/17 11:48	EPA 8260B	
Xylenes, total	13000	---	150	"	"	"	"	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 106 %	Limits: 80-120 %	1	"	"	
Toluene-d8 (Surr)			101 %	Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)			100 %	Limits: 80-120 %	"	"	"	

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Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
09/06/17 09:01

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7081009 - EPA 3510C (Fuels/Acid Ext.)						Water						
Blank (7081009-BLK1)			Prepared: 08/28/17 11:40 Analyzed: 08/30/17 22:21									
NWTPH-Dx												
Diesel	ND	---	182	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	364	"	"	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 100 %		Limits: 50-150 %		Dilution: 1x						
LCS (7081009-BS1)			Prepared: 08/28/17 11:40 Analyzed: 08/30/17 22:44									
NWTPH-Dx												
Diesel	1120	---	200	ug/L	1	1250	---	90	58-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 105 %		Limits: 50-150 %		Dilution: 1x						
LCS Dup (7081009-BSD1)			Prepared: 08/28/17 11:40 Analyzed: 08/30/17 23:06									
NWTPH-Dx												
Diesel	1100	---	200	ug/L	1	1250	---	88	58-115%	2	20%	
Surr: o-Terphenyl (Surr)		Recovery: 100 %		Limits: 50-150 %		Dilution: 1x						
Batch 7081066 - EPA 3510C (Fuels/Acid Ext.)						Water						
Blank (7081066-BLK1)			Prepared: 08/29/17 14:01 Analyzed: 08/31/17 01:45									
NWTPH-Dx												
Diesel	ND	---	182	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	364	"	"	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 94 %		Limits: 50-150 %		Dilution: 1x						
LCS (7081066-BS1)			Prepared: 08/29/17 14:01 Analyzed: 08/31/17 02:08									
NWTPH-Dx												
Diesel	1070	---	200	ug/L	1	1250	---	85	58-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 98 %		Limits: 50-150 %		Dilution: 1x						
LCS Dup (7081066-BSD1)			Prepared: 08/29/17 14:01 Analyzed: 08/31/17 02:30									
NWTPH-Dx												
Diesel	1120	---	200	ug/L	1	1250	---	89	58-115%	5	20%	
Surr: o-Terphenyl (Surr)		Recovery: 97 %		Limits: 50-150 %		Dilution: 1x						

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Lisa Domenighini, Client Services Manager

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102Project: PLIA-Widbey Island
Project Number: 1303-001
Project Manager: Elizabeth ForbesReported:
09/06/17 09:01

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080923 - EPA 5030B						Water						
Blank (7080923-BLK1)						Prepared: 08/25/17 12:24		Analyzed: 08/25/17 14:44				
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 97 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		101 %		50-150 %		"						
LCS (7080923-BS2)						Prepared: 08/25/17 12:24		Analyzed: 08/25/17 14:15				
NWTPH-Gx (MS)												
Gasoline Range Organics	518	---	100	ug/L	1	500	---	104	70-130%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 98 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		100 %		50-150 %		"						
Duplicate (7080923-DUP1)						Prepared: 08/25/17 13:52		Analyzed: 08/25/17 15:41				
QC Source Sample: MW01-20170821 (A7H0719-01)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		101 %		50-150 %		"						
Duplicate (7080923-DUP2)						Prepared: 08/25/17 13:52		Analyzed: 08/25/17 18:05				
QC Source Sample: MW06-20170822 (A7H0719-05)												
NWTPH-Gx (MS)												
Gasoline Range Organics	16300	---	1000	ug/L	10	---	16200	---	---	0.5	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		102 %		50-150 %		"						



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QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080956 - EPA 5030B						Water						
Blank (7080956-BLK1)						Prepared: 08/25/17 15:18 Analyzed: 08/25/17 18:22						
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Surr)		Recovery: 93 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		92 %		50-150 %		"						
LCS (7080956-BS2)						Prepared: 08/25/17 15:18 Analyzed: 08/25/17 17:54						
NWTPH-Gx (MS)												
Gasoline Range Organics	433	---	100	ug/L	1	500	---	87	70-130%	---	---	
Surr: 4-Bromofluorobenzene (Surr)		Recovery: 94 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		95 %		50-150 %		"						

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QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080996 - EPA 5030B							Water					
Blank (7080996-BLK1)					Prepared: 08/28/17 08:34		Analyzed: 08/28/17 10:53					
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Surr)		Recovery: 98 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		104 %		50-150 %		"						
LCS (7080996-BS2)					Prepared: 08/28/17 08:34		Analyzed: 08/28/17 10:25					
NWTPH-Gx (MS)												
Gasoline Range Organics	554	---	100	ug/L	1	500	---	111	70-130%	---	---	
Surr: 4-Bromofluorobenzene (Surr)		Recovery: 101 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		102 %		50-150 %		"						



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QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080923 - EPA 5030B												
Water												
Blank (7080923-BLK1)												
Prepared: 08/25/17 12:24 Analyzed: 08/25/17 14:44												
EPA 8260B												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	"	"	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	"	"	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	"	"	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)												
			Recovery:	102 %	Limits:	80-120 %	Dilution: 1x					
Toluene-d8 (Surr)				99 %		80-120 %	"					
4-Bromofluorobenzene (Surr)				101 %		80-120 %	"					
LCS (7080923-BS1)												
Prepared: 08/25/17 12:24 Analyzed: 08/25/17 13:47												
EPA 8260B												
Benzene	20.6	---	0.200	ug/L	1	20.0	---	103	70-130%	---	---	
Toluene	19.0	---	1.00	"	"	"	---	95	"	---	---	
Ethylbenzene	20.9	---	0.500	"	"	"	---	105	"	---	---	
Xylenes, total	68.9	---	1.50	"	"	60.0	---	115	"	---	---	
Surr: 1,4-Difluorobenzene (Surr)												
			Recovery:	101 %	Limits:	80-120 %	Dilution: 1x					
Toluene-d8 (Surr)				101 %		80-120 %	"					
4-Bromofluorobenzene (Surr)				103 %		80-120 %	"					
Duplicate (7080923-DUP1)												
Prepared: 08/25/17 13:52 Analyzed: 08/25/17 15:41												
QC Source Sample: MW01-20170821 (A7H0719-01)												
EPA 8260B												
Benzene	ND	---	0.200	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.500	"	"	---	ND	---	---	---	30%	
Xylenes, total	ND	---	1.50	"	"	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)												
			Recovery:	102 %	Limits:	80-120 %	Dilution: 1x					
Toluene-d8 (Surr)				99 %		80-120 %	"					
4-Bromofluorobenzene (Surr)				101 %		80-120 %	"					
Duplicate (7080923-DUP2)												
Prepared: 08/25/17 13:52 Analyzed: 08/25/17 18:05												
QC Source Sample: MW06-20170822 (A7H0719-05)												
EPA 8260B												
Benzene	ND	---	2.00	ug/L	10	---	ND	---	---	---	30%	
Toluene	ND	---	10.0	"	"	---	ND	---	---	---	30%	
Ethylbenzene	705	---	5.00	"	"	---	690	---	---	2	30%	

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QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080923 - EPA 5030B						Water						
Duplicate (7080923-DUP2)				Prepared: 08/25/17 13:52		Analyzed: 08/25/17 18:05						
QC Source Sample: MW06-20170822 (A7H0719-05)												
EPA 8260B												
Xylenes, total	2150	---	15.0	ug/L	"	---	2100	---	---	2	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						
Matrix Spike (7080923-MS1)						Prepared: 08/25/17 13:52		Analyzed: 08/26/17 00:09				
QC Source Sample: MW16-20170822 (A7H0719-08)												
EPA 8260B												
Benzene	22.4	---	0.200	ug/L	1	20.0	ND	112	70-130%	---	---	
Toluene	20.6	---	1.00	"	"	"	ND	103	"	---	---	
Ethylbenzene	22.0	---	0.500	"	"	"	ND	110	"	---	---	
Xylenes, total	72.9	---	1.50	"	"	60.0	ND	122	"	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		102 %		80-120 %		"						

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QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080956 - EPA 5030B						Water						
Blank (7080956-BL.K1)						Prepared: 08/25/17 15:18 Analyzed: 08/25/17 18:22						
EPA 8260B												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	"	"	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	"	"	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	"	"	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 104 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						
LCS (7080956-BS1)						Prepared: 08/25/17 15:18 Analyzed: 08/25/17 17:25						
EPA 8260B												
Benzene	20.2	---	0.200	ug/L	1	20.0	---	101	70-130%	---	---	
Toluene	19.1	---	1.00	"	"	"	---	95	"	---	---	
Ethylbenzene	19.4	---	0.500	"	"	"	---	97	"	---	---	
Xylenes, total	57.9	---	1.50	"	"	60.0	---	97	"	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		93 %		80-120 %		"						
Matrix Spike (7080956-MS1)						Prepared: 08/25/17 15:18 Analyzed: 08/26/17 02:50						
QC Source Sample: MW13-20170823 (A7H0719-18)												
EPA 8260B												
Benzene	224	---	2.00	ug/L	10	200	23.2	100	70-130%	---	---	
Toluene	10900	---	10.0	"	"	"	11000	-32	"	---	---	E, Q-03
Ethylbenzene	1950	---	5.00	"	"	"	1730	107	"	---	---	
Xylenes, total	13300	---	15.0	"	"	600	12900	77	"	---	---	E
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		94 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

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QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080995 - EPA 5030B						Water						
Blank (7080995-BLK1)			Prepared: 08/28/17 08:17 Analyzed: 08/28/17 10:52									
EPA 8260B												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	"	"	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	"	"	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	"	"	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			Recovery:	107 %	Limits:	80-120 %	Dilution: 1x					
Toluene-d8 (Surr)				101 %		80-120 %	"					
4-Bromofluorobenzene (Surr)				99 %		80-120 %	"					
LCS (7080995-BS1)						Prepared: 08/28/17 08:17 Analyzed: 08/28/17 09:55						
EPA 8260B												
Benzene	20.0	---	0.200	ug/L	1	20.0	---	100	70-130%	---	---	
Toluene	19.0	---	1.00	"	"	"	---	95	"	---	---	
Ethylbenzene	19.2	---	0.500	"	"	"	---	96	"	---	---	
Xylenes, total	58.6	---	1.50	"	"	60.0	---	98	"	---	---	
Surr: 1,4-Difluorobenzene (Surr)			Recovery:	104 %	Limits:	80-120 %	Dilution: 1x					
Toluene-d8 (Surr)				98 %		80-120 %	"					
4-Bromofluorobenzene (Surr)				96 %		80-120 %	"					

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QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080996 - EPA 5030B						Water						
Blank (7080996-BLK1)			Prepared: 08/28/17 08:34 Analyzed: 08/28/17 10:53									
EPA 8260B												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	"	"	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	"	"	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	"	"	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 104 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		102 %		80-120 %		"						
LCS (7080996-BS1)			Prepared: 08/28/17 08:34 Analyzed: 08/28/17 09:57									
EPA 8260B												
Benzene	21.2	---	0.200	ug/L	1	20.0	---	106	70-130%	---	---	
Toluene	19.2	---	1.00	"	"	"	---	96	"	---	---	
Ethylbenzene	20.8	---	0.500	"	"	"	---	104	"	---	---	
Xylenes, total	68.2	---	1.50	"	"	60.0	---	114	"	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						



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SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7081009							
A7H0719-01	Water	NWTPH-Dx	08/21/17 13:50	08/28/17 11:40	1010mL/5mL	1000mL/5mL	0.99
A7H0719-02	Water	NWTPH-Dx	08/21/17 14:18	08/28/17 11:40	1020mL/5mL	1000mL/5mL	0.98
A7H0719-03	Water	NWTPH-Dx	08/21/17 15:40	08/28/17 11:40	1040mL/5mL	1000mL/5mL	0.96
A7H0719-04	Water	NWTPH-Dx	08/21/17 15:45	08/28/17 11:40	1030mL/5mL	1000mL/5mL	0.97
A7H0719-05	Water	NWTPH-Dx	08/22/17 09:45	08/28/17 11:40	1000mL/5mL	1000mL/5mL	1.00
Batch: 7081066							
A7H0719-06	Water	NWTPH-Dx	08/22/17 10:30	08/29/17 15:32	1010mL/5mL	1000mL/5mL	0.99
A7H0719-07	Water	NWTPH-Dx	08/22/17 11:30	08/29/17 15:32	1030mL/5mL	1000mL/5mL	0.97
A7H0719-08	Water	NWTPH-Dx	08/22/17 12:10	08/29/17 15:32	1040mL/5mL	1000mL/5mL	0.96
A7H0719-09	Water	NWTPH-Dx	08/22/17 13:00	08/29/17 15:32	1030mL/5mL	1000mL/5mL	0.97
A7H0719-10	Water	NWTPH-Dx	08/22/17 14:25	08/29/17 15:32	990mL/5mL	1000mL/5mL	1.01
A7H0719-12	Water	NWTPH-Dx	08/22/17 16:00	08/29/17 14:01	1040mL/5mL	1000mL/5mL	0.96
A7H0719-14	Water	NWTPH-Dx	08/23/17 10:20	08/29/17 14:01	1030mL/5mL	1000mL/5mL	0.97
A7H0719-15	Water	NWTPH-Dx	08/23/17 10:30	08/29/17 14:01	1050mL/5mL	1000mL/5mL	0.95
A7H0719-16	Water	NWTPH-Dx	08/23/17 12:30	08/29/17 14:01	1010mL/5mL	1000mL/5mL	0.99
A7H0719-17	Water	NWTPH-Dx	08/23/17 12:45	08/29/17 14:01	1000mL/5mL	1000mL/5mL	1.00
A7H0719-18	Water	NWTPH-Dx	08/23/17 13:15	08/29/17 14:01	1030mL/5mL	1000mL/5mL	0.97

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7080923							
A7H0719-01	Water	NWTPH-Gx (MS)	08/21/17 13:50	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-02	Water	NWTPH-Gx (MS)	08/21/17 14:18	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-03	Water	NWTPH-Gx (MS)	08/21/17 15:40	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-04	Water	NWTPH-Gx (MS)	08/21/17 15:45	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-05	Water	NWTPH-Gx (MS)	08/22/17 09:45	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-06	Water	NWTPH-Gx (MS)	08/22/17 10:30	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-08	Water	NWTPH-Gx (MS)	08/22/17 12:10	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-09	Water	NWTPH-Gx (MS)	08/22/17 13:00	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-10	Water	NWTPH-Gx (MS)	08/22/17 14:25	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-11	Water	NWTPH-Gx (MS)	08/22/17 14:55	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-12	Water	NWTPH-Gx (MS)	08/22/17 16:00	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00

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Project Manager: Elizabeth Forbes

