

REMEDIAL INVESTIGATION REPORT

Performed at:
Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington 98068

AEROTECH
Environmental Consulting Inc.

November 23, 2020

Anchorage Seattle Portland

Cost-effective environmental solutions
for the western United States and Alaska

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Remedial Investigation Report

Report Version: Revision 2

Site Name: Summit Deli & Chevron
Site Address: 521 WA 906
Snoqualmie Pass, Washington 98068
Alternate Location Info: King/Kittitas County, Washington
Parcel Number: 131936
Ecology Facility Site ID No.: 47987894
Cleanup Site No.: 15109
Petroleum Technical Assistance Program PNW206
Project No.:
Colony Claim No. 258603
Vertex Claim No 46722

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Date: 11/23/20



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ACRONYMS AND ABBREVIATIONS

Aerotech	Aerotech Environmental Consulting, Inc
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
bgs	below ground surface
COCs	Contaminants of Concern
CSID	Cleanup Site Identification number
CUL	Clean-up Level
Ecology	Washington State Department of Ecology
ESA	Environmental Site Assessment
FSID	Facility Site Identification Number
HVOCs	Halogenated Volatile Organic Compounds
MTCA	Model Toxics Control Act
PLIA	Pollution Liability Insurance Agency
PTAP	Petroleum Technical Assistance Program
PVC	Polyvinyl Chloride
TEE	Terrestrial Ecological Evaluation
TPHg	Total Petroleum Hydrocarbon – Gasoline Range
TPHd	Total Petroleum Hydrocarbon – Diesel Range
TPHo	Total Petroleum Hydrocarbon – Heavy Oil Range
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds
WAC	Washington State Administrative Code

EXECUTIVE SUMMARY

The Site is located at Snoqualmie Pass in the State of Washington, approximately 3,019 feet above mean sea level within the Cascades Mountains. The subject Property was originally vacant, wooded land that was developed into a retail petroleum service station in 1989. The Property is also developed with a convenience store with a residence above and an auto repair garage adjacent-east.

A masonry and wood framed canopy covering four pump islands, with a total of eight fuel pumps is located adjacent west of the convenience store building. Directly north of the canopy is the Underground Storage Tank (“UST”) Basin, which contains three 10,000-gallon USTs. The two western tanks hold regular unleaded gasoline, while the eastern tank holds super unleaded gasoline. Four observation wells are located at each corner of the UST Basin. A 6,000-gallon capacity diesel UST was installed south west of the gasoline UST Basin in 2017.

A *Phase I Environmental Site Assessment* (“ESA”), completed June 27, 2017 by Aerotech Environmental Consulting, Inc (“Aerotech”), identified Contaminants of Concern as compounds related to gasoline fueling operations and auto repair activities: Total Petroleum as Gasoline (“TPHg”), Diesel (“TPHd”), and Motor Oil (“TPHo”); Benzene, Toluene, Ethylbenzene, Xylenes (“BTEX”), the Fuel Additives Ethylene Dibromide, Ethylene Dichloride, and Methyl Tert-Butyl Ether; Halogenated Volatile Organic Compounds (“HVOCs”), and Lead.

Based on the recommendations of the June 27, 2017 Phase I ESA, First Financial Northwest Bank retained Aerotech to conduct a Limited & Targeted Phase II Subsurface Investigation to determine if petroleum hydrocarbons had been released into the surrounding soil and groundwater. A total of 11 discrete soil samples were collected on August 9 and 10, 2017 from ten (10) soil boring locations for laboratory analysis. Additionally, four (4) water samples were collected from observation wells OBS-N, OBS-S, OBS-E, and OBS-W.

TPHg and BTEX were detected in concentrations above the Model Toxics Control Act (“MTCA”) Method A Cleanup Levels at the Site in soil in the vicinity of the UST Basin, Pump Islands, and the northwest Catch/Drainage Basin and in water from inside the UST Basin.

Based on the above results, Aerotech proposed additional assessment activities in a November 6, 2017 *Proposed Work Plan - Colony Claim No. 258603*. The objective of the scope of work was to provide additional lateral and vertical delineation of TPHg and benzene in soil and to install groundwater monitoring wells in order to initiate monitoring of TPHg and benzene in groundwater. During the month of September 2018, Aerotech directed the installation of six on-Site groundwater monitoring wells, designated MW1 through MW6. Laboratory analytical results further confirmed the presence of TPHg and Benzene at concentrations above MTCA Method A cleanup levels in shallow soil to the south and west of the Pump Island, to the east of the UST Basin and in the vicinity of the western catch basin/dry well. Additionally, the groundwater sampling event conducted on September 26, 2018 indicated the presence of dissolved-phase petroleum hydrocarbons in groundwater.

In June 2019, Aerotech installed 6 additional groundwater monitoring wells. Three (MW7-MW9) groundwater monitoring wells were installed under a permit with the Washington State Department of Transportation within the shoulder of State Route 906. Additional wells (MW10-MW12) were installed on the Bob’s Summit Deli & Chevron Property to laterally delineate the presence of petroleum hydrocarbons in groundwater. All soil samples were reported below laboratory reporting limits.

In September and October 2020, Aerotech installed eleven (11) soil borings, three (3) temporary soil vapor points, three (3) sub slab vapor points and four (4) additional wells along the western portion of the Site to further delineate in areas not previously accessible.

Groundwater monitoring indicates samples from MW2, MW4, MW6, MW13, MW14 and MW15 contain (TPHg and/or BTEX) at concentrations above the MTCA Method A screening levels.

- **Further Action Recommended.** Further assessment of the soil vapor pathway is necessary to confirm any seasonal variation between the wet and dry seasons. Aerotech will collect soil vapor samples in the second quarter of 2021 to further evaluate the soil vapor pathway as well as continue to monitor the elevated concentrations of gas and benzene in groundwater at the Site.

1. INTRODUCTION

The purpose of this Remedial Investigation Report (“RI”) is to summarize the characterization of the nature and extent of contamination and to present the plan forward to address residual impacts at the Site. Aerotech Environmental Consulting, Inc (“Aerotech”) was retained by Bob Shin to summarize the work completed at the Site. This information will be submitted to the Pollution Liability Insurance Agency’s (“PLIA’s”) Petroleum Technical Assistance Program (“PTAP”).

Under MTCA, 173-340-200 Washington Administrative Code (“WAC”) the Site is defined by the nature and extent of contamination associated with one or more releases of hazardous substances prior to any cleanup of the contamination. Aerotech has completed several investigations to define the Site based on the release associated with the use of the Site as a gasoline service station.

1.1. GENERAL SITE INFORMATION

Site Name:	Summit Deli & Chevron
Site Address:	521 WA 906 Snoqualmie Pass, Washington 98068
Facility Site Identification number (FSID):	47987894
Cleanup Site Identification number (CSID):	15109
Petroleum Technical Assistance Program (PTAP):	PNW206
Project Consultant:	Aerotech Environmental Consulting, Inc.
Project Consultant Contact Information:	Justin Foslien 13925 Interurban Avenue South, Suite No. 210 Seattle, Washington 98168 (206) 257-4211 justin@dirtydirt.us
Property Owner:	Bob Shin PO BOX 169, Snoqualmie Pass, WA 98068 (206) 226-9943 bobshin63@yahoo.com

1.2. SITE LOCATION/DEFINITION

The Property located at 521 SR 906 comprises Kittitas County Parcel No. 131961, which totals 0.88 acres of land in a commercial and residential area of Snoqualmie Pass, Washington (Figures 1 and 2). The parcel is located in King County; however, it appears the jurisdiction has been passed to Kittitas County. The subject Property was originally vacant, wooded land that was developed into a retail petroleum service station in 1989. The Property is also developed with a convenience store with a residence above and an auto repair garage adjacent-east (Figure 3). Previously a seasonal restaurant existed on the southeast portion of the site. It included a tent or canopy shelter set up for patrons and a

kitchen immediately adjacent to the pump islands that is located on a moveable trailer. The Aardvark Restaurant shut down in the Fall/Winter of 2019 and is no longer operating at the property.

The MTCA site ("Site") is defined by the extent of release to soil as petroleum related hydrocarbons associated with the gasoline station located on the *Summit Deli & Chevron* parcel.

1.2.1.SURROUNDING AREA DESCRIPTION:

The Property lies within the community of Snoqualmie Pass on the southwest side of Interstate 90 at Snoqualmie Summit. Adjacent properties include:

- North: A recently logged parcel owned by the subject property owner;
- South: Summit Inn;
- East: A vacant gravel lot owned by the subject Property Owner, followed by Interstate 90;
- West: State Highway 906 followed by single family residences and rental homes.

1.2.2.PHYSIOGRAPHIC SETTING/TOPOGRAPHY

The precise Property location is N 47° 25' 22.87" / W 121° 24' 44.92" as determined by DeLorme mapping data. The Site is located within Universal Transverse Mercator Zone No.10. The Site elevation is approximately 3,019 feet above mean sea level. As observed during Site visits and confirmed on the USGS topographic map, the subject Property exhibits a surficial drainage towards the southeast, based upon overall Site topography (Figure 4).

The Property lies at the crest of the Cascade Range along the county lines of King and Kittitas Counties in Washington.

1.3. SITE HISTORY

The subject Property was originally vacant, wooded land that was developed into a retail petroleum service station in 1989. The Property is also developed with a convenience store with a residence above and an auto repair garage adjacent-east.