Reported:
09/06/17 09:01

SAMPLE PREPARATION INFORMATION

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A7H0719-13	Water	NWTPH-Gx (MS)	08/22/17 16:30	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-14	Water	NWTPH-Gx (MS)	08/23/17 10:20	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-15	Water	NWTPH-Gx (MS)	08/23/17 10:30	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-16	Water	NWTPH-Gx (MS)	08/23/17 12:30	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
Batch: 7080956							
A7H0719-17	Water	NWTPH-Gx (MS)	08/23/17 12:45	08/25/17 15:18	5mL/5mL	5mL/5mL	1.00
A7H0719-18	Water	NWTPH-Gx (MS)	08/23/17 13:15	08/25/17 15:18	5mL/5mL	5mL/5mL	1.00
Batch: 7080996							
A7H0719-07RE1	Water	NWTPH-Gx (MS)	08/22/17 11:30	08/28/17 10:37	5mL/5mL	5mL/5mL	1.00

BTEX Compounds by EPA 8260B

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 7080923							
A7H0719-01	Water	EPA 8260B	08/21/17 13:50	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-02	Water	EPA 8260B	08/21/17 14:18	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-03	Water	EPA 8260B	08/21/17 15:40	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-04	Water	EPA 8260B	08/21/17 15:45	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-05	Water	EPA 8260B	08/22/17 09:45	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-06	Water	EPA 8260B	08/22/17 10:30	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-07	Water	EPA 8260B	08/22/17 11:30	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-08	Water	EPA 8260B	08/22/17 12:10	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-09	Water	EPA 8260B	08/22/17 13:00	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-10	Water	EPA 8260B	08/22/17 14:25	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-11	Water	EPA 8260B	08/22/17 14:55	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-12	Water	EPA 8260B	08/22/17 16:00	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-13	Water	EPA 8260B	08/22/17 16:30	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-14	Water	EPA 8260B	08/23/17 10:20	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-15	Water	EPA 8260B	08/23/17 10:30	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
A7H0719-16	Water	EPA 8260B	08/23/17 12:30	08/25/17 13:52	5mL/5mL	5mL/5mL	1.00
Batch: 7080956							
A7H0719-17	Water	EPA 8260B	08/23/17 12:45	08/25/17 15:18	5mL/5mL	5mL/5mL	1.00
A7H0719-18	Water	EPA 8260B	08/23/17 13:15	08/25/17 15:18	5mL/5mL	5mL/5mL	1.00
Batch: 7080995							

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Lisa Domenighini, Client Services Manager

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
09/06/17 09:01

SAMPLE PREPARATION INFORMATION

BTEX Compounds by EPA 8260B

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A7H0719-17RE1	Water	EPA 8260B	08/23/17 12:45	08/28/17 08:17	5mL/5mL	5mL/5mL	1.00
A7H0719-18RE1	Water	EPA 8260B	08/23/17 13:15	08/28/17 08:17	5mL/5mL	5mL/5mL	1.00
Batch: 7080996							
A7H0719-14RE1	Water	EPA 8260B	08/23/17 10:20	08/28/17 10:37	5mL/5mL	5mL/5mL	1.00
A7H0719-15RE1	Water	EPA 8260B	08/23/17 10:30	08/28/17 10:37	5mL/5mL	5mL/5mL	1.00

Apex Laboratories



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Lisa Domenighini, Client Services Manager

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
09/06/17 09:01

Notes and Definitions

Qualifiers:

- E Estimated Value. The result is above the calibration range of the instrument.
- F-12 The result for this hydrocarbon range is primarily due to the presence of individual analyte peaks in the quantitation range. No fuel pattern detected.
- F-18 Result for Diesel (Diesel Range Organics, C12-C24) is due to overlap from Gasoline or a Gasoline Range product.
- Q-03 Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
- Q-19 Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- R-06 Reporting level raised due to possible carryover from a previous sample.

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
- Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
- Blank Policy Apex assesses blank data for potential high bias down to a level equal to 1/2 the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
- QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- *** Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories



Lisa Domenighini, Client Services Manager

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Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
09/06/17 09:01

Lab # **A740719** COC 2 of 2

CHAIN OF CUSTODY

APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: SoundEarth Strategies		Project Mgr: Liz Forbes		Project Name: Former Widbey Area + Aids		Project # 1303-001	
Address: 2811 Fairview Ave E, Suite 2000, Seattle, WA		Phone: 206.306.1900		Fax: 206.306.1907		Email: Eforbes@soundEarth.com	
Sampled by: Logan Schumacher, Grayson Frish							
Site Location: OR	OR	DATE	TIME	MATRIX	# OF CONTAINERS	ANALYSIS REQUEST	
Other: (K1)							
SAMPLE ID		LAB ID #					
1 MW002-20170822		9/22/17	1455	K2P	3		
2 MW015-20170822		9/22/17	1600		5		
3 MW007-20170822		9/22/17	1630		2		
4 MW017-20170823		9/23/17	1020		4		
5 MW012-20170823		9/23/17	1030		8		
6 MW008-20170823		9/23/17	1230		17		
7 MW009-20170823		9/23/17	1245		8		
8 MW013-20170823		9/23/17	1315		5		
9 LDS		8/23/17					
10							
Normal Turn Around Time (TAT) = 10 Business Days		YES NO					
TAT Requested (circle)		1 Day	2 Day	3 Day	Other:		
		4 DAY	5 DAY				
SAMPLES ARE HELD FOR 30 DAYS							
RELINQUISHED BY:		RECEIVED BY:					
Signature: Logan Schumacher		Date: 9/24/17		Signature: Bill		Date: 9/25/17	
Printed Name: Logan Schumacher		Time: 1345		Printed Name: Bill		Time: 15:45	
Company: SoundEarth		Company: APEX LABS		Company: APEX LABS		Company: Apex	

SPECIAL INSTRUCTIONS: **Also refer to logon schedule. MW009-20170823 is MW009 Duplicate Sample. Additional sample collected for MW02 + MW09 for possible forensic analysis.**

Lisa Domenighini

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
09/06/17 09:01

APEX LABS COOLER RECEIPT FORM

Client: Sound Earth Element WO#: A7H0719
Project/Project #: Former Whitbey Marine + Auto / 1303-001

Delivery info:

Date/Time Received: 8/25/17 @ 9:55 By: WU1
Delivered by: Apex ☐ Client ☐ ESS ☐ FedEx ☒ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐

Cooler Inspection Inspected by: WU1 : 8/25/17 @ 9:56

Chain of Custody Included? Yes ☒ No ☐ Custody Seals? Yes ☐ No ☒

Signed/Dated by Client? Yes ☒ No ☐

Signed/Dated by Apex? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (deg. C)	<u>3.0</u>	<u>3.9</u>	<u>4.2</u>	<u>0.8</u>	<u>1.4</u>		
Received on Ice? (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>		
Temp. Blanks? (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>		
Ice Type: (Gel/Real/Other)	<u>Good</u>						
Condition:	<u>good</u>						

Cooler out of temp? (Y/N) Possible reason why: NA
If some coolers are in temp and some out, were green dot applied to out of temperature samples? Yes/No NA

Samples Inspection: Inspected by: WU1 : 8/25/17 @ 11:40

All Samples Intact? Yes ☒ No ☐ Comments: _____

Bottle Labels/COCs agree? Yes ☐ No ☒ Comments: MW-9-20170823 cont (8)

MW-9- Product samples read T of 1430, Unpreserved amber

Containers/Volumes Received Appropriate for Analysis? Yes ☒ No ☐ Comments: _____

Do VOA Vials have Visible Headspace? Yes ☒ No ☐ NA ☐

Comments: 1/6 Trip blanks has HS

Water Samples: pH Checked and Appropriate (except VOAs): Yes ☒ No ☐ NA ☐

Comments: _____

Additional Information: MW-9-20170823 reads T of 1430, 6 trip blanks # 1559 received not listed on CoC * on back

Labeled by: WU1 Witness: WU1 Cooler Inspected by: WU1 See Project Contact Form: Y

Sound Earth Strategies - Seattle
2811 Fairview Ave E, Suite 2000
Seattle, WA 98102

Project: **PLIA-Widbey Island**
Project Number: 1303-001
Project Manager: Elizabeth Forbes

Reported:
09/06/17 09:01

Lab # 4740919 COC 1 of 2

CHAIN OF CUSTODY

APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: <u>Sound Earth Strategies</u>		Project Mgr: <u>Liz Forbes</u>		Project Name: <u>Former Widbey Monolith</u>		Project # <u>1303-001</u>	
Address: <u>2811 Fairview Ave E, Suite 2000, Seattle, WA</u>		Phone: <u>206.306.1900</u>		Fax: <u>206.306.1907</u>		Email: <u>Elizbeth@SoundEarth.com</u>	
Sampled by: <u>Logan Schumacher, Gregson Frick</u>							
Site Location: <u>OR</u>	OR <u>(N)</u>						
Other: _____							
SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	ANALYSIS REQUEST	
1 MW01-20170821		8/21/17	1350	40	5		
2 MW02-20170821		8/21/17	1418	1	1		
3 MW03-20170821		8/21/17	1540	1	1		
4 MW04-20170821		8/21/17	1545	1	1		
5 MW05-20170822		8/21/17	0945	1	1		
6 MW06-20170822		8/21/17	1030	1	1		
7 MW07-20170822		8/21/17	1130	1	1		
8 MW08-20170822		8/21/17	1210	1	1		
9 MW09-20170822		8/21/17	1300	1	1		
10 MW10-20170822		8/21/17	1425	1	1		
						SPECIAL INSTRUCTIONS: <u>also report to logan schumacher</u>	
TAT Requested (circle)		1 Day		2 Day		3 Day	
		4 DAY		5 DAY		Other: _____	
SAMPLES ARE HELD FOR 30 DAYS							
RELINQUISHED BY:		RECEIVED BY:					
Signature: <u>[Signature]</u>		Signature: <u>[Signature]</u>					
Date: <u>8/24/17</u>		Date: <u>8/24/17</u>					
Printed Name: <u>Logan Schumacher</u>		Printed Name: <u>Bili</u>					
Time: <u>1345</u>		Time: <u>1345</u>					
Company: <u>Sound Earth</u>		Company: <u>Apex Labs</u>					
Signature: <u>[Signature]</u>		Signature: <u>[Signature]</u>					
Date: <u>8/24/17</u>		Date: <u>8/24/17</u>					
Printed Name: <u>Elizabeth Forbes</u>		Printed Name: <u>Elizabeth Forbes</u>					
Time: <u>9:55</u>		Time: <u>9:55</u>					
Company: <u>Apex Labs</u>		Company: <u>Apex Labs</u>					

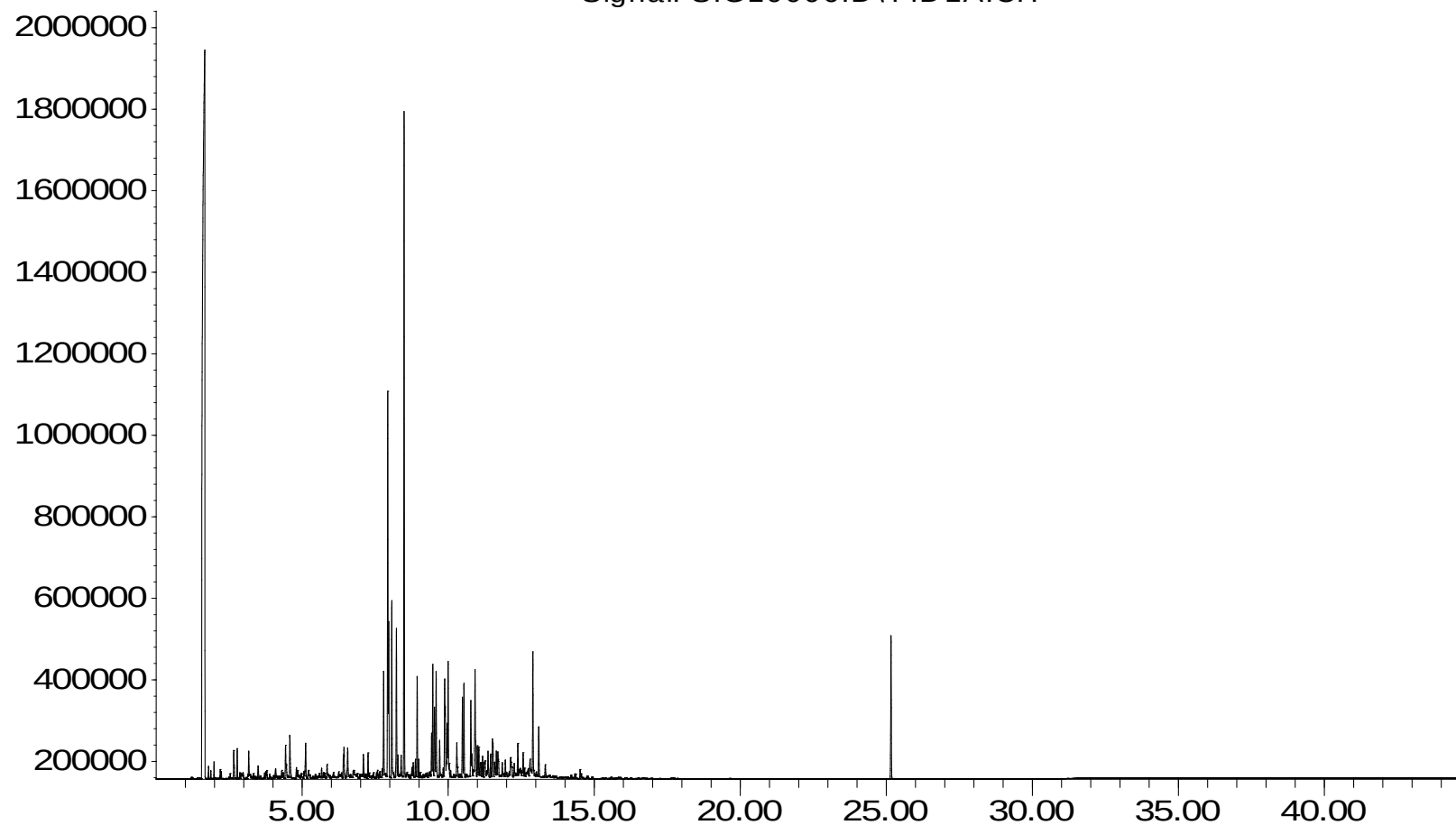
Lisa Domenighini

APPENDIX F
APEX FORENSICS CHROMATOGRAPHS

Soil Sample: MW17-54 (A7H0009-13)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 29, 2017