A masonry and wood framed canopy covering four pump islands, with a total of eight fuel pumps is located west of the convenience store building. Directly north of the canopy is the Underground Storage Tank ("UST") Basin, which contains three 10,000-gallon USTs (Figure 5). The two western tanks hold regular unleaded gasoline, while the eastern tank holds super unleaded gasoline. Four observation wells are located at each corner of the UST Basin. A 6,000-gallon capacity diesel UST was installed southwest of the gasoline UST Basin in 2017.

A Phase I Environmental Site Assessment ("ESA"), completed June 27, 2017 by Aerotech, identified Contaminants of Concern as compounds related to gasoline fueling operations and auto repair activities: Total Petroleum as Gasoline ("TPHg"), Diesel ("TPHd"), and Motor Oil ("TPHo"); Benzene, Toluene, Ethylbenzene, Xylenes ("BTEX"), the Fuel Additives Ethylene Dibromide, Ethylene Dichloride, and Methyl Tert-Butyl Ether; Halogenated Volatile Organic Compounds ("HVOCs"), and Lead.

The subject Property is occupied by a fueling station and a two-story convenience store. The main entrance to the building is located on the western side, opening to a neatly shelved retail space. The front counter and kitchen are to the north (left) of the entrance. United State Postal Service leases space in the southeast corner of the retail area. An occupied four bedroom, two bathroom residential unit is on the second floor. A rarely used auto repair shop to the east adjoins the retail space. The leased shop contains a new hydraulic hoist and an empty single-walled above ground storage tank (previously containing diesel fuel). A small masonry shed to the east adjoins the auto repair shop, housing an old generator and several empty 55-gallon drums.

Previously a seasonal restaurant existed on the southeast portion of the site. It included a tent or canopy shelter set up for patrons and a kitchen immediately adjacent to the pump islands that is located on a moveable trailer. The Aardvark Restaurant shut down in the Fall/Winter of 2019 and is no longer

operating at the property.

1.4. PREVIOUS SITE ASSESSMENT

Based on the recommendations of the June 27, 2017 Phase I ESA, First Financial Northwest Bank retained Aerotech to conduct a Limited & Targeted Phase II Subsurface Investigation to determine if petroleum hydrocarbons had been released into the surrounding soil and groundwater. A total of 11 discrete soil samples were collected on August 9 and 10, 2017 from ten (10) soil boring locations for laboratory analysis. Additionally, four (4) water samples were collected from observation wells OBS-N, OBS-S, OBS-E, and OBS-W.

TPHg and BTEX were detected in concentrations above the MTCA Method A Cleanup Levels in the vicinity of the UST Basin, Pump Islands, and the northwest Catch/Drainage Basin and in water from inside the UST Basin.

Based on the above results, Aerotech proposed additional assessment activities in a November 6, 2017 Proposed Work Plan - Colony Claim No. 258603. The objective of the scope of work was to provide additional lateral and vertical delineation of TPHg and benzene in soil and to install groundwater monitoring wells in order to initiate monitoring of TPHg and benzene in groundwater.

During the month of September 2018, Aerotech directed the installation of six on-Site groundwater monitoring wells, designated MW1 through MW6. Laboratory analytical results further confirmed the presence of TPHg and Benzene at concentrations above MTCA Method A clean-up levels ("CULs") in shallow soil to the south and west of the Pump Island, to the east of the UST Basin and in the vicinity of the western catch basin/dry well. Additionally, the groundwater sampling event conducted on September 26, 2018 indicated the presence of dissolved-phase petroleum hydrocarbons in groundwater.

In June 2019, Aerotech installed 6 additional groundwater monitoring wells. Three (MW7-MW9) groundwater monitoring wells were installed under a permit with the Washington State Department of Transportation within the shoulder of State Route 906. Additional wells (MW10-MW12) were installed on the Bob's Summit Deli & Chevron Property to laterally delineate the presence of petroleum hydrocarbons in groundwater. All soil samples were reported below laboratory reporting limits. Groundwater samples collected from MW2, MW4 and MW6 contained petroleum hydrocarbons (TPHg and/or BTEX) at concentrations above the MTCA Method A screening levels.

In September 2020, Aerotech directed additional assessment activities including the advance of soil borings B23-B33; soil vapor points SV1-SV3; and subslab points SS1-SS3. Upon reviewing the analytical results from soil collected from Soil Borings B23-B33, three additional monitoring wells MW13-MW16 were installed along the western portion of the Site into Soil Borings B34-37. Additional information is presented in Section 3.0

1.5. SITE USE

1.5.1. CURRENT PROPERTY USES AND FACILITIES

The Property is utilized as a Chevron-branded gas station and two-story convenience store. A masonry and wood framed canopy covering four pump islands, with a total of eight fuel pumps is located west of the convenience store building. Directly north of the canopy is the UST Basin, which contains three 10,000-gallon USTs. The two western tanks hold regular unleaded gasoline, while the eastern tank holds super unleaded gasoline. Four observation wells are located at each corner of the UST Basin. A 6,000-gallon capacity diesel UST was installed southwest of the gasoline UST Basin in 2017.

1.5.2. PROPOSED OR POTENTIAL FUTURE SITE USES

Planned use for the Property is to continue as a gas station and deli. The parcel is zoned as planned unit development/commercial mixed use (Figure 6).

1.5.3. REGULATORY STATUS

On November 25, 2019, Aerotech met with representatives of Pollution Liability Insurance Agency

(“PLIA”) at their Headquarters Office for an intake meeting to discuss the current status of the Site. At the conclusion of the meeting it was determined that going forward under the Pollution Technical Assistance Program (“PTAP”) is the most appropriate regulatory agency for the Site.

After the submittal of the Remedial Investigation Report & Work Plan dated January 31, 2020, representative of Aerotech and Namadi Madakor of PLIA’s PTAP convened to discuss the Site in an intake meeting at PLIA’s Office in Lacey, WA. During this meeting Mr. Madakor indicated the potential for tightening the MTCA Site Boundary with further subsurface investigation as well as the required additional evaluation of the soil vapor pathway concerning the convenience store building.

1.5.4. TRANSPORTATION/ROADS

The Property is located at the east side of the State Route 906 at Snoqualmie Summit. Access is obtained through driveway entrances at the north and south portions of the Site along State Route 906. To access Interstate 90, from the Site travel north or south via State Route 906. To head west toward Seattle, turn north from the Site on State Route 906 and travel under the interstate prior to turning left onto the westbound onramp to Interstate 90. To head east toward Spokane, turn south along State Route 906 and then turn left on Yellowstone Trail Road then right onto an onramp to Interstate 90.

1.5.5. UTILITIES AND WATER SUPPLY

Utility corridors including sanitary sewer, storm sewer and water are located beneath State Route 906. Private connections extend from the south and east side of the building to the south connecting to mains along State Route 906.

Snoqualmie Pass Utility District supplies water to the Site which is sourced primarily from two wells in the Alpentel area advanced approximately 500 feet into an unnamed aquifer. Approximately 300 feet of solid bedrock confines the aquifer above the unnamed aquifer (SPUD, 2020).

1.6. POTENTIAL SOURCES OF HYDROCARBONS

The potential sources of hydrocarbons include existing USTs and the fuel conveyance system including the fuel dispensers located in the vicinity of the pump island pad and UST basin. Secondly, the dry well located in the northeast area of the Site near groundwater monitoring well MW2 is a pathway. It receives water in its vicinity and directly from a catch basin located on the east side of the UST Basin (Figure 5). The dry well consists of a pit with a depth of approximately 6.5-feet.

2. FIELD INVESTIGATIONS

2.1. PREVIOUS ENVIRONMENTAL INVESTIGATIONS

A total of sixteen groundwater monitoring wells have been completed on-Site to date (Table 1). Monitoring of the groundwater wells has occurred since September 2018 (Aerotech, 2018a; 2019b; 2019c and 2020).

A total of 6 investigations have been completed at *Summit Deli & Chevron* and are summarized in the following reports:

- Aerotech. June 27, 2017. *Phase I Environmental Site Assessment*.
- Aerotech. September 1, 2017. *Phase II Limited and Targeted Subsurface Investigation*.
- Aerotech. October 23, 2018. *Groundwater Monitoring Well Installation Report*.
- Aerotech. July 30, 2019. *Right of Way Groundwater Monitoring Well Installation Report*.

The most recent investigation completed at the Site in September 2020 is summarized in Section 3.

A chronological summary of work completed at *Summit Deli & Chevron* during the investigations listed above can be found in Appendix B. A summary of historical soil analytical data and historical groundwater analytical data can be found in Tables 1 and 2, respectively. All historical boring logs are included in Appendix C. All currently existing wells, soil borings and vapor sampling points are shown on Figure 7 through 9. All activities completed by Aerotech were in accordance with Aerotech Field Protocols (Appendix D).

2.2. ENVIRONMENTAL INVESTIGATION SUMMARY

A total of 37 soil borings have been advanced at the Site (B-1 through B37). The soil analytical results can be found in Table 2 and Figure 7. Groundwater analytical results are summarized in Table 3.

2.2.1.CONSTITUENTS OF POTENTIAL CONCERN

Constituents of potential concern (“COPCs”) based on current and past uses of the Property include the compounds listed in WAC Chapter 173-340-900 Table 830-1 Required Testing for Petroleum Releases. The following table lists COPCs for the Site:

Potential Source	COPCs
Gasoline Service Station Tanks and Fuel Conveyance System	<ul style="list-style-type: none"> • TPHg • TPHd • TPHo • BTEX • • HVOCs • Total Lead

Based on the laboratory analytical results from environmental activities conducted at the Site, concentrations of TPHg and/or BTEX have been detected above MTCA Method A Screening Levels in soil, vapor and groundwater samples.

2.2.2.SOIL

Locations of soil samples are depicted on Figure 7. Soil samples have been analyzed for TPHg, TPHd, TPHo, BTEX, HVOCs and lead. Laboratory analytical results indicated TPHg and BTEX above the MTCA Method A screening levels. The depths of the soil samples range from 2 to 15.5 feet below ground surface (“bgs”). A summary of laboratory analytical results, sample depth, and sample date for each soil sample submitted for analysis is presented in Table 2.

2.2.3.SURFACE WATER

Surface water has not been observed on the Property. Currently, the ditch along State Route 906 collects overland flow of surface runoff. There are no culverts connecting it to other ditches along State Route 906. Surface runoff at the station ultimately terminates in one of two locations: 1) catch basins on the Site ultimately flow to one dry well (There is no evidence of an oil-water separator present at the Site) which is located in the vicinity of Soil Boring B10 and Groundwater Monitoring Well MW2. The dry well is approximately 6.5-Feet deep, which is within one foot of the water level in MW2, creating a situation where surface runoff could potentially be in direct contact with groundwater, which flows to the southwest. 2) Due to the generally flat ground surface, some water runs west of the parking lot into the gravel surface in the vicinity of the previously located Aardvark Restaurant.

The surface runoff drains from the Site via gravity to the next surface water body downgradient from the drainage ditch which is believed to be Coal Creek that ultimately drains into Lake Keechelus.

Surface water has not been evaluated at the Site.

2.2.4.GROUNDWATER

Aerotech installed sixteen groundwater monitoring wells MW1 through MW16 (Figure 8) at the Site between October 2017 and October 2020.

A summary of laboratory analytical results, and sample date for each groundwater sample submitted for analysis is presented in Table 3.

2.2.5.INTERIM ACTIONS

No interim actions have been completed at the Site.

2.2.6.SEDIMENT

Sediment has not been observed on the Property.

2.2.7.AIR/SOIL VAPOR

To evaluate the potential air/soil pathway Aerotech utilized the Modified Approach for Assessing the Vapor Intrusion Pathway for Sites with Petroleum Contamination taken from the *Updated Process for Initially Assessing the Potential for Petroleum Vapor Intrusion - Toxics Cleanup Program Implementation Memorandum No. 14* (Ecology, 2016):

- 1) An initial release to the environment occurred based on the previous investigation data and regulatory records did occur;
- 2) No immediate action was necessary;
- 3) Site conceptual model based on characterization data has been completed;
- 4) No other volatile contaminants other than petroleum have been identified;
- 5) No precluding factors are present at the Site;
- 6) The locations of elevated hydrocarbons remain at the Site; occur within areas which are less than 30 feet laterally from the Site building;
- 7) Samples collected at the Site ranged in depth from 2 – 15.5 feet bgs. The 2 – 6 foot interval samples do not meet the vertical screening distance of 6 ft;
- 8) Therefore, sub slab and soil vapor samples need to be collected to evaluate the potential source of petroleum vapor intrusion at the *Summit Deli & Chevron*.

To further evaluate the potential air/soil pathway, Aerotech completed a Tier 1 assessment and collected sub slab vapor samples beneath the Site building as well as soil vapor samples beneath the surface cover

in the area of known petroleum impacts at the Site (Table 4, Figure 9). Additional information is presented in Section 3.0.

2.2.8.NATURAL RESOURCES/WILDLIFE

A Terrestrial Ecological Evaluation (“TEE”) form has been completed and is discussed in Section 3.

2.2.9.CULTURAL HISTORY/ARCHEOLOGY

No information or reports of historical investigations have indicated a need for additional research of Property history or archaeology.

3. 2020 SUBSURFACE INVESTIGATION & 4TH QUARTER 2020 GROUNDWATER SAMPLING

Aerotech directed the advancement of eleven (11) subsurface soil borings via a direct push drilling rig. The purpose of the investigation included the need to further delineate the MTCA Site Boundary on the Property Parcel. Additionally, the investigation occurred to further evaluate the soil vapor pathway via the collection of vapor sample data from sub slab points beneath the Site building and from soil vapor sampling points above the impacted soil and in the area of preferential pathways. Upon review of soil analytical results, four additional soil borings were constructed as groundwater monitoring wells at the Site.

Aerotech also collected groundwater samples from the Site monitoring well network on November 6th and 9th, 2020. Laboratory reports for the samples collected from September to November 2020 are included in Appendix E.

3.1. SUBSURFACE INVESTIGATION

Aerotech completed the subsurface investigation in two mobilizations. The first mobilization on September 24, 2020 included the advancement of eleven subsurface soil borings (B23-B33), installation of three subslab vapor sampling points (SS1-SS3) and advancement of three temporary soil vapor sampling points (SV1-SV3). Vapor samples were collected from subslab points beneath the Site building and the temporary soil vapor points above the impacted soil and in the area of preferential pathways (Figure 9).

The second mobilization included the installation of groundwater monitoring wells. Aerotech reviewed the soil data collected from B23-B33 and installed four new groundwater monitoring wells in soil borings B34-B37 (MW13-MW16).

3.1.1. PRE-FIELD ACTIVITIES

Prior to field activities, Aerotech notified the Utility Notification Center to mark public subsurface utilities and contract a private utility locator to locate subsurface utilities in the area of the proposed borings.

3.1.2. DRILLING ACTIVITIES:

Soil borings were advanced at fifteen (15) locations on Site. Drilling operations for Soil Borings B23 through B33 occurred on September 24, 2020 via direct push drilling rig from Standard Environmental Probe of Tumwater, Washington a Licensed Driller. Aerotech directed the advancement of these soil borings and the collection of soil samples for laboratory analysis to evaluate soil and groundwater on the western portion of the Site after the removal of the temporary Aardvark Restaurant trailer. Groundwater Monitoring Wells MW13 through MW16 were installed within soil borings B34 through B37) on October 1, 2020. The groundwater monitoring well installation was performed by equipment owned and operated by a Licensed Driller from Borettec, Inc. of Bellevue, Washington.

All subsurface work was overseen by State of Washington Licensed Geologists, Mr. Justin Foslien (State of Washington License No. 2540). The laboratory analytical services were performed by a State of Washington accredited laboratory, ALS Laboratories located in Everett, Washington.

3.1.2.1. SOIL SAMPLE COLLECTION:

A total of thirty-five (35) discrete soil samples were collected and submitted for analyses from fifteen (15) soil boring locations.

Soils from each location were visually inspected for color quality and evidence of discoloration, and physically observed for the purpose of recording composition and noting color, where distinctive. Each

sample was handled with a fresh pair of clean nitrile gloves. Samples were then placed into sterile four-ounce glass jars and/or 40cc glass vials preserved with 5 ml of methanol in accordance with procedures specified for USEPA Method 5035A.

Each sample was given a unique identifier number and placed into an iced cooler for preservation. Samples were held in the custody of Aerotech until delivery to ALS Laboratories in Everett, Washington.

3.1.2.2. ANALYTICAL METHODS

The analyses completed on the soil samples for evaluating the presence of petroleum related hydrocarbons included:

- **Total Petroleum Hydrocarbon as Gasoline**

Washington State Department of Ecology (“Ecology”) Method NWTPH-Gx

- **Benzene, Toluene, Ethylbenzene and Xylenes**

EPA Method 8021

3.1.2.3. EQUIPMENT DECONTAMINATION:

All sample acquisition equipment was decontaminated before and after the completion of each borehole to eliminate the potential for cross-contamination between borings, as required. All reusable sampling equipment for soil sampling, drive rods, and probes were decontaminated after each sampling point by washing with an Alconox-distilled water solution and rinsing with distilled water.

3.1.3. SUBSLAB AND SOIL VAPOR SAMPLING:

On September 24, 2020 Aerotech also mobilized to the Site to evaluate the potential for vapor intrusion from petroleum hydrocarbon impacted soil and groundwater beneath the Site building. Aerotech utilized sub slab vapor pins which creates an impermeable seal separating the sub slab and above ground atmospheres. Additionally, Aerotech collected soil vapor samples from temporary soil vapor points advanced via a direct push drilling rig to a depth of 2 to 4 feet bgs (Figure 9).

A total of six soil vapor samples were collected and submitted for analyses from three (3) sub slab locations and three (3) soil vapor sampling points using a shroud containing ultra-high purity helium as a tracer gas. Samples were collected into laboratory supplied 1 Liter (“L”) vacuum-charged air sampling canisters (SUMMA canisters). Each sample was given a unique identifier number and held in the custody of Aerotech until delivery to FedEx in Tacoma, Washington for shipment to the ALS Laboratories in Simi Valley, California.

3.1.3.1. SAMPLE COLLECTION

Samples are collected using a soil vapor purging and sampling manifold consisting of a flow regulator, vacuum gauges, vacuum pump, shroud, and laboratory-prepared, gas-tight, Summa™ canisters (Figure 19). Prior to use, Summa™ canisters are checked to ensure they are under the laboratory induced vacuum between 25 and 30 inches of mercury (in. Hg). New inert tubing was used to purge and sample each well. Prior to purging and sampling each SVS well, Aerotech conducted a vacuum leak test on the sampling equipment. To perform the leak test, the Summa™ canister is connected to the sampling manifold which is connected to the gas-tight vacuum fitting or valve at the wellhead, and the downstream tubing and fittings are vacuum tested at or above 10 in. Hg. Purging and sampling are conducted only on SVS wells when the tubing and fittings hold the applied vacuum for 5 minutes per vacuum gauge reading. If the vacuum is not maintained, Aerotech field personnel will isolate the leak and reattach the fittings and tubing until the vacuum is held for 5 minutes. Purging is performed with the sampling manifold equipped with a vacuum gauge, flow regulator and a peristaltic pump.