Response_

Signal: SIG10006.D\FID1A.CH

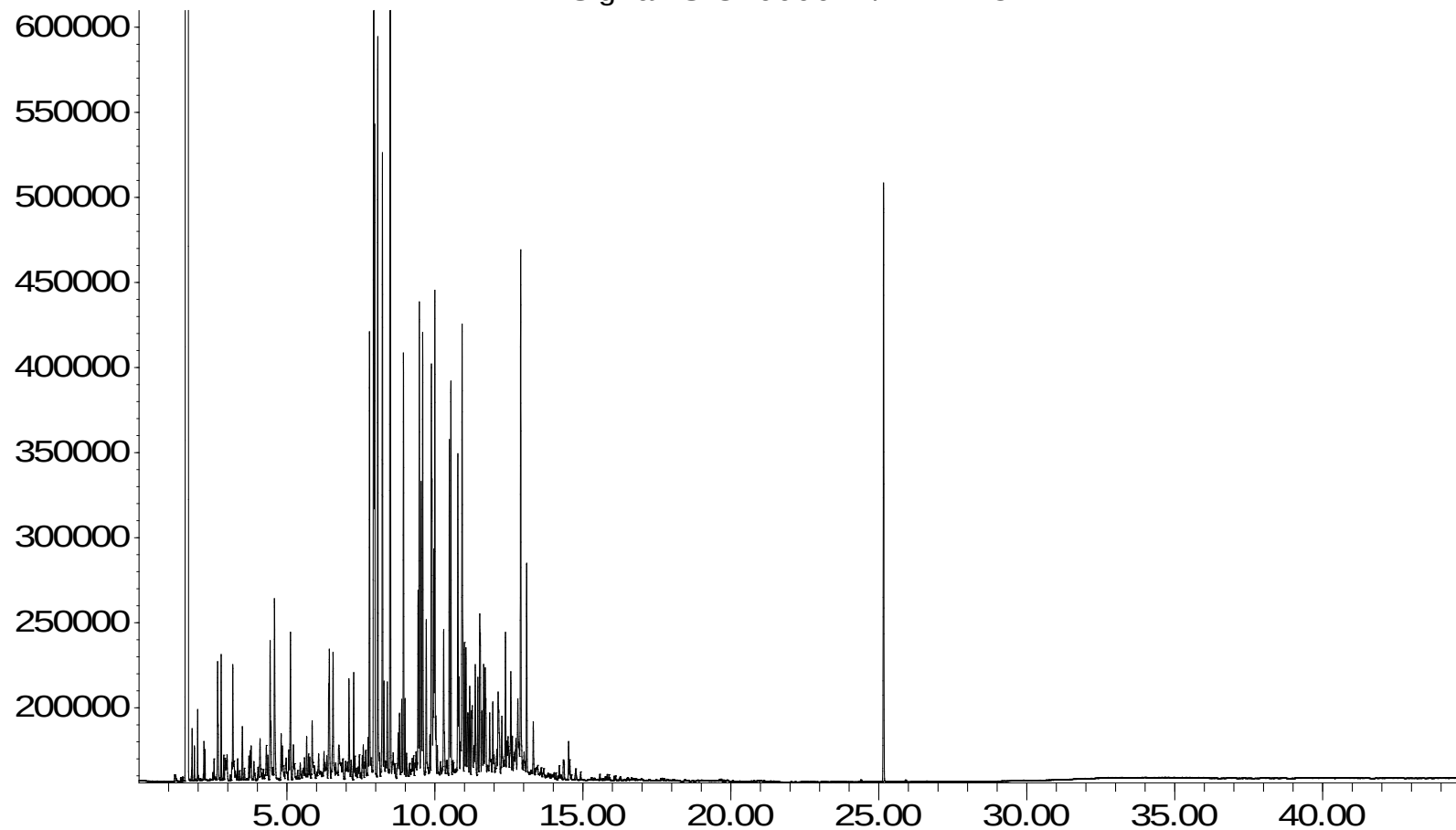


Time

Soil Sample: MW17-54 (A7H0009-13)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 29, 2017

Response_

Signal: SIG10006.D\FID1A.CH

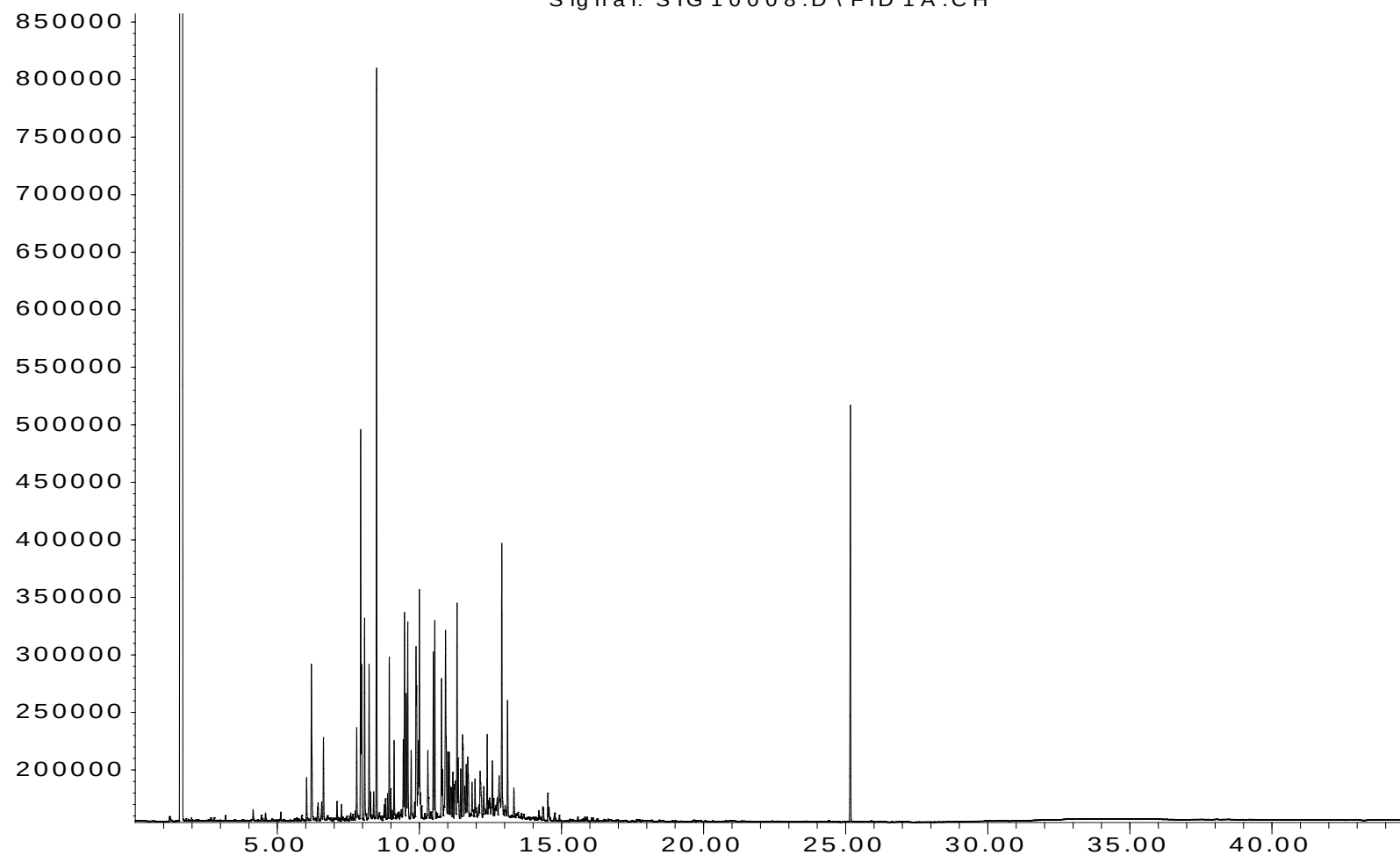


Time

Soil Sample: MW17-105 (A7H0009-19)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 29, 2017

Response_

Signal: SIG10008.D\FID1A.CH

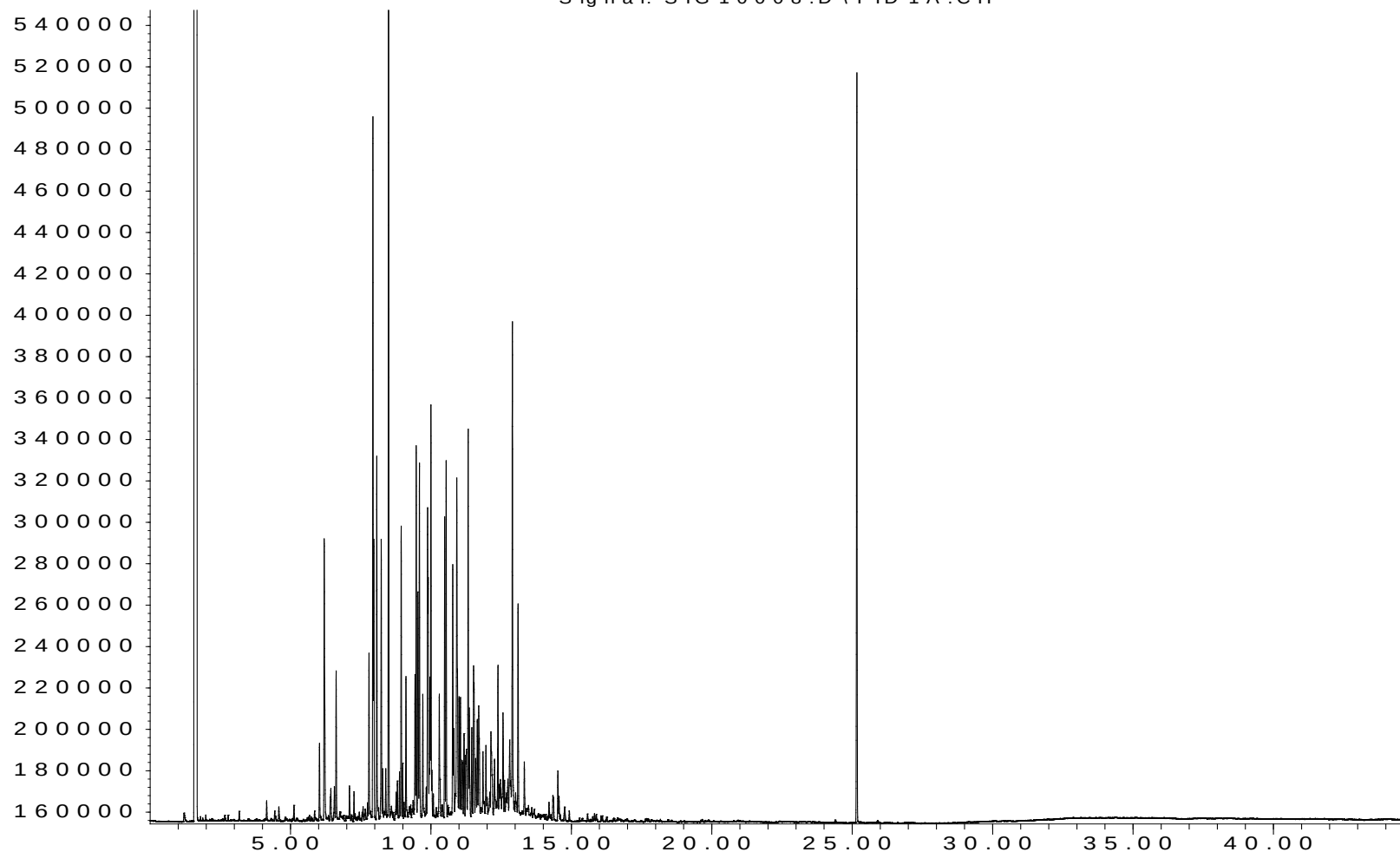


Time

Soil Sample: MW17-105 (A7H0009-19)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 29, 2017

Response_

Signal: SIG10008.D\FID1A.CH

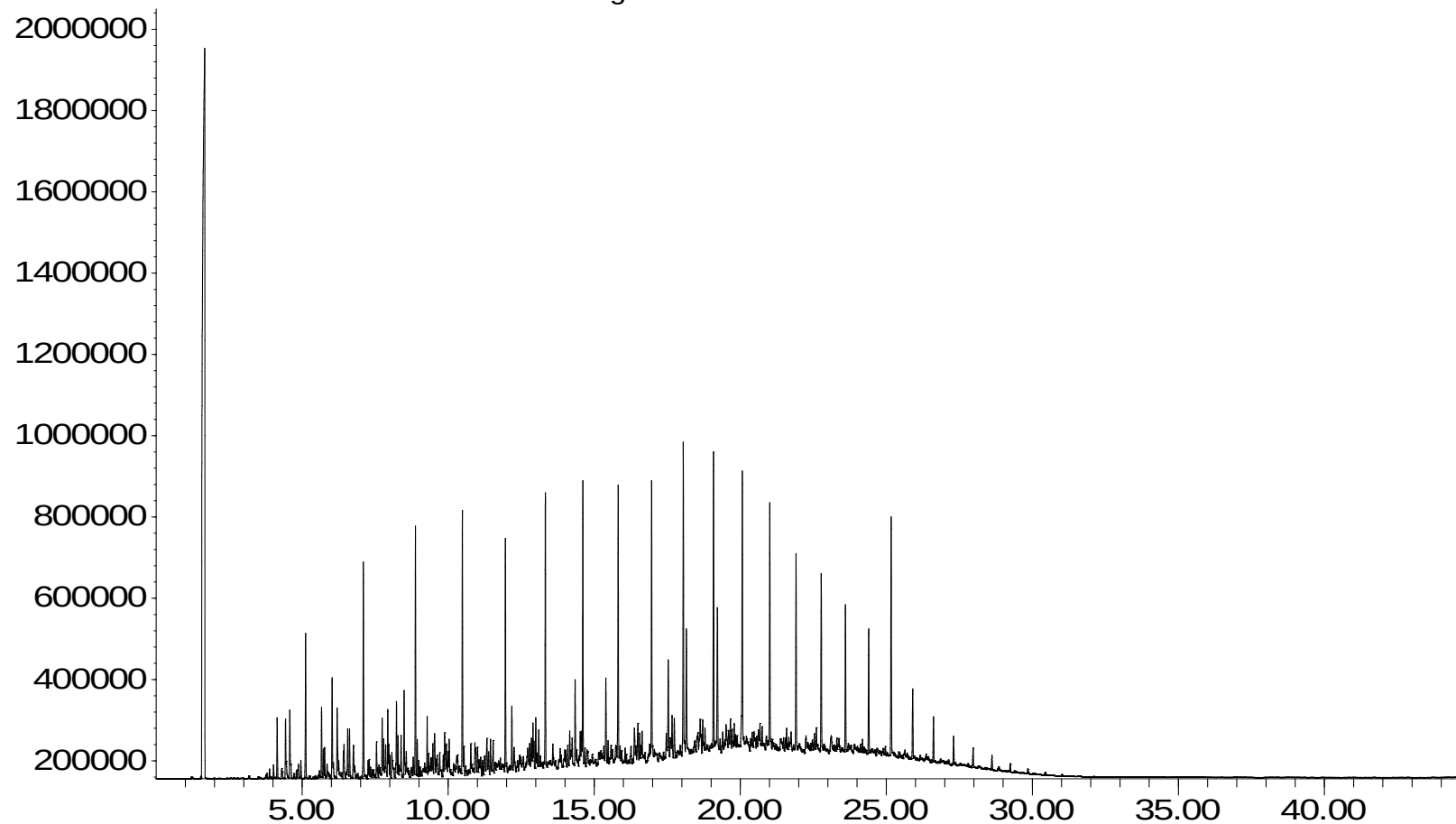


Time

QC Sample: Gas/Oil B
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 29, 2017