Prior to sampling, a helium leak test is performed at each SVS well, including a Summa™ canister and its fittings, to check for leaks in the SVS well annulus. To assess the potential for leaks in the SVS well annulus, a shroud is placed over the SVS well and Summa™ canister and the shroud was filled with a measured amount of helium (20%). Helium screening is performed in the field by pumping soil gas into a Tedlar bag and screening the contents of the Tedlar bag with a helium meter. Pumping is conducted at approximately the same rate of purging, at 100 to 200 ml/min. The concentration of helium in the sample divided by the concentration of helium in the shroud provides a measure of the proportion of the sample attributable to leakage. A sample that contains less than 5% Helium when collected while the shroud is 20% Helium is considered valid. Helium screening will also be performed using laboratory analysis of the contents of the Summa™ canister collected under the shroud.

After purging and the helium leak test, the Summa™ canister is opened and allowed to fill. Sampling is conducted at approximately the same rate of purging, at 100 to 200 ml/min. The canister vacuum readings at the beginning and end of sampling will be recorded. The soil vapor sample collection will end when the vacuum within the sample canister is approximately 5 in Hg. Aerotech field personnel will label the sample containers, store the samples at ambient temperature in laboratory-supplied containers, and initiate COC records.

Additional samples were planned to obtain a vertical vapor profile, however the depth to water was shallow at 2-3 feet bgs at the time of vapor sample collection. Therefore, only the shallowest was collected.

3.1.3.2. ANALYTICAL METHODS

The analyses completed on the sub slab and soil vapor samples for evaluating the presence of petroleum related hydrocarbons included:

- **Total Petroleum Hydrocarbon Vapor as Gasoline**
United States Environmental Protection Agency (“EPA”) Method TO-15
- **Aromatic/Aliphatic Carbon Fractions**
EPA Method TO-15
- **Benzene, Toluene, Ethylbenzene, Xylenes, and Napthalene**
EPA Method TO-15
- **Leak Detection Compound: Helium**
American Society for Testing and Materials (“ASTM”) Method D1945M

3.1.4. INSTALLATION AND DESIGN OF GROUNDWATER MONITORING WELLS:

At each well location, a two-inch diameter Schedule 40 polyvinyl chloride (“PVC”) groundwater monitoring well was installed to the depths shown in the Soil Boring Logs and the Table below. Each well was installed with 5 to 15, or 5 to 20 vertical feet of 0.010-inch slot-sized screen between the depth interval shown on each Soil Boring Log. The annular space in each borehole was filled with clean 12-20 sized silica sand to 2.0 feet above the top of the well screen interval. The remaining annular space was sealed with bentonite chips to within one foot of the surface to prevent the infiltration of surface water or contaminants to the depth of the screened interval. The well was completed with a sealable pressure cap, and cement was placed above the bentonite to secure a traffic-rated well-head monument flush with the surround surface grade.

Well design details are depicted in the Soil Boring Logs included in Appendix C. The Department of Ecology does not permit groundwater to be collected from a newly installed groundwater well until the well system has been allowed to chemically equilibrate for a period of at least 72 hours. This waiting conditions prior to the disturbance caused by the well installation process. Groundwater monitoring

wells will be sampled after well development, the results of which are to be presented in a separate report.

3.1.5.MONITORING WELL DEVELOPMENT:

When a permanent groundwater monitoring well is installed, proper well development is necessary to ensure that complete hydraulic connection is made and maintained between the well and the aquifer material surrounding the well screen and filter pack. Well development should begin no sooner than 48 to 72 hours after well installation to allow grout to cure prior to improvement. Aerotech completed well development for MW13 through MW16 on October 28, 2020.

A surge block was used to move sediments from the filter pack into the well casing. A surge block consists of a rubber and metal plunger attached to Schedule 80 PVC sections of sufficient length to reach the bottom of the well. The surge block is constructed of materials that will not introduce contamination into the well. The surge block is moved up and down the well screen interval and then removed, followed by pumping with a down-well pump to remove any sand and silt brought into the well by the surging action. Care is taken to not surge too strongly with subsequent casing deformation or collapse. Surging will be followed by additional pumping to remove fine materials that may have entered the well during the surging effort.

After surging has been completed and the sand content of the pumped water has decreased, a submersible pump is used to continue well development. The pump was moved up and down the well screen interval until the obtained water was relatively clear. Well development continued until the water in the well clarifies. It should be noted that where very fine-grained formations are opposite the screened interval, continued well development until clear water is obtained might be impossible. Decisions regarding when to cease development where silty conditions exist will be made between amongst Aerotech personnel.

During well development, the primary criteria used to evaluate whether the well has been completely developed is water clarity. As mentioned above, clear water can often be impossible to obtain with environmental monitoring wells.

The minimum volume of water purged from the well during development will be approximately a minimum of 3 borehole volumes (wells will typically not reach stabilization of water quality parameters before this condition is achieved and may not have reached stability even after this threshold has been achieved). The above is a general guideline for difficult well development. Development water was stored in 55-gallon Department of Transportation (“DOT”) -approved drums.

3.2. INVESTIGATION RESULTS

3.2.1.SOIL SAMPLE RESULTS:

Of the soil samples collected from Sol Boring B33 through B37 (Figure 7), six contained concentrations of TPHg or benzene above the Method A Screening Level for soil. They include B24(11), B27(11), B28(11), B34(11), B34(15) and B35(11).

The results indicate the western edge of the MTCA Site lies between the Groundwater Monitoring Wells MW7 through MW9 and the slope adjacent to the drainage ditch.

3.2.2.VAPOR SAMPLE RESULTS:

At the completion of the Preliminary Assessment the investigator has identified where vapor intrusion may pose an issue at the Site. For *Summit Deli & Chevron*, soil and groundwater contain concentrations of volatile organic compounds (“VOCs”) associated with petroleum hydrocarbons above CULs for TPHg, Naphthalene, and BTEX. The question at this point remains: are the concentrations in the

subsurface soil and groundwater high enough to pose an unacceptable threat to indoor air quality within current or future site area buildings (Ecology, 2018)?

Currently at the Site there are VOCs are present, the existing buildings are within the proximity of the VOC plume, and measured VOC concentrations in shallow groundwater exceed the generic screening levels developed for conservative assumptions and in shallow subsurface soil as well. The next progressive step was to collect soil gas concentration data.

Ecology guidance permits investigators to utilize sub-slab or deeper soil gas concentrations during Tier I to estimate the strength of the potential VI source. Sub-slab sampling refers to the collection of soil vapors immediately beneath the basement floor or slab of the building of concern, often above the soil of fill layer in contact with the slab. Deeper soil gas samples are collected above the VOC source, whether this sample location is directly beneath the slab or outside of the footprint of the building of concern (Ecology, 2009).

The three soil vapor samples collected from SV1 through SV3 (Table 4, Figure 9) contained concentrations exceeding the MTCA Method B Sub Slab Screening Level. This was expected due to the shallow source material associated with the dispenser island.

The three sub slab vapor samples collected from SS1 through SS3 (Table 4, Figure 9) did not contain any concentration above the MTCA Method B Sub Slab Screening Level.

3.3. GROUNDWATER SAMPLING EVENT

On November 6 and 9, 2020 Aerotech sampled all site groundwater monitoring wells. Groundwater Monitoring Wells MW2, MW4, MW6, MW13, MW14 and MW15 contained petroleum hydrocarbons (TPHg and/or BTEX) at concentrations above the MTCA Method A Cleanup Levels (Table 3, Figure 8).

4. NATURAL CONDITIONS

4.1. SITE GEOLOGY

According to the most current geologic map available (Haugerud and Tabor, 2009; Figure 10), the Site is underlain by the alpine glacial deposits of the Holocene and Pleistocene age. Predominant geologic units at or near the Site are characterized as follows: Qag, Qu, Tes, and Tev.

Based on the borings advanced by Aerotech on the Property, the Site is dominantly underlain by coarse-grained sediments consisting of silty gravel and sand and poorly-graded gravel and sand to 24 feet bgs, the greatest depth explored. Fine-grained sediments consisting of silty sand and gravelly silt are present in the vicinity of borings near the dispenser islands and the convenience store immediately below the surface grade.

Northwest-Southeast trending and East-West trending geologic cross sections illustrating subsurface conditions observed at the Property can be found on Figures 11 and 12.

4.2. SITE HYDROGEOLOGY

The principal aquifers in the Snoqualmie Pass area occur in fractured bedrock. Well logs included in Appendix F illustrate the water bearing zone begins at approximately 45 feet bgs and extends to total depths of 365 and 495 feet bgs. The logs indicated pumping tests performed for 24 hours at 160 – 180 gallons per minute resulted in 83 – 108 feet of drawdown.

4.2.1. GROUNDWATER CONDITIONS

Based on groundwater monitoring and sampling events performed by Aerotech and lithologic conditions, shallow groundwater is present in the silty sand and gravelly silt sediments. Well locations within these deposits have a low recharge compared to the wells installed within the deeper and more conductive sand with gravel. The interpreted groundwater flow direction is to the southwest Figures 13 and 14.

4.3. SURFACE WATER

The Site is currently covered with a building and concrete/asphalt directly above the petroleum impacted area. In the event of a storm water overflow in the area of the petroleum impacted soil and groundwater, stormwater surface runoff is collected via catch basins and the drainage ditch along State Route 906.

The nearest surface water body are Commonwealth Creek located approximately ½ mile north-northwest of the Site and Coal Creek approximately ½ mile to the southeast (Google Earth, 2020).

4.4. ECOLOGICAL RECEPTORS

4.4.1. SENSITIVE RECEPTOR SURVEY ANALYSIS

Based on the current layout of the Site, there is potential for surface runoff to transport petroleum hydrocarbons into the ditch paralleling State Route 906. It is not known at this time where water collected in this drainage ditch flows to ultimately; however, it is expected to ultimately connect with Coal Creek.

The nearest potable water well is located within ½ mile north-northwest of the Site (Health, 2020). Well#3 of the Snoqualmie Pass Utility District is utilized for emergency use. The Site is not located within any groundwater well protection areas.

Additional permanent wells used by the Snoqualmie Pass Utility District include Well #4 and Well #5 located approximately 1 mile north-northwest of the Site (Health, 2020).

4.4.2. TERRESTRIAL ECOLOGICAL EVALUATION

A TEE Form has been completed for the Site and can be found in Appendix G. The Site qualified for an exclusion from further evaluation based on Barriers to Exposure (WAC 173-340-7491(1)(b) where:

All contaminated soil, is or will be, covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

5. CONCEPTUAL SITE MODEL

The conceptual site model is a “conceptual understanding of a site that identifies potential or suspected sources of hazardous substances, types and concentrations of hazardous substances, potentially contaminated media, and actual and potential exposure pathways and receptors.” As defined by MTCA WAC 173-340-200 (WAC, 2017). This report has provided details regarding how COPCs were released, the types and extent of constituents detected at the Site, and actual and potential receptors. This section provides a conceptual summary of the detailed information described in the previous sections. Figure 15 presents a graphical representation of the conceptual model for the Site.

5.1. SOURCES OF CONSTITUENTS OF CONCERN

The sources of hydrocarbons on the Site are the releases to soil of COPCs that were stored and distributed by the gasoline station at the *Summit Deli & Chevron* Site. These COPCs occurred via releases from USTs, pipes, and dispensers. These releases were focused in the vicinity of the former pump islands and fuel conveyance piping. The COPCs were released to soil; the hydrocarbons then spread by vapor transport into the vadose zone, by partitioning from soil vapor into groundwater, and by direct leaching to groundwater from saturated soils. The Property is currently utilized as a Chevron-branded gasoline station with a convenience store and a residence on the second floor. The surface cover consists of the building footprint, canopy and pump islands, UST basin, and the asphalt and concrete associated with the parking area.

5.2. FATE AND TRANSPORT

The fate and transport of the COPCs are governed by the specific properties of the constituents and the surrounding environmental conditions at the Site. Hydrocarbons released at the Site biodegrade most rapidly under aerobic conditions. Under aerobic conditions, oxygen acts as an electron acceptor, but under anaerobic conditions naturally occurring organic matter or volatile hydrocarbons can act as the electron acceptor. The shallow water bearing zone is an oxidizing environment where naturally occurring microbes utilize hydrocarbons as a food source and proliferate until anaerobic conditions potentially occur. As a result, the transport of dissolved constituents is limited and concentrations decrease before they reach the Site boundary.

The COPCs were released to soil; the hydrocarbons then spread by vapor transport into the vadose zone, by partitioning from soil vapor into groundwater, and by direct leaching to groundwater from saturated soils.

5.3. EXPOSURE PATHWAYS AND RECEPTORS

The Property is within a mixed commercial residential use area that includes public streets, businesses, and other commercial activities. The streets and parking lots are covered with asphalt or concrete. Current exposure pathways and receptors are limited to the following:

- Incidental ingestion of surface soils;
- Incidental ingestion of groundwater from leaching of soil;
- Inhalation of indoor air from volatilization of soil;
- Inhalation of outdoor air from volatilization of soil;
- Inhalation of indoor air from volatilization of groundwater; and
- Inhalation of outdoor air from volatilization of groundwater

5.4. POTENTIAL FUTURE EXPOSURE PATHWAYS AND RECEPTORS

Future land use in the area is expected to remain mixed commercial and residential use, therefore the MTCA Method A and B Cleanup Levels are applicable to this Site. No significant changes in zoning are expected in the foreseeable future.

5.5. SOIL CLEANUP STANDARDS

The following pathways are considered for the establishment of soil cleanup levels at the Site:

- Protection of human health via direct exposure using the MTCA Method A Cleanup Levels;
- Protection of ecological receptors, an ecological evaluation is required under MTCA;
- Protection of groundwater resources from contaminants of concern (“COCs”) leaching from soil; and
- Protection of indoor air from vapor intrusion from soil containing hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels.

In developing cleanup levels, the following Site-specific information is relevant:

- The Site and the adjacent properties are currently zoned for mixed commercial and residential use; and
- Soil containing residual COPCs remains on the *Summit Deli & Chevron* Site.

5.6. GROUNDWATER CLEANUP STANDARDS

The following pathways are considered for the establishment of groundwater cleanup levels at the Site:

- Protection of human health via direct exposure using the MTCA Method A Cleanup Levels;
- Protection of ecological receptors, an ecological evaluation is required under MTCA;
- Protection of groundwater resources from COCs leaching from soil; and
- Protection of indoor air from vapor intrusion from soil containing hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels.

In developing cleanup levels, the following Site-specific information is relevant:

- The Site and the adjacent properties are currently zoned for mixed commercial and residential use; and
- Groundwater containing residual COPCs is present at the Site.

5.7. CLEANUP STANDARDS FOR INDOOR/AMBIENT AIR, SOIL GAS, SUB-SLAB SOIL GAS

In developing cleanup levels for indoor air, the following Site-specific information is relevant:

- Soil containing residual COPCs remains on the *Summit Deli & Chevron* property parcel.
- Groundwater containing residual COPCs is present at the Site.
- Evaluation of potential soil vapor intrusion from the residual COPCS in soil and groundwater is ongoing. An additional round of sampling needs to occur to account for seasonal variation. The screening levels for sub-slab soil gas as well as the standards for indoor air have been included for reference. Initial results indicate concentrations of petroleum hydrocarbons are present in vapor below the MTCA Method B screening levels in samples collected from beneath the slab.

5.8. CLEANUP LEVELS

Based on the current conditions present at the Site, MTCA Method A is the appropriate CUL for both soil and groundwater. Method B screening levels for sub-slab vapor and the CULs indoor air have been included in the table below.

MTCA Cleanup Levels					
COPC	Soil – Method A (mg/kg)	Soil – Method B Direct Contact (mg/kg)	Groundwater (µg/L)	Sub-Slab Vapor – Method B (µg/m ³) c	Indoor Air – Method B (µg/m ³)
Benzene	0.030	18.2	5	11	0.32
Toluene	7	6,400	1,000	76,000	2,300
Ethylbenzene	6	8,000	700	15,000	460
Xylenes	9	16,000	1,000	1,500	46
Naphthalene	5	1,600	160	2.5	0.074
TPHg	100a/30b	1,500	800a/1,000b	N/A	N/A
Lead	250	N/A	15	N/A	N/A

a = TPHg soil cleanup level is 30 mg/kg, unless benzene is not detected in the sample, or if toluene, ethylbenzene, and total xylenes constitute less than 1% of the TPHg present in the sample. If these conditions are met, the cleanup level for TPHg may be elevated to 100 mg/kg.

b = 800 mg/L if benzene is present in groundwater; 1,000 mg/L if no detectable benzene in groundwater

c = Sub-Slab Soil Gas values are screening levels

6. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

6.1. SUMMARY AND CONCLUSIONS

The *Summit Deli & Chevron* is located at Snoqualmie Pass in the State of Washington, approximately 3,019 feet above mean sea level within the Cascade Mountains. The subject Property was originally vacant, wooded land that was developed into a retail petroleum service station in 1989. The Property is also developed with a convenience store with a residence above and an auto repair garage adjacent-east.

Based on previous environmental investigation soil and groundwater contain petroleum impacts associated with the UST basin, dispenser islands and fuel conveyance system. The extent of contamination in soil and groundwater is the MTCA Site Boundary (Figure 16).

To account for seasonal variations another separate soil gas sampling event will be necessary before concluding that the VI potential is too weak to merit further assessment. Should a Tier II assessment be necessary, seasonally variations will need to be evaluated as well. The next event in Spring 2021 will include vapor samples collected from the sub slab vapor points SS1 through SS3 and three temporary soil vapor points in the same area of SV1 through SV3.

Based on previous environmental investigation soil and groundwater pathways will require further management to prevent exposure to human health and the environment (Figure 16). An environmental covenant will be necessary to manage the remaining soil and groundwater remaining at the Site above CULs as the Site is to be utilized as a gasoline station in the future. Pending the subsequent sampling vapor evaluation; additional mitigation may be necessary for the protection of human health and the environment. However, based on the MTCA Site Boundary limited to the source property, the Site is eligible for the use of a Model Remedy 4 for Soil and Groundwater.