Response_

Signal: SIG10003.D\FID1A.CH



Time

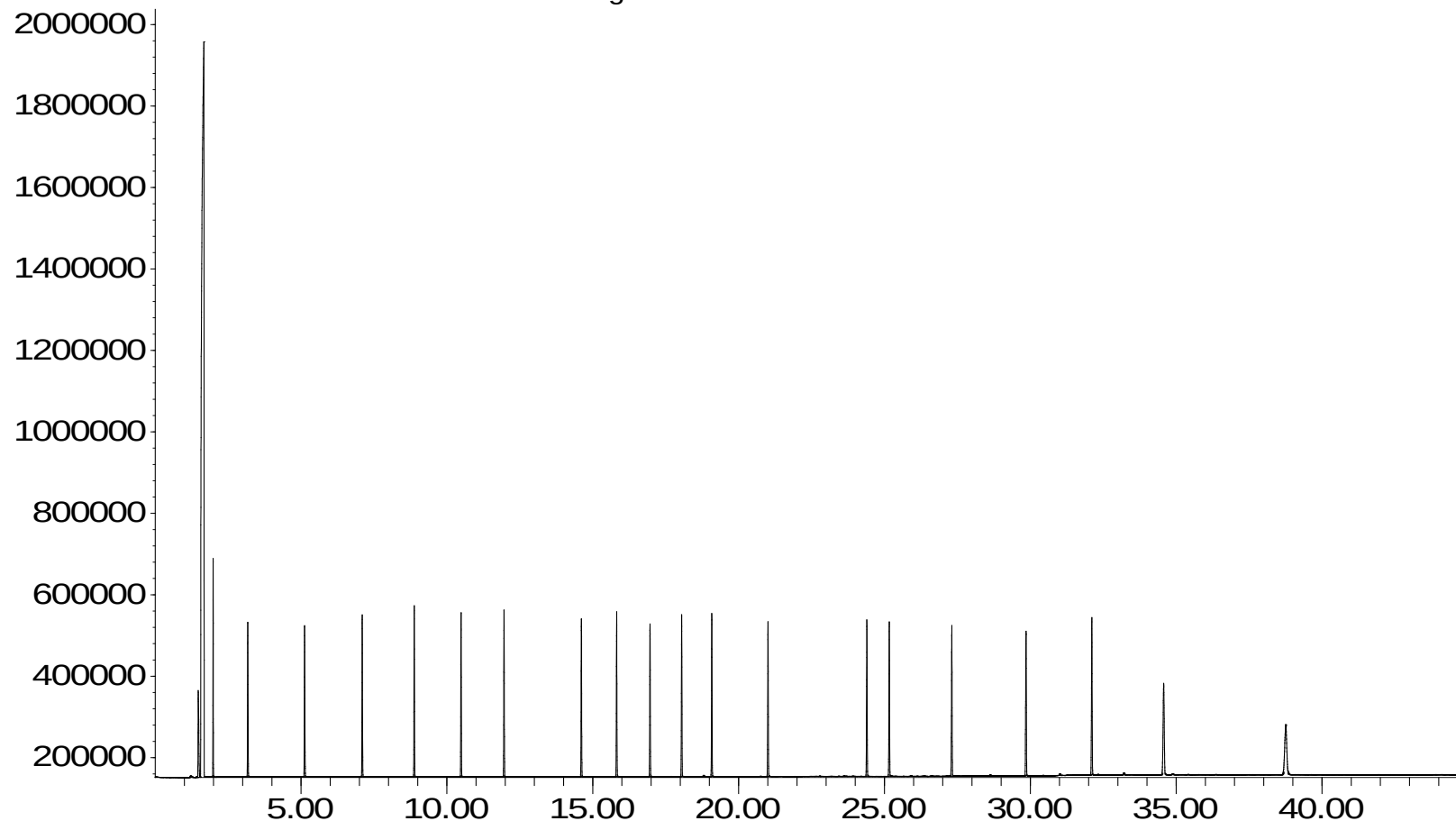
ASTM Reference Sample: Select Alkanes (C5 to C44)

Sound Earth Strategies, PLIA Widbey Island

Date Analyzed: August 29, 2017

Response_

Signal: SIG10002.D\FID1A.CH

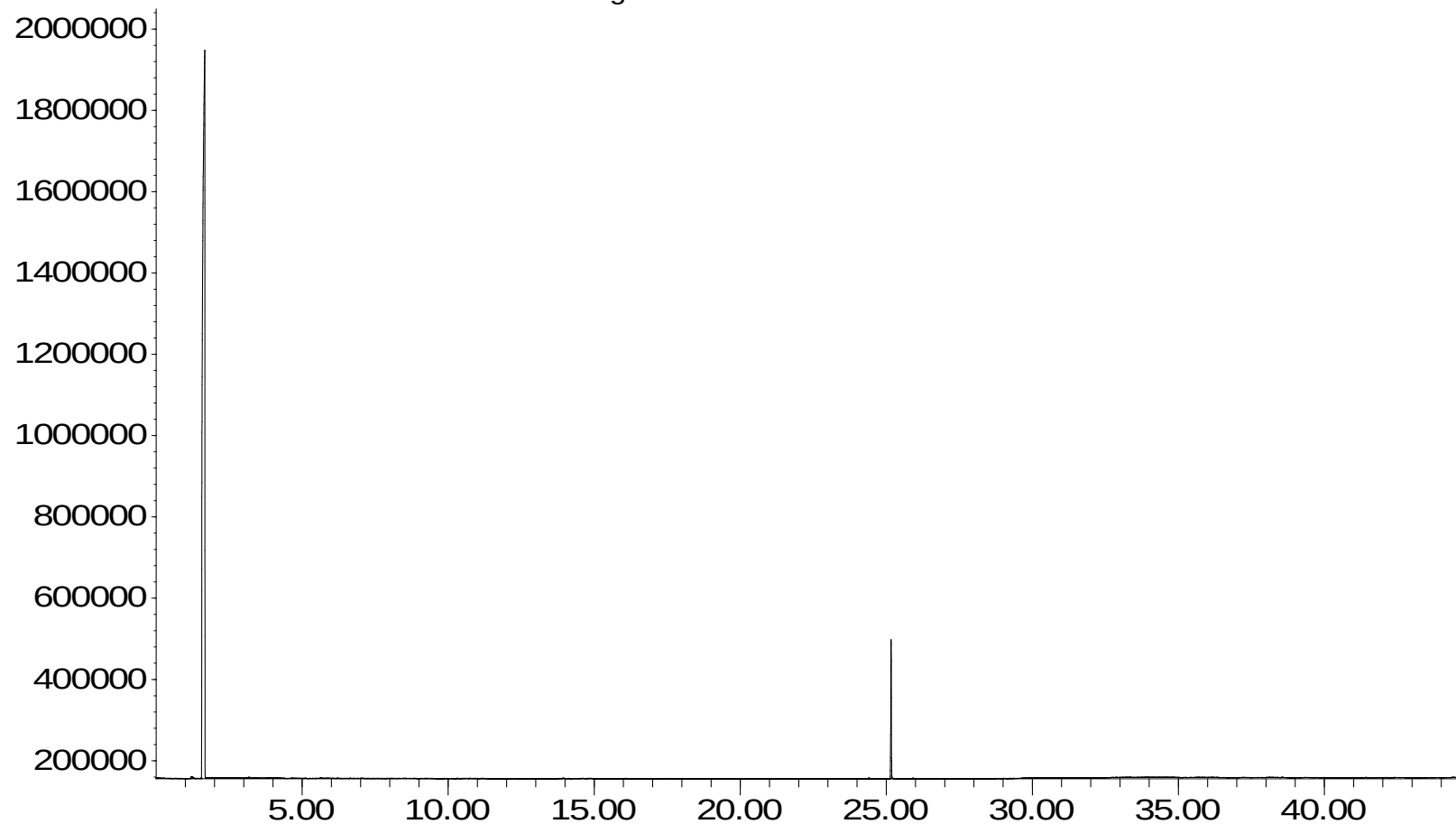


Time

QC Sample: Method Blank
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 29, 2017

Response_

Signal: SIG10005.D\FID1A.CH

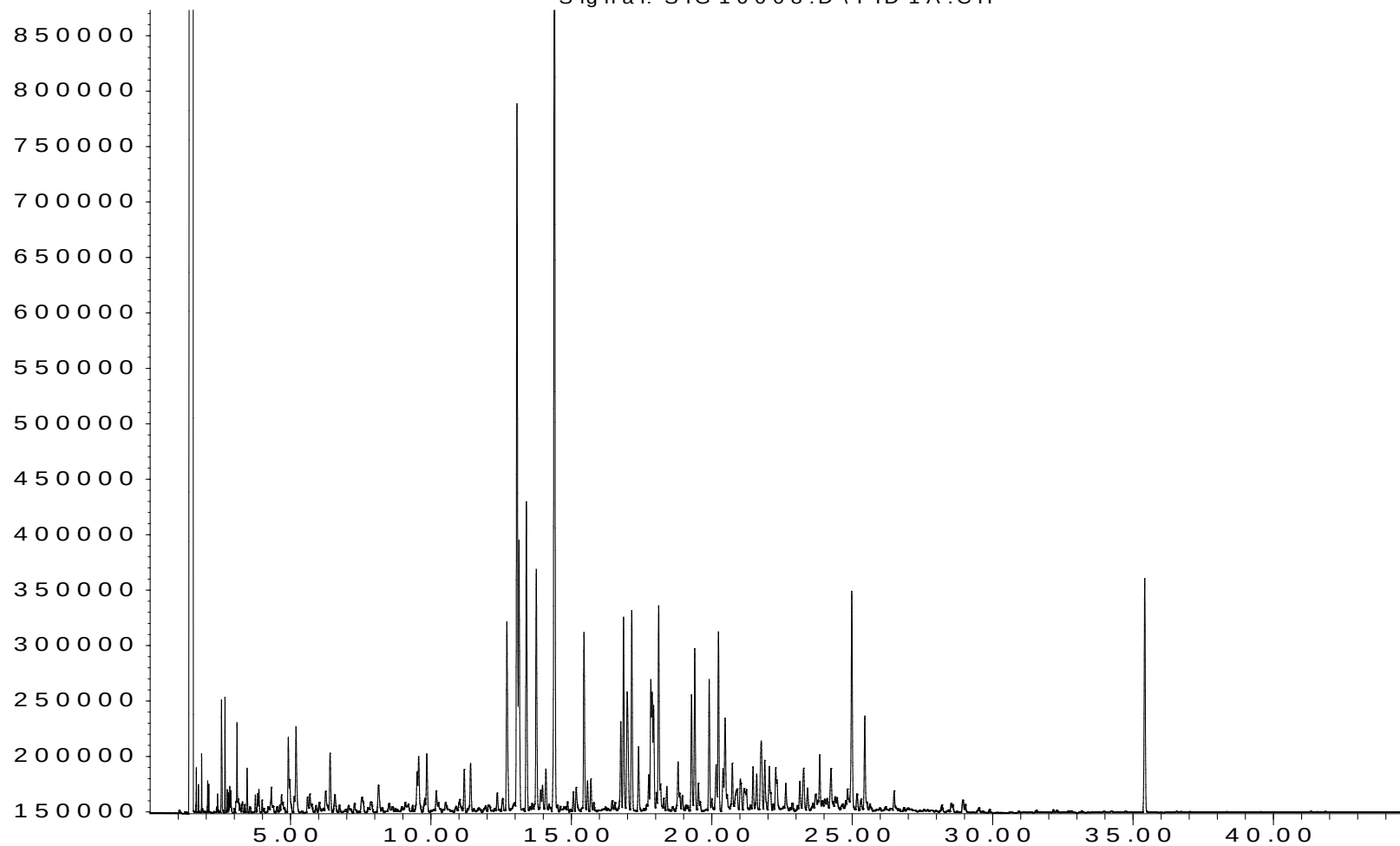


Time

Soil Sample: MW17-54 (A7H0009-13)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: September 7, 2017

Response_

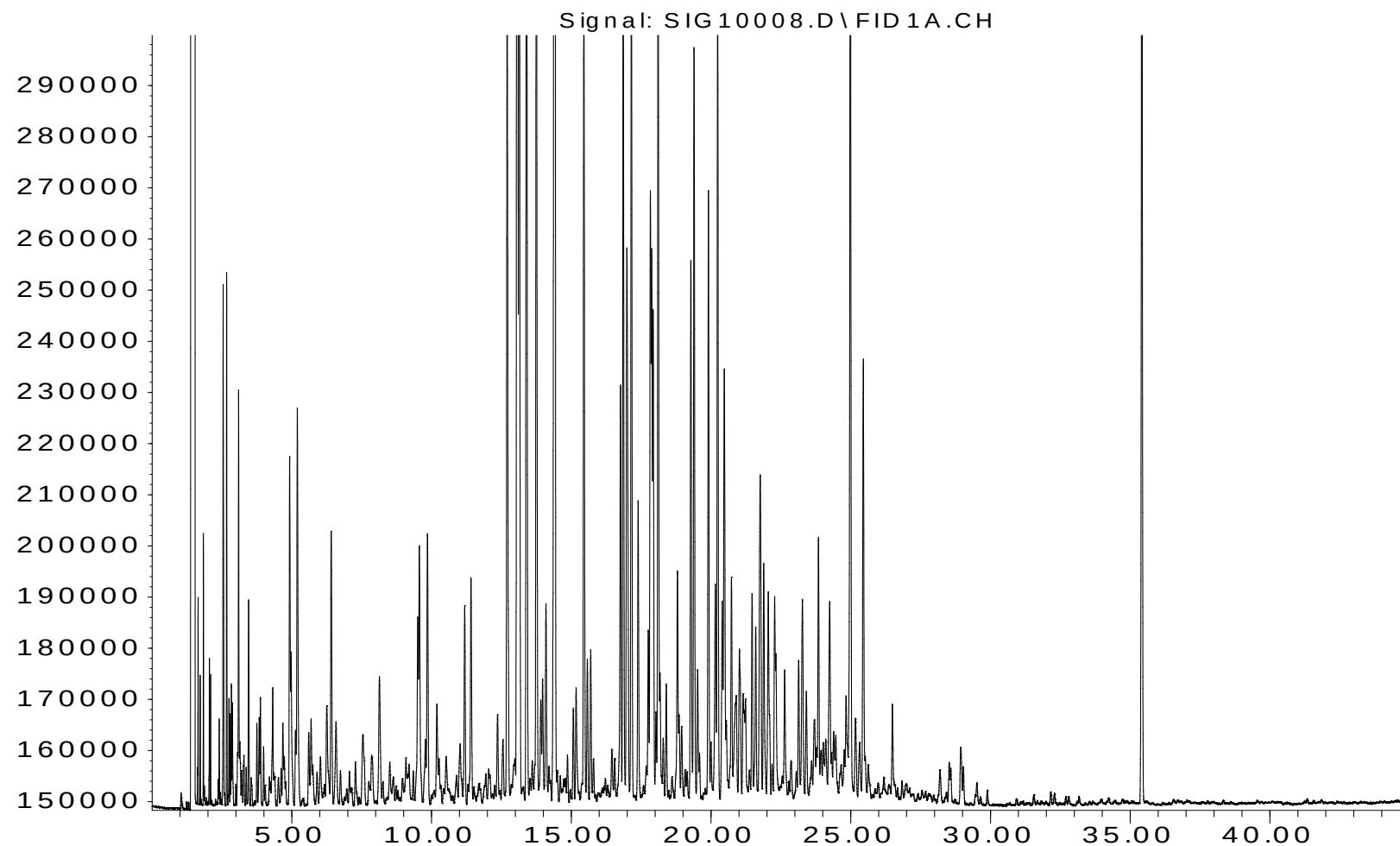
Signal: SIG10008.D\FID1A.CH



Time

Soil Sample: MW17-54 (A7H0009-13)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: September 7, 2017