6.2. RECOMMENDATIONS

Further assessment of the soil vapor pathway is necessary to confirm any seasonal variation between the wet and dry seasons. Aerotech will collect soil vapor samples in the second quarter of 2021 to further evaluate the soil vapor pathway as well as continue to monitor the elevated concentrations of gas and benzene in groundwater at the Site.

7. LIMITATIONS

For any documents cited that were not generated by Aerotech, the data taken from those documents is used “as is” and is assumed to be accurate. Aerotech does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

This report and the works performed have been undertaken in good faith, with due diligence and with the expertise, experience capability and specialized knowledge necessary to perform the Work in a good and workmanlike manner and within all accepted standards pertaining to providers of environmental services, in Washington at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

8. REFERENCES

- Aerotech Environmental Consulting Inc. (Aerotech). June 27, 2017a. *Phase I Environmental Site Assessment*, Summit Deli & Chevron, 521 State Route 906, Snoqualmie Pass, Washington 98068.
- Aerotech. September 1, 2017b. *Phase II Limited and Targeted Subsurface Investigation*, Summit Deli & Chevron, 521 State Route 906, Snoqualmie Pass, Washington 98068.
- Aerotech. September 26, 2018a. *Groundwater Monitoring Report: First Quarter*, Summit Deli & Chevron, 521 State Route 906, Snoqualmie Pass, Washington 98068.
- Aerotech. October 23, 2018b. *Groundwater Monitoring Well Installation Report*, Summit Deli & Chevron, 521 State Route 906, Snoqualmie Pass, Washington 98068.
- Aerotech. July 30, 2019a. *Right of Way Groundwater Monitoring Well Installation Report*, Summit Deli & Chevron, 521 State Route 906, Snoqualmie Pass, Washington 98068.
- Aerotech. August 6, 2019b. *Groundwater Monitoring Report: 3rd Quarter 2019*, Summit Deli & Chevron, 521 State Route 906, Snoqualmie Pass, Washington 98068.
- Aerotech. October 31, 2019c. *Groundwater Monitoring Report: 4th Quarter 2019*, Summit Deli & Chevron, 521 State Route 906, Snoqualmie Pass, Washington 98068.
- Aerotech. January 31, 2020. *Groundwater Monitoring Report: 1st Quarter 2020*, Summit Deli & Chevron, 521 State Route 906, Snoqualmie Pass, Washington 98068.
- Ecology, 2018. *Petroleum Vapor Intrusion (PVI): Updated Screening Levels, Cleanup Levels, and Assessing PVI Threats to Future Buildings: Implementation memorandum no. 18*. Washington State Department of Ecology, Olympia, Washington. Publication no. 17-09-043. <https://fortress.wa.gov/ecy/publications/documents/1709043.pdf>
- Ecology. 2016a. *Updated process for initially assessing the potential for petroleum vapor intrusion: Implementation memorandum no. 14*. (Ecology Publication No. 16-09-046.) Olympia, WA: Washington State Department of Ecology, Toxics Cleanup Program. <https://fortress.wa.gov/ecy/publications/SummaryPages/1609046.html>
- Ecology, Revised April 2018. *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action*. Washington State Department of Ecology, Olympia, Washington. 108 pages. Publication no. 09-09-047. <https://fortress.wa.gov/ecy/publications/documents/0909047.pdf>
- Ecology, revised 2013. *Model Toxics Control Act Regulation and Statute*. Washington State Department of Ecology, Olympia, Washington. 324 pages. Publication No. 94-06. <http://www.ecy.wa.gov/biblio/9406.html>
- Ecology, revised 2011. *Guidance for Remediation of Petroleum Contaminated Sites*. Washington State Department of Ecology, Olympia, Washington. 197 pages. Publication No. 10-09-057. <https://fortress.wa.gov/ecy/publications/SummaryPages/1009057.html>
- Haugerud, Ralph A. and Tabor, Rowland W. 2009. *Geologic Map of the North Cascade Range, Washington*. U.S. Geological Survey Map 2940. <https://pubs.usgs.gov/sim/2940>.
- Google Earth Map. Accessed January 21, 2020.
- Interstate Technology & Regulatory Council (ITRC). 2014. *Petroleum Vapor Intrusion: Fundamentals of Screening, Investigation, and Management*. PVI-1. Washington, D.C.: Interstate Technology & Regulatory Council, Petroleum Vapor Intrusion Team. <https://www.itrcweb.org/PetroleumVI-Guidance/>
- Snoqualmie Pass Utility District (SPUD). Accessed January 20, 2020. *2018 Water Quality Report*. <http://snopass.org/wp-content/uploads/2019/06/2018-Water-Quality-Report.pdf>

Washington Department of Health (“Health”) 2020. Accessed Source Water Assessment Program (SWAP) Maps <https://fortress.wa.gov/doh/eh/maps/SWAP/index.html>