Response_

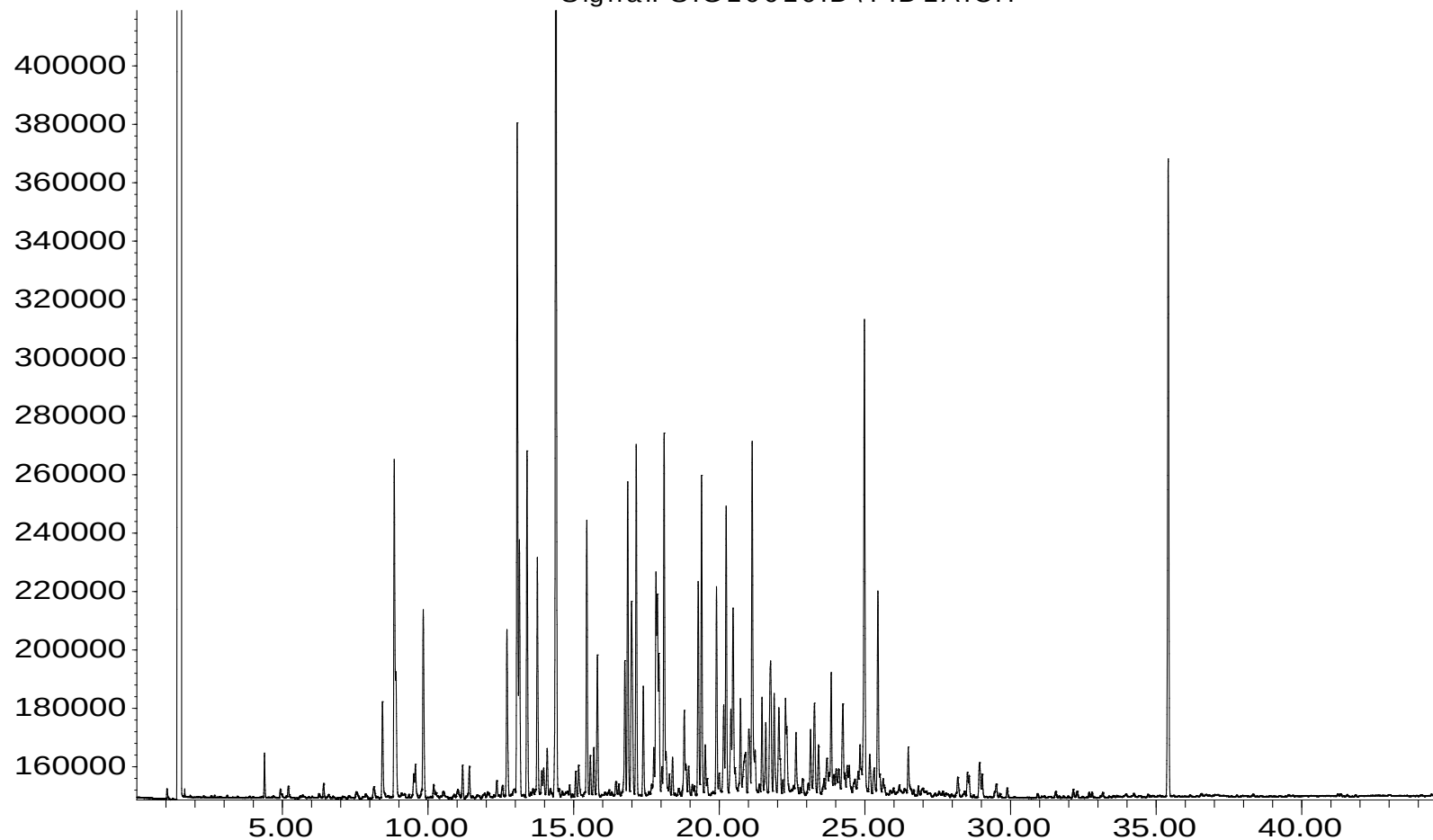


Time

Soil Sample: MW17-105 (A7H0009-19)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: September 7, 2017

Response_

Signal: SIG10010.D\FID1A.CH

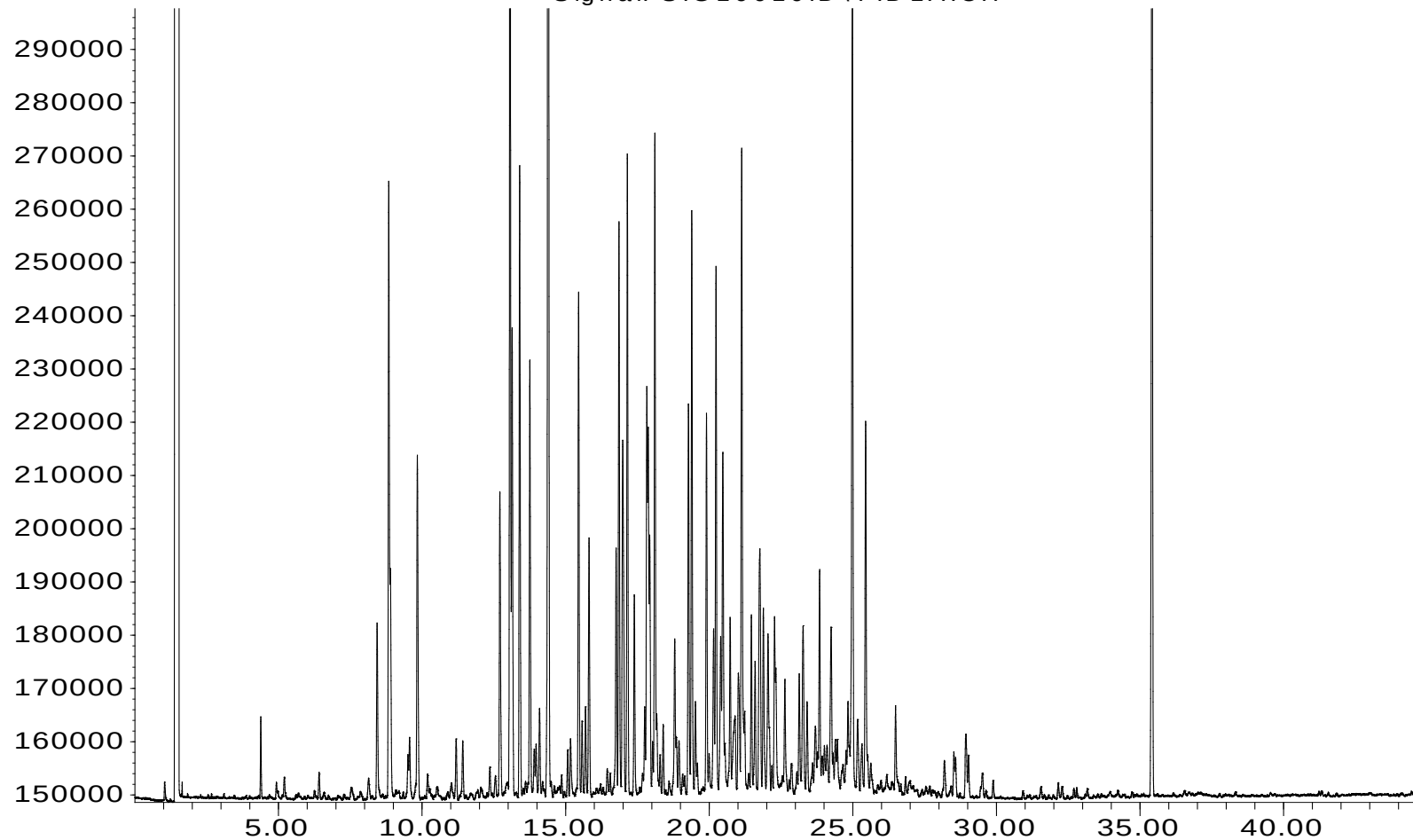


Time

Soil Sample: MW17-105 (A7H0009-19)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: September 7, 2017

Response_

Signal: SIG10010.D\FID1A.CH

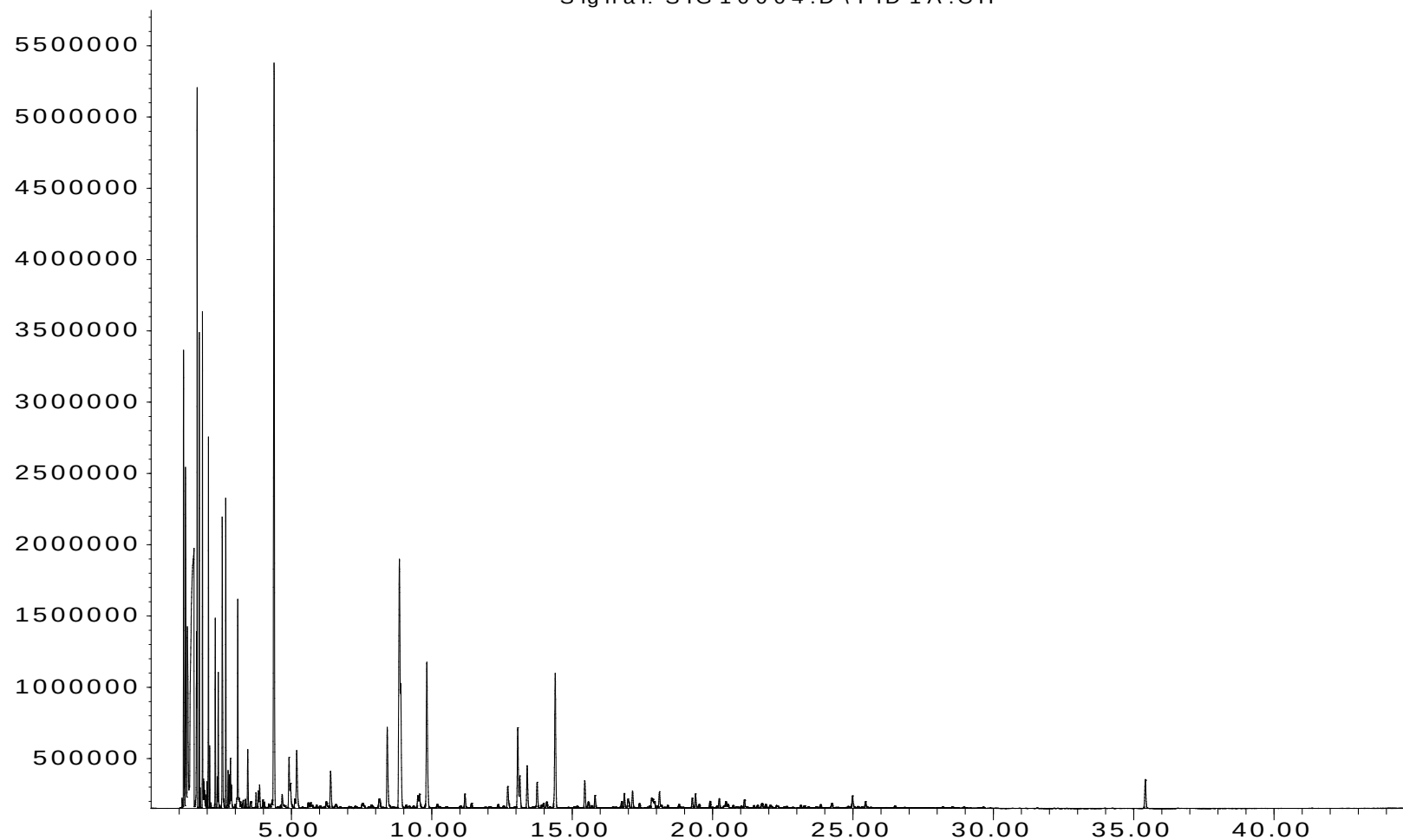


Time

QC Sample: 7096 GasB
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: September 7, 2017

Response_

Signal: SIG10004.D\FID1A.CH

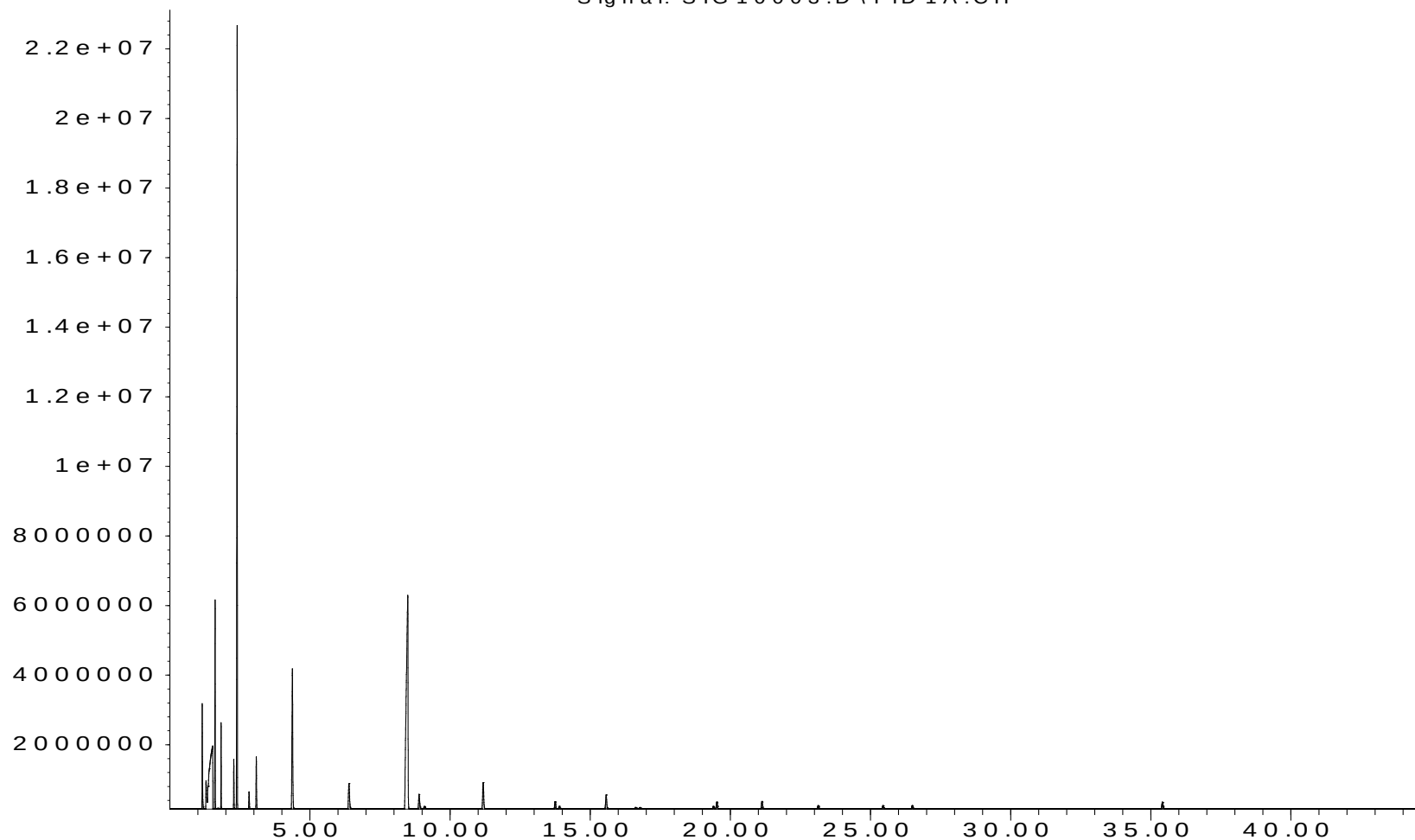


Time

QC Sample: 7096 OxyB
 Sound Earth Strategies, PLIA Widbey Island
 Date Analyzed: September 7, 2017

Response_

Signal: SIG10003.D\FID1A.CH

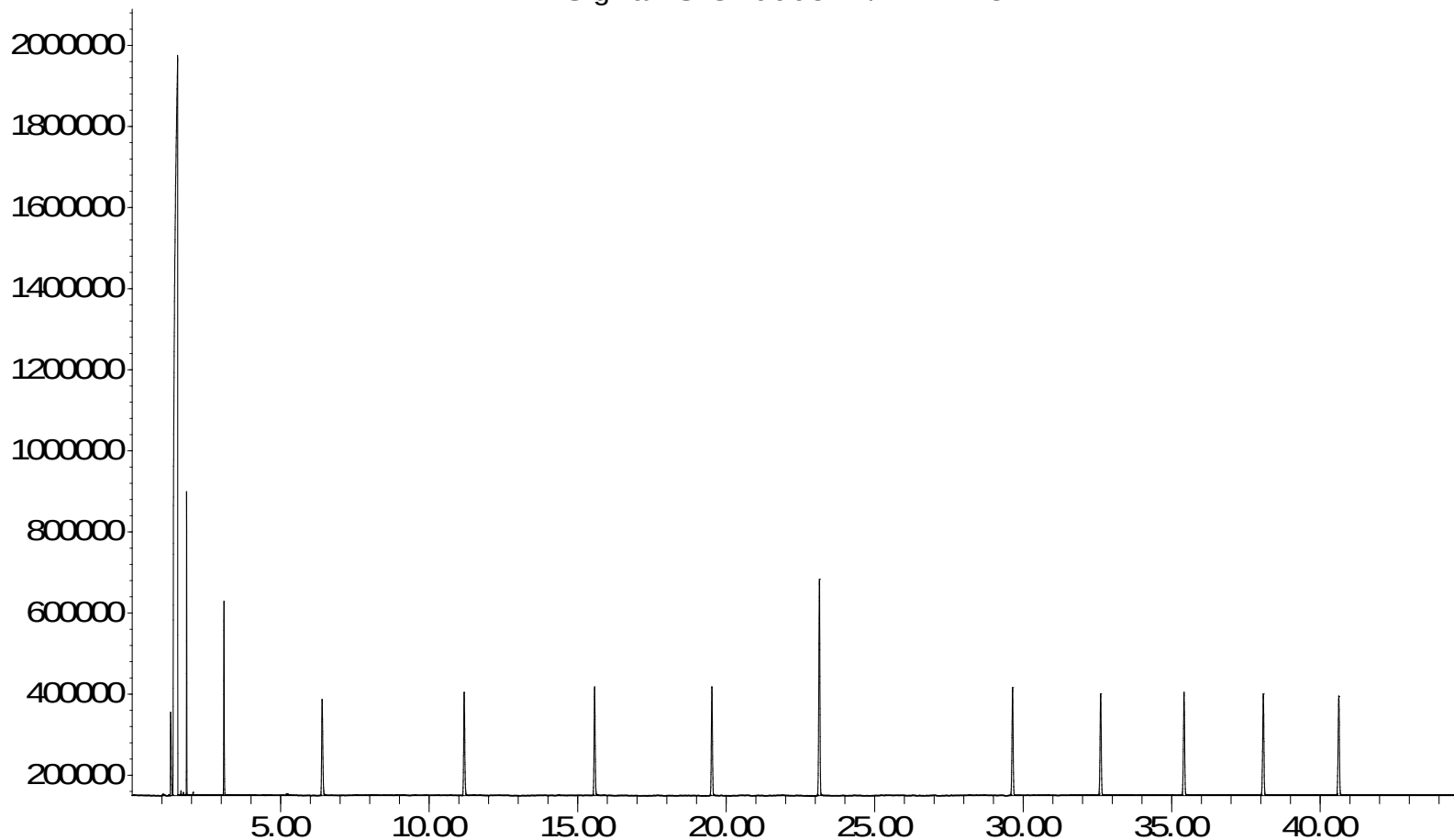


Time

QC Sample: 7096 AlkB
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: September 7, 2017

Response_

Signal: SIG10005.D\FID1A.CH

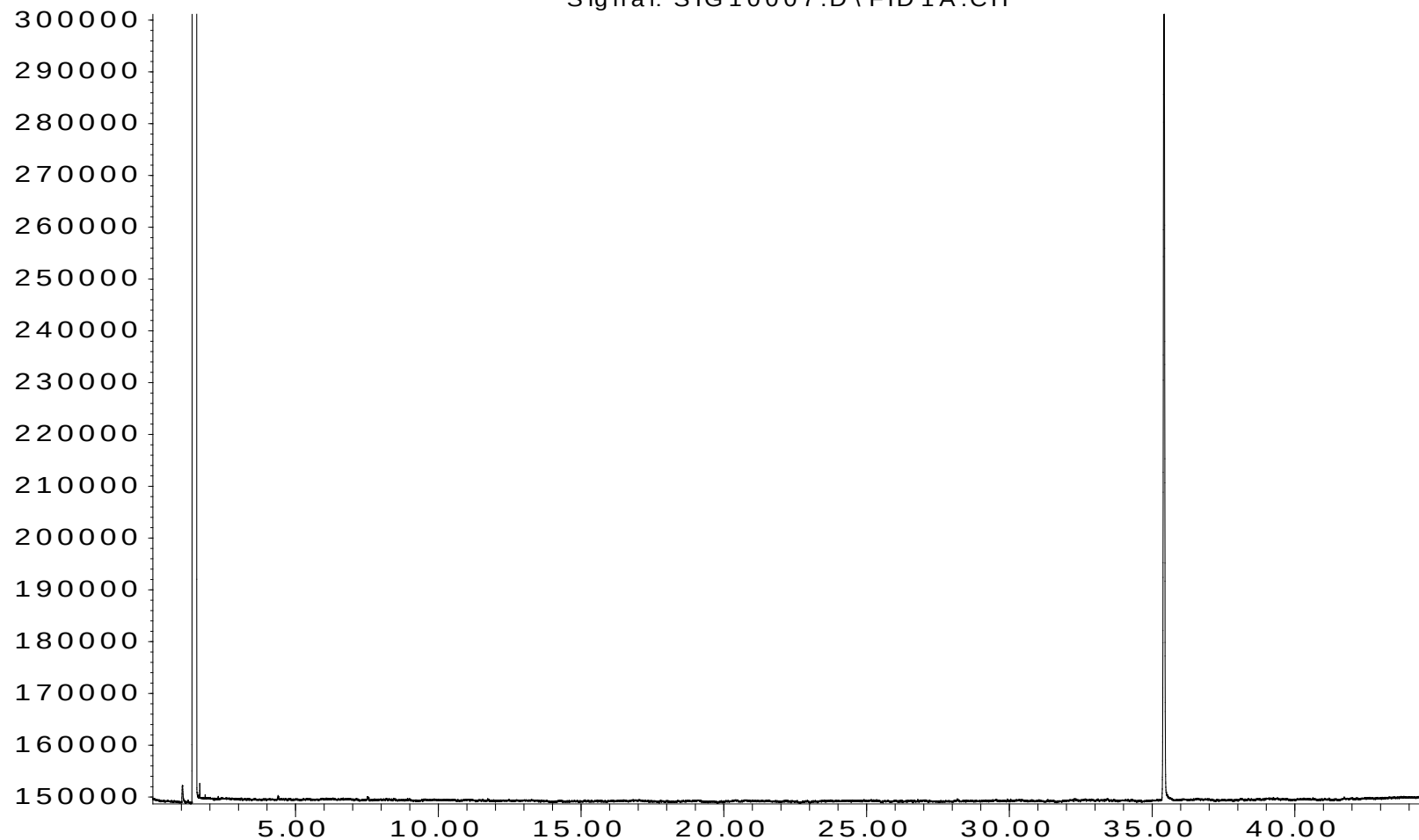


Time

QC Sample: Method Blank
Sound Earth Strategies, PLIA Widdbey Island
Date Analyzed: September 7, 2017

Response_

Signal: SIG10007.D\FID1A.CH

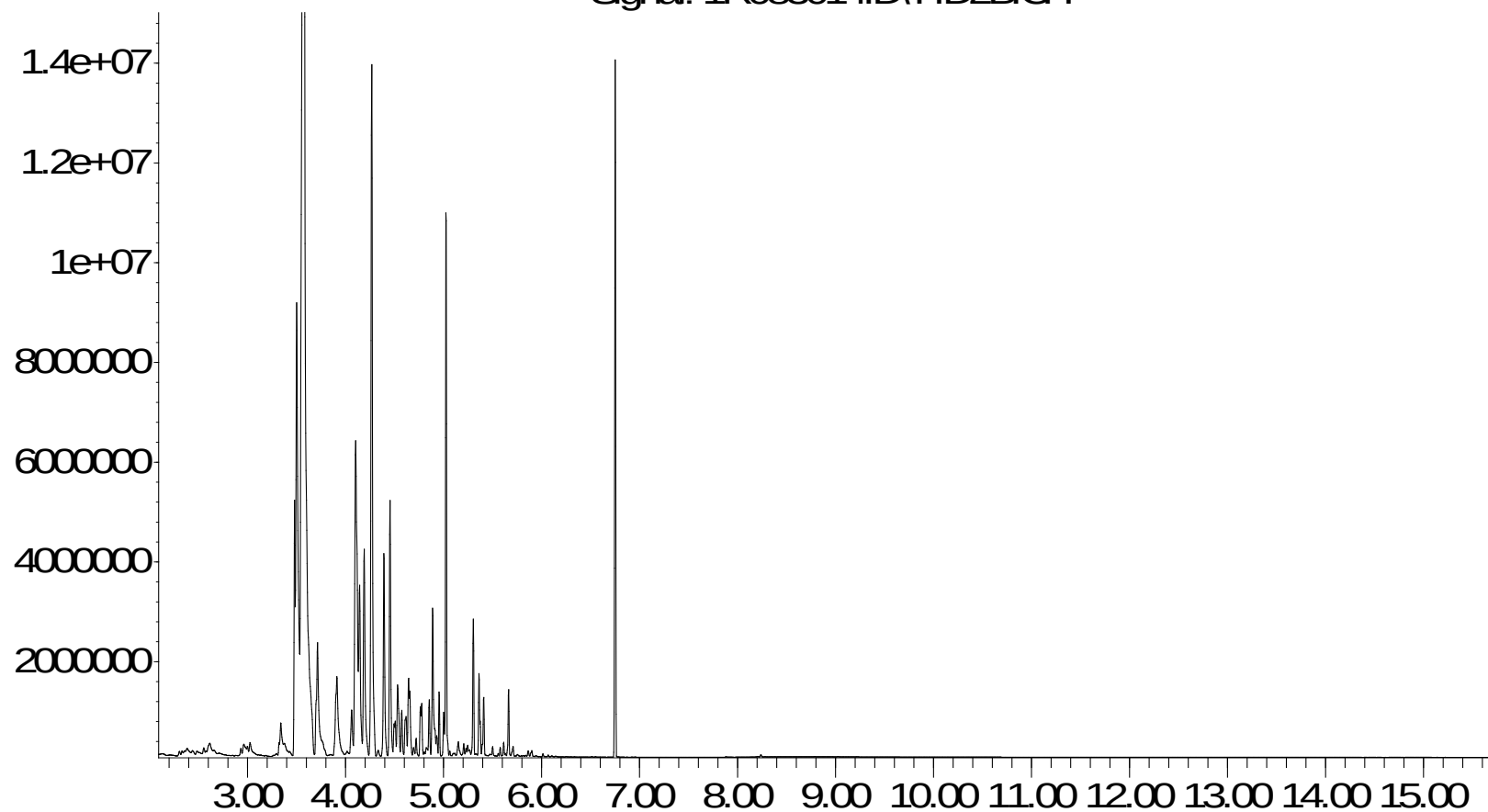


Time

Water Sample: MW06-20170822 (A7H0719-05)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 30, 2017