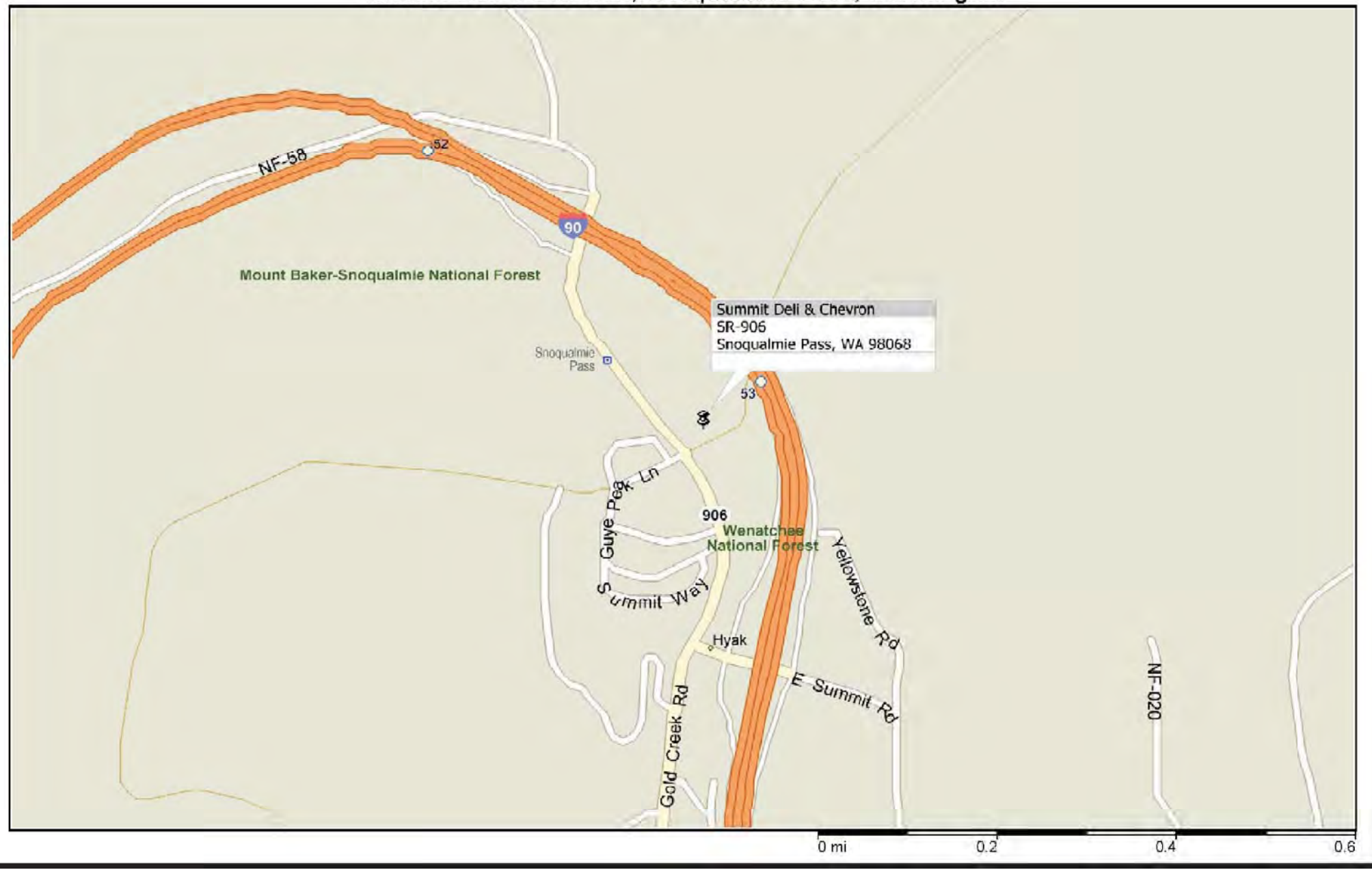
• Figures

Summit Deli & Chevron, Snoqualmie Pass, Washington



Summit Deli & Chevron
SR-906
Snoqualmie Pass, WA 98068

Summit Deli & Chevron, Snoqualmie Pass, Washington



NEIGHBORHOOD MAP

Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

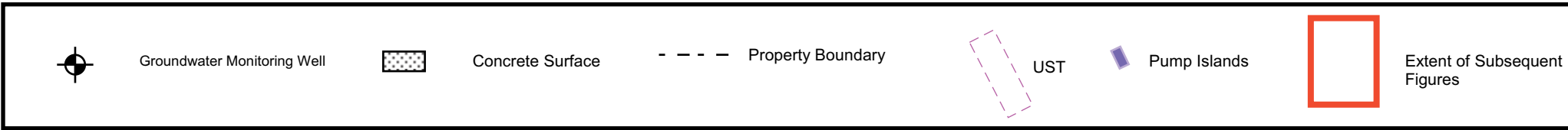
Date: 08/29/17

By: Nick Gerkin

Figure:
2

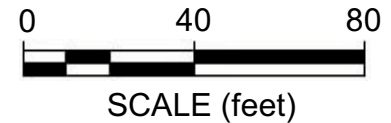


EXPLANATION

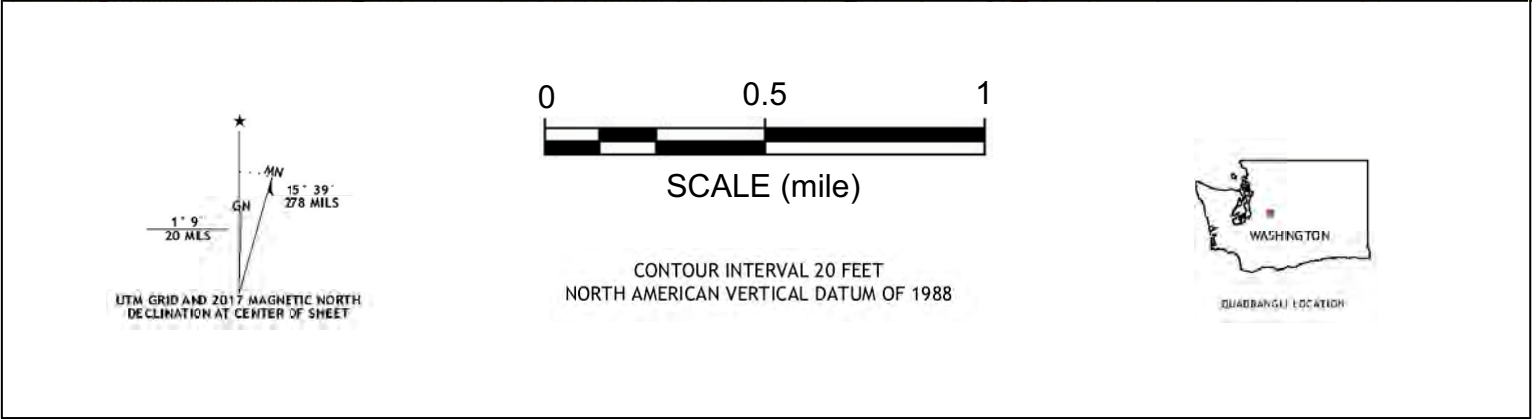
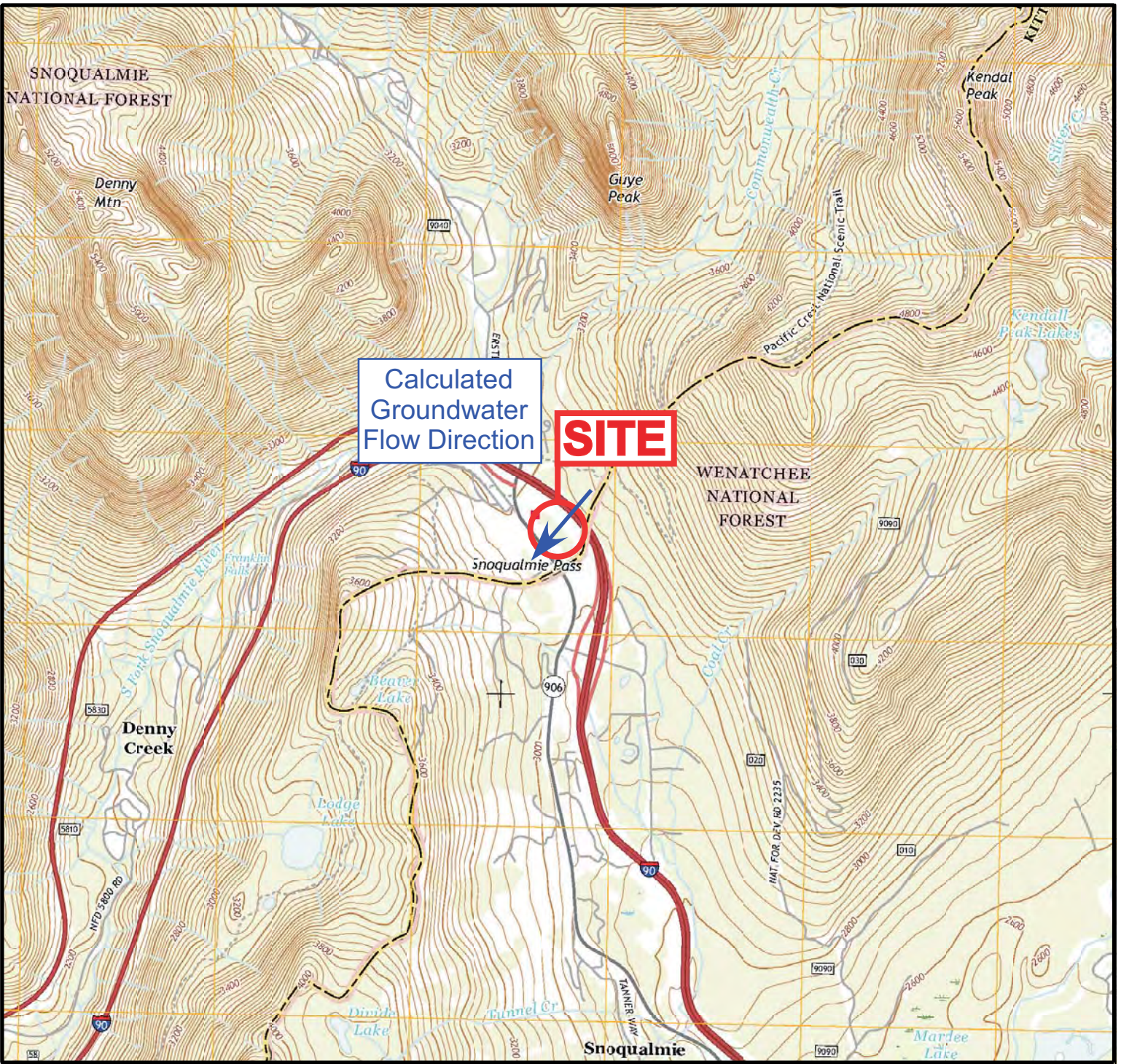


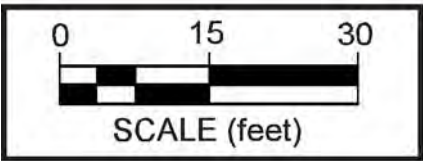
SITE OVERVIEW

Summit Deli & Chevron
 521 State Route 906
 Snoqualmie Pass, Washington



Date: 11/12/20
 By: Justin Foslien
 Figure: 3





EXPLANATION			
	Groundwater Monitoring Well		Concrete Surface
	UST Basin Observation Well		Catch Basin
	Dry Well		Property Boundary
			Underground Utility: Electrical (Red); Storm Water / Sanitary (Green); Water (Blue)

SITE PLAN




Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

Date: 11/13/20
By: Nick Gerkin
Figure: 5





EXPLANATION

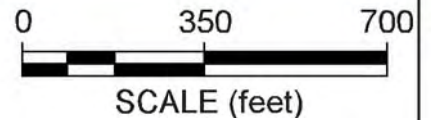
-  Planned Unit Development/Commercial
-  Forest
-  Rural Recreational