Response_

Signal: 1R083014.D\FID2B.CH

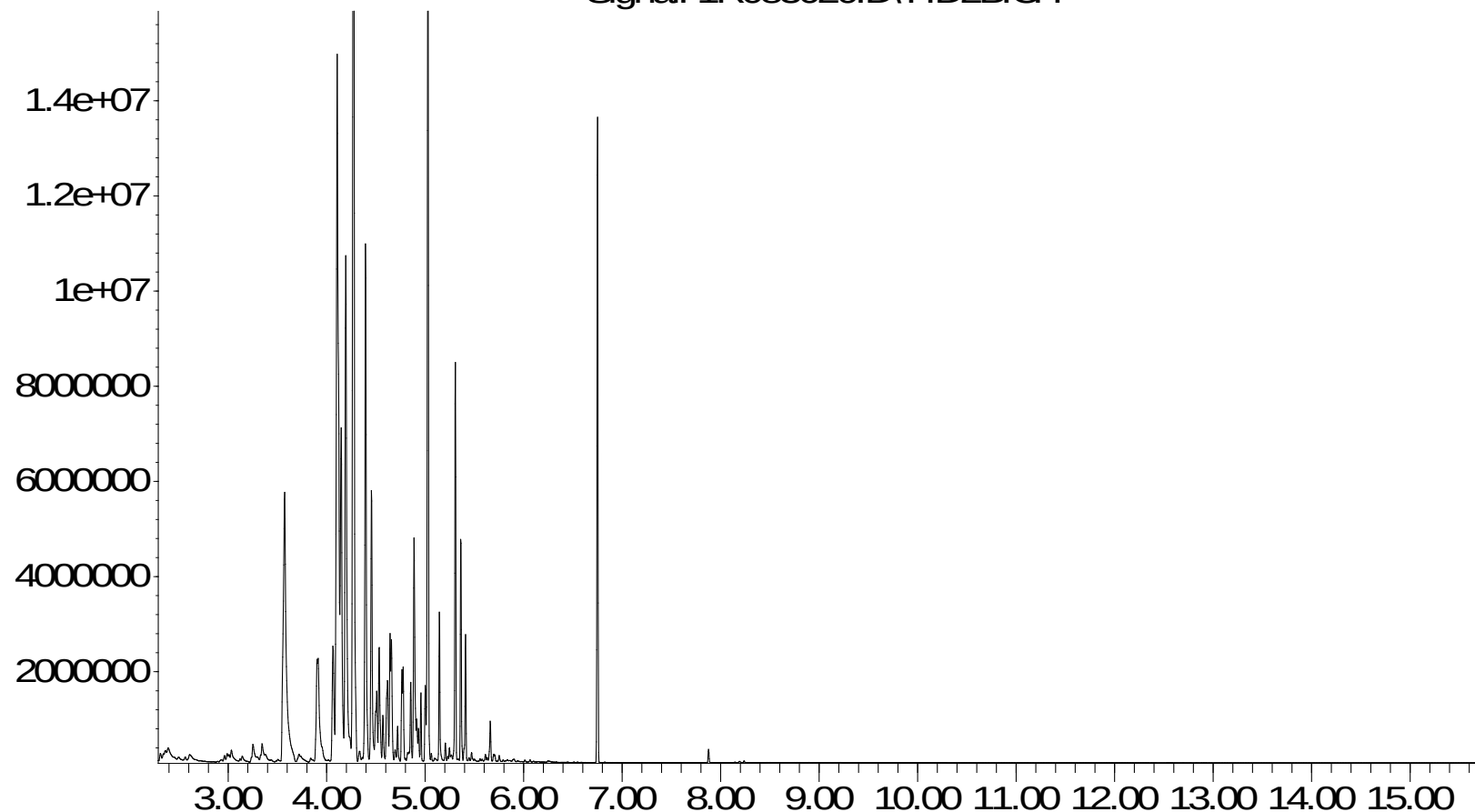


Time

Water Sample: MW04-20170822 (A7H0719-07)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 30, 2017

Response_

Signal: 1R083020.D\FID2B.CH

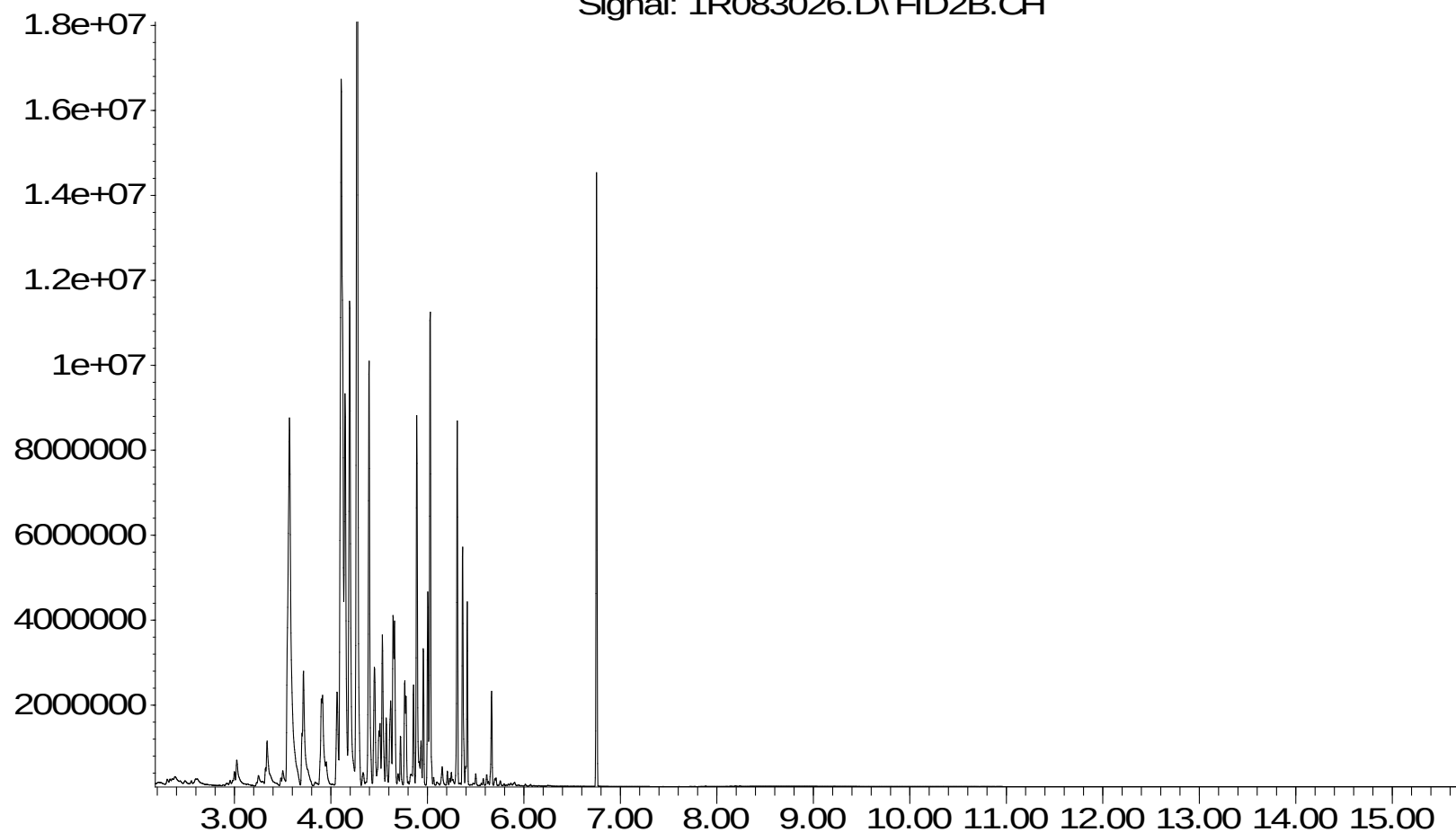


Time

Water Sample: MW08-20170822 (A7H0719-09)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 30, 2017

Response_

Signal: 1R083026.D\FID2B.CH

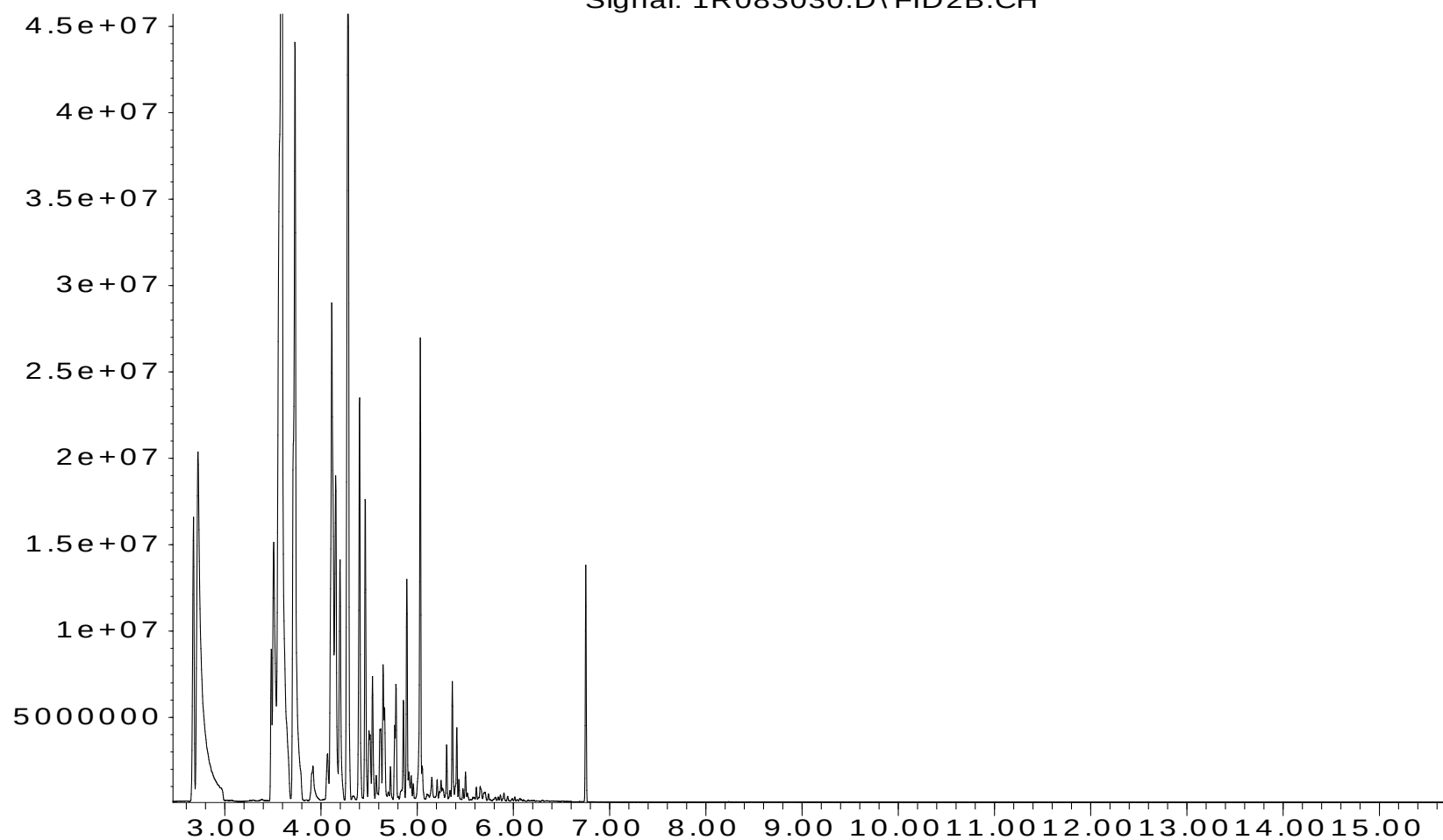


Time

Water Sample: MW12-20170823 (A7H0719-15)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 30, 2017

Response_

Signal: 1R083030.D\FID2B.CH

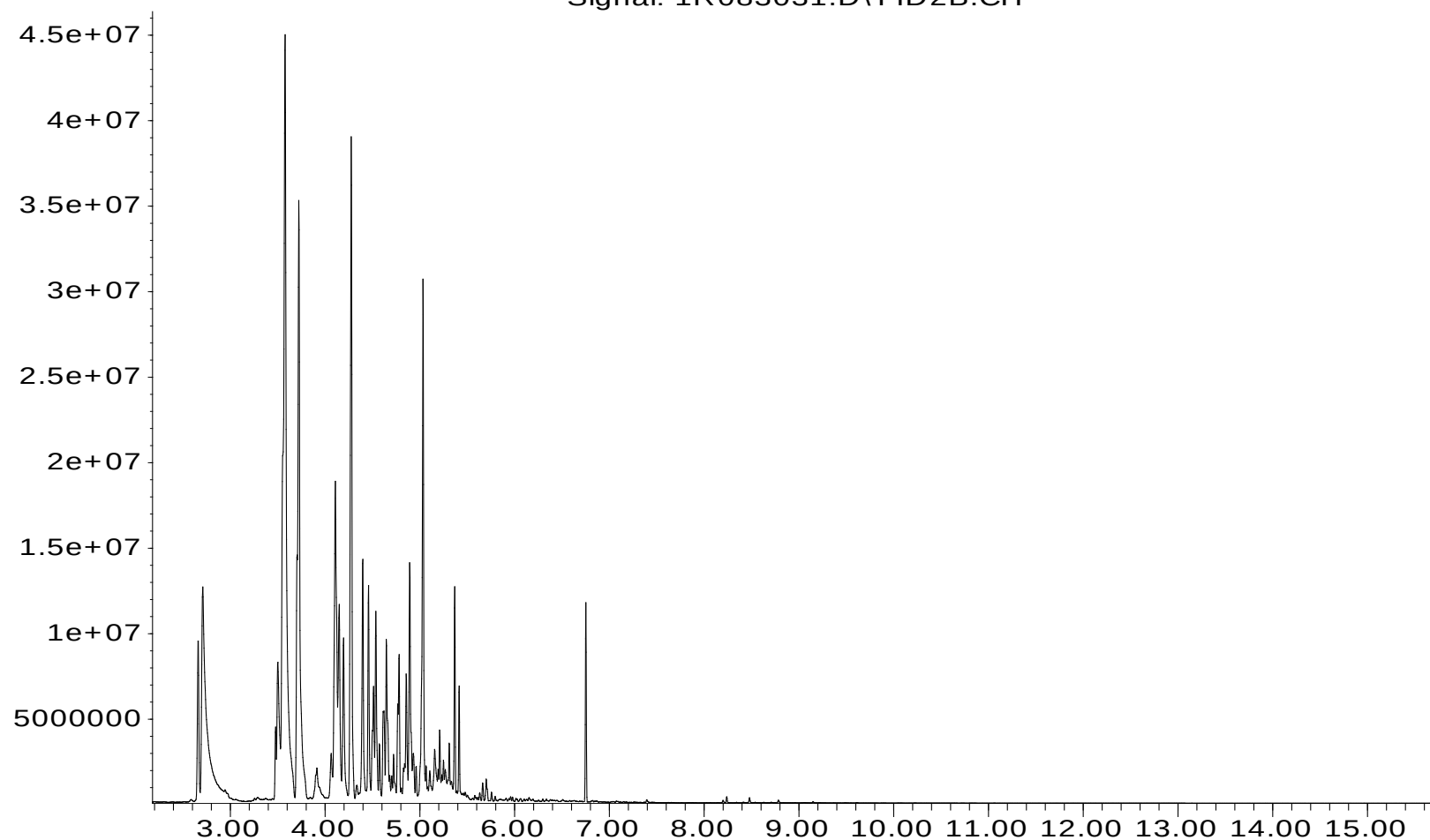


Time

Water Sample: MW09-20170823 (A7H0719-16)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 30, 2017

Response_

Signal: 1R083031.D\FID2B.CH

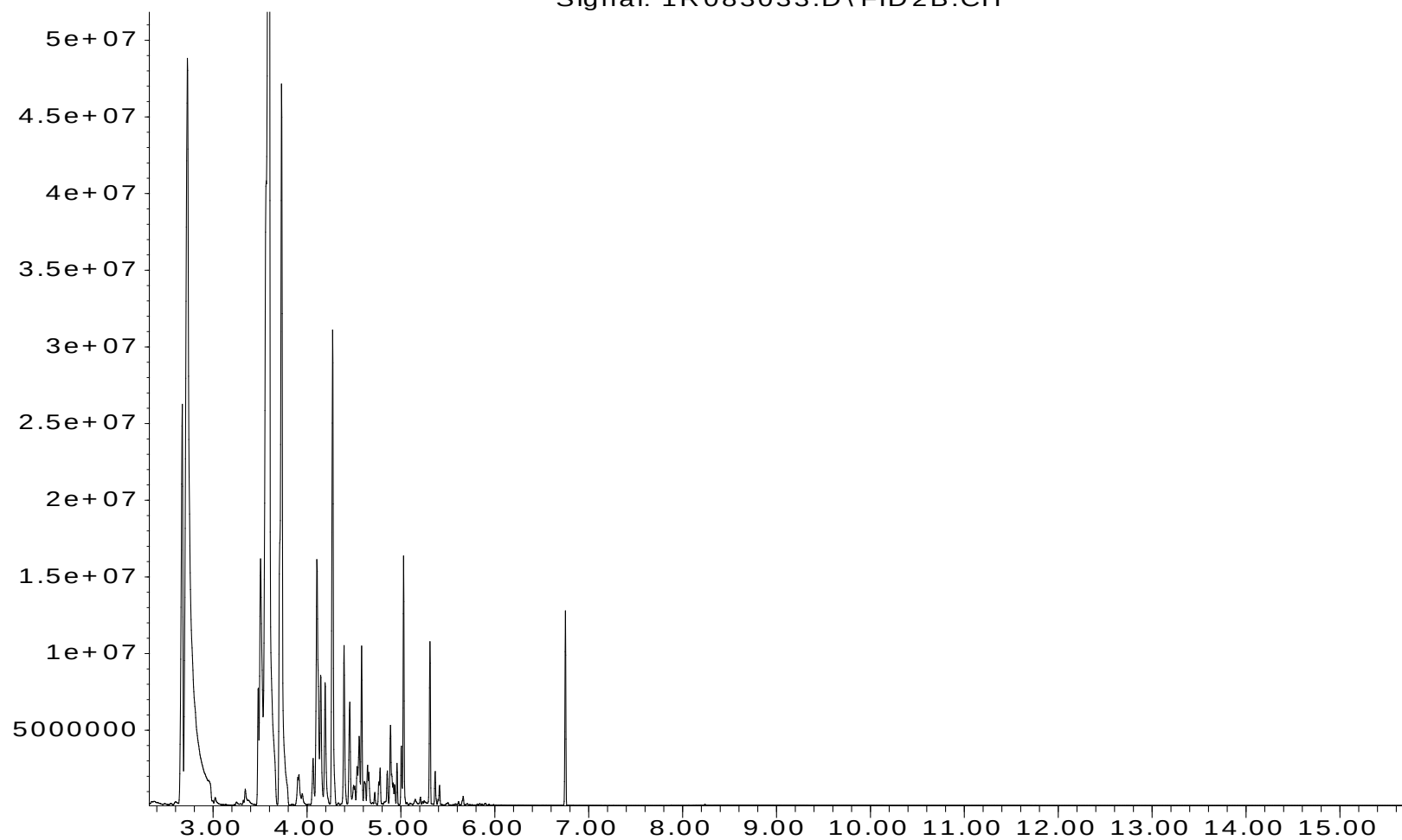


Time

Water Sample: MW13-20170823 (A7H0719-18)
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 30, 2017

Response_

Signal: 1R083033.D\FID2B.CH

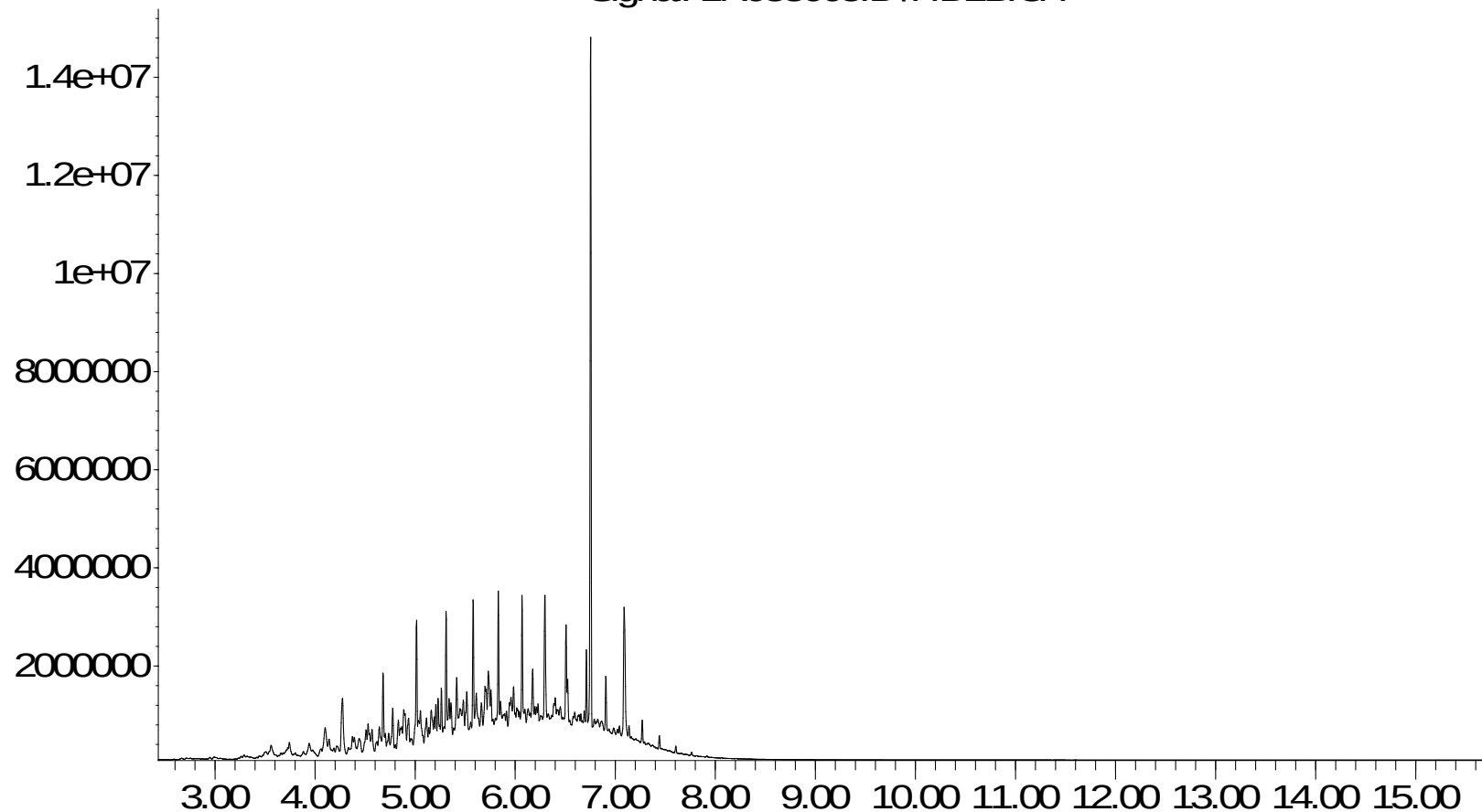


Time

QC Sample: 7H30046-CCV2
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 30, 2017

Response_

Signal: 1R083005.D\FID2B.CH

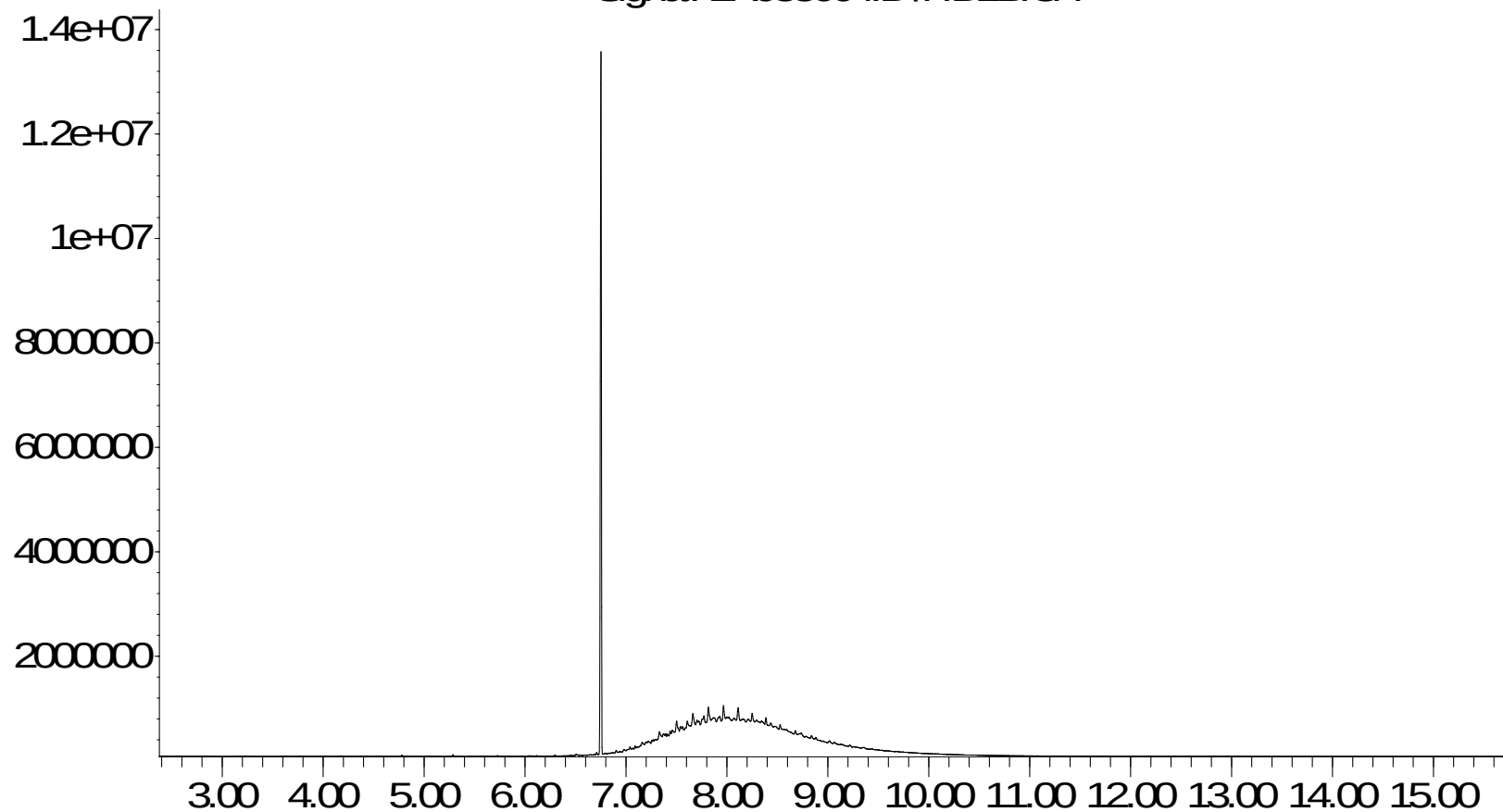


Time

QC Sample: 7H30046-CCV1
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 30, 2017

Response_

Signal: 1R083004.D\FID2B.CH

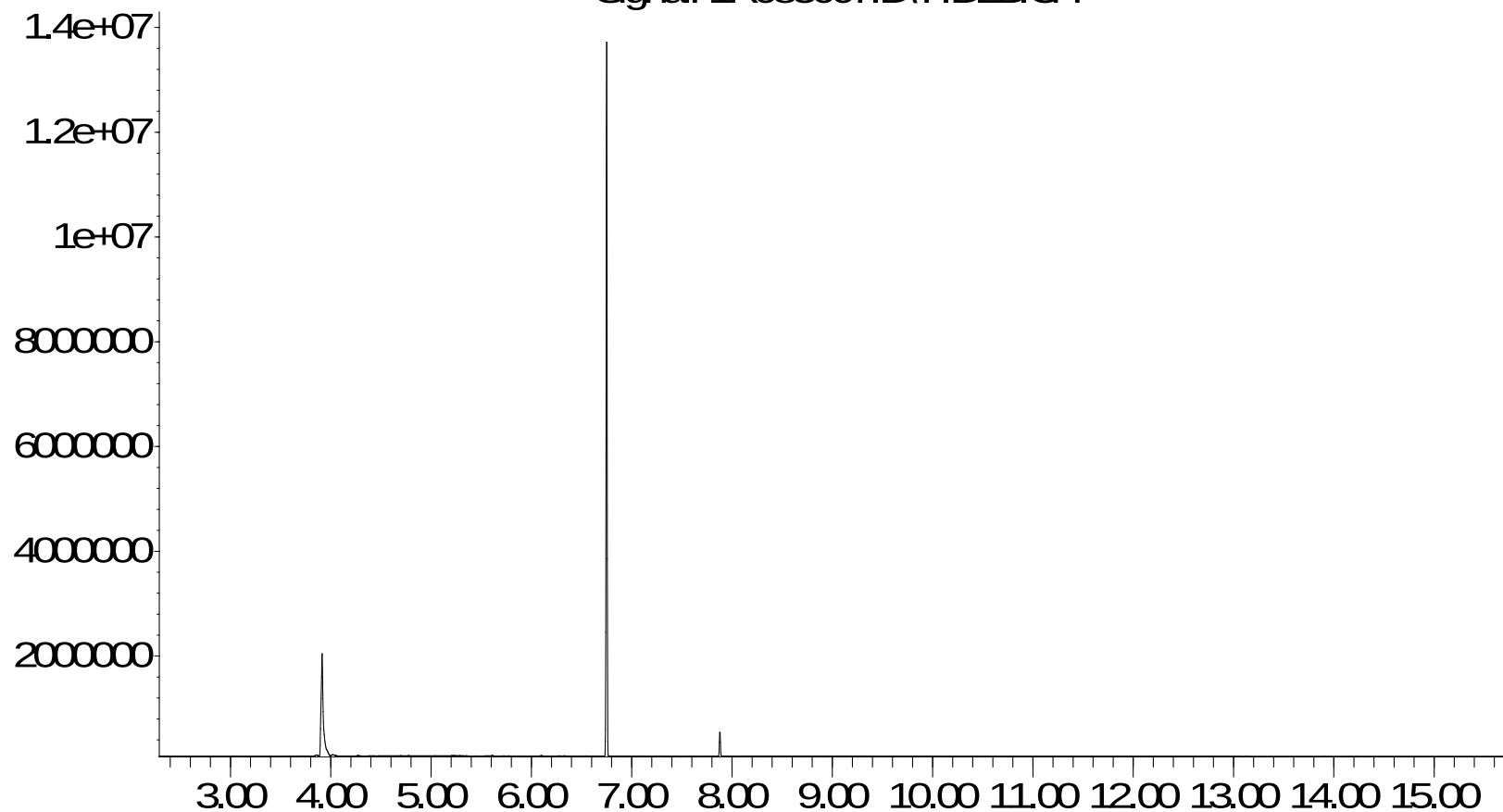


Time

QC Sample: Method Blank
Sound Earth Strategies, PLIA Widbey Island
Date Analyzed: August 30, 2017

Response_

Signal: 1R083007.D\FID2B.CH



Time