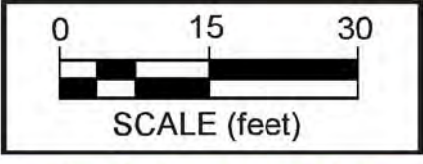
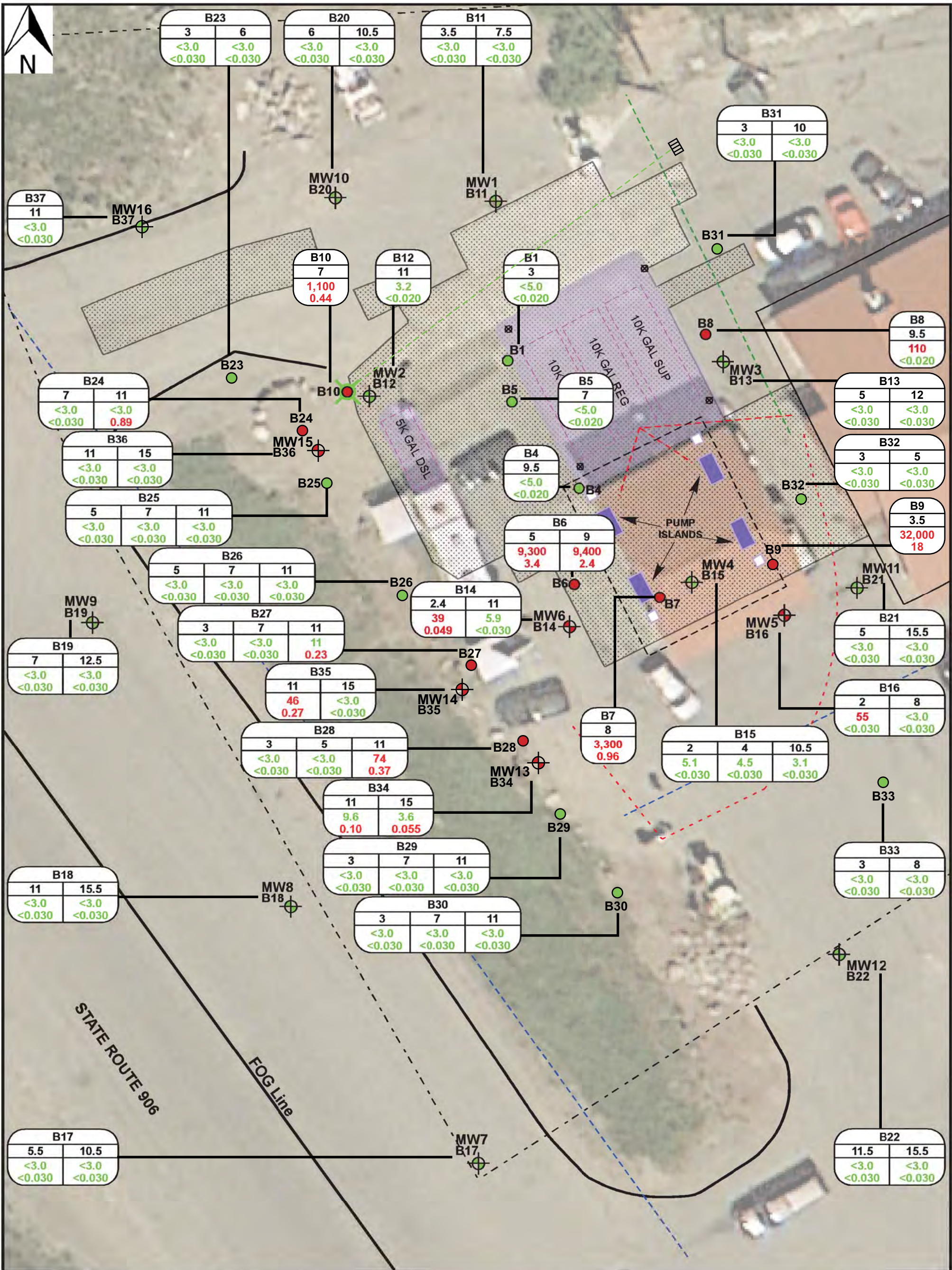
Subject Property



County Line



Information Sourced from King and Kittitas County Zoning Maps



Green numbers and symbols indicate concentrations below the MTCA Method A Cleanup Levels

Red numbers and symbols indicate concentrations above the MTCA Method A Cleanup Levels

EXPLANATION

- MW16: Groundwater Monitoring Well
- B33: Soil Boring
- UST Basin Observation Well
- Catch Basin
- Dry Well
- Property Boundary
- Underground Utility: Electrical (Red); Storm Water / Sanitary (Green); Water (Blue)

B22		Soil Boring ID
11.5	15.5	Depth (ft.)
<3.0	<3.0	TPHg
<0.030	<0.030	Benzene

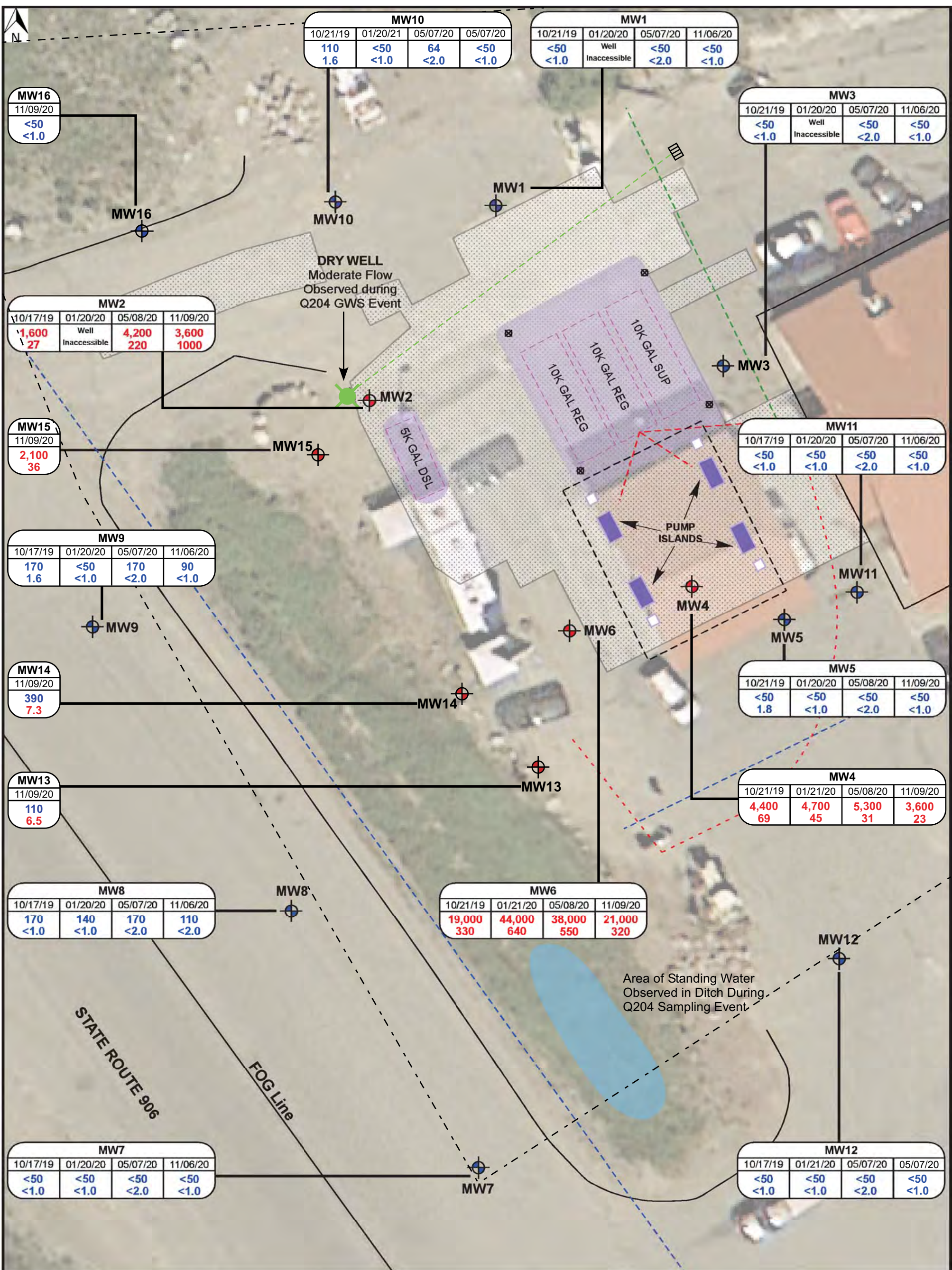
All Concentrations are reported in mg/kg

CUMULATIVE SOIL ANALYTICAL RESULTS MAP

Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

Date: 10/15/20
By: Nick Gerkin
Figure: 7





MW10			
10/21/19	01/20/21	05/07/20	05/07/20
110	<50	64	<50
1.6	<1.0	<2.0	<1.0

MW1			
10/21/19	01/20/20	05/07/20	11/06/20
<50	Well Inaccessible	<50	<50
<1.0		<2.0	<1.0

MW3			
10/21/19	01/20/20	05/07/20	11/06/20
<50	Well Inaccessible	<50	<50
<1.0		<2.0	<1.0

MW16	
11/09/20	
<50	
<1.0	

MW2			
10/17/19	01/20/20	05/08/20	11/09/20
1,600	Well Inaccessible	4,200	3,600
27		220	1000

MW15	
11/09/20	
2,100	
36	

MW11			
10/17/19	01/20/20	05/07/20	11/06/20
<50	<50	<50	<50
<1.0	<1.0	<2.0	<1.0

MW9			
10/17/19	01/20/20	05/07/20	11/06/20
170	<50	170	90
1.6	<1.0	<2.0	<1.0

MW5			
10/21/19	01/20/20	05/08/20	11/09/20
<50	<50	<50	<50
1.8	<1.0	<2.0	<1.0

MW14	
11/09/20	
390	
7.3	

MW4			
10/21/19	01/21/20	05/08/20	11/09/20
4,400	4,700	5,300	3,600
69	45	31	23

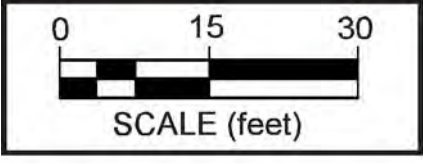
MW13	
11/09/20	
110	
6.5	

MW6			
10/21/19	01/21/20	05/08/20	11/09/20
19,000	44,000	38,000	21,000
330	640	550	320

MW8			
10/17/19	01/20/20	05/07/20	11/06/20
170	140	170	110
<1.0	<1.0	<2.0	<2.0

MW12			
10/17/19	01/21/20	05/07/20	05/07/20
<50	<50	<50	<50
<1.0	<1.0	<2.0	<1.0

MW7			
10/17/19	01/20/20	05/07/20	11/06/20
<50	<50	<50	<50
<1.0	<1.0	<2.0	<1.0



Blue numbers and symbols indicate concentrations below the MTCA Method A Cleanup Levels

Red numbers and symbols indicate concentrations above the MTCA Method A Cleanup Levels

EXPLANATION			
	Groundwater Monitoring Well		Concrete Surface
	Dry Well		Catch Basin
	UST Basin Observation Well		Property Boundary
			Electrical
			Storm Water

MW6	
05/07/20	
21,000	
550	

Monitoring Well ID
Date
TPHg
Benzene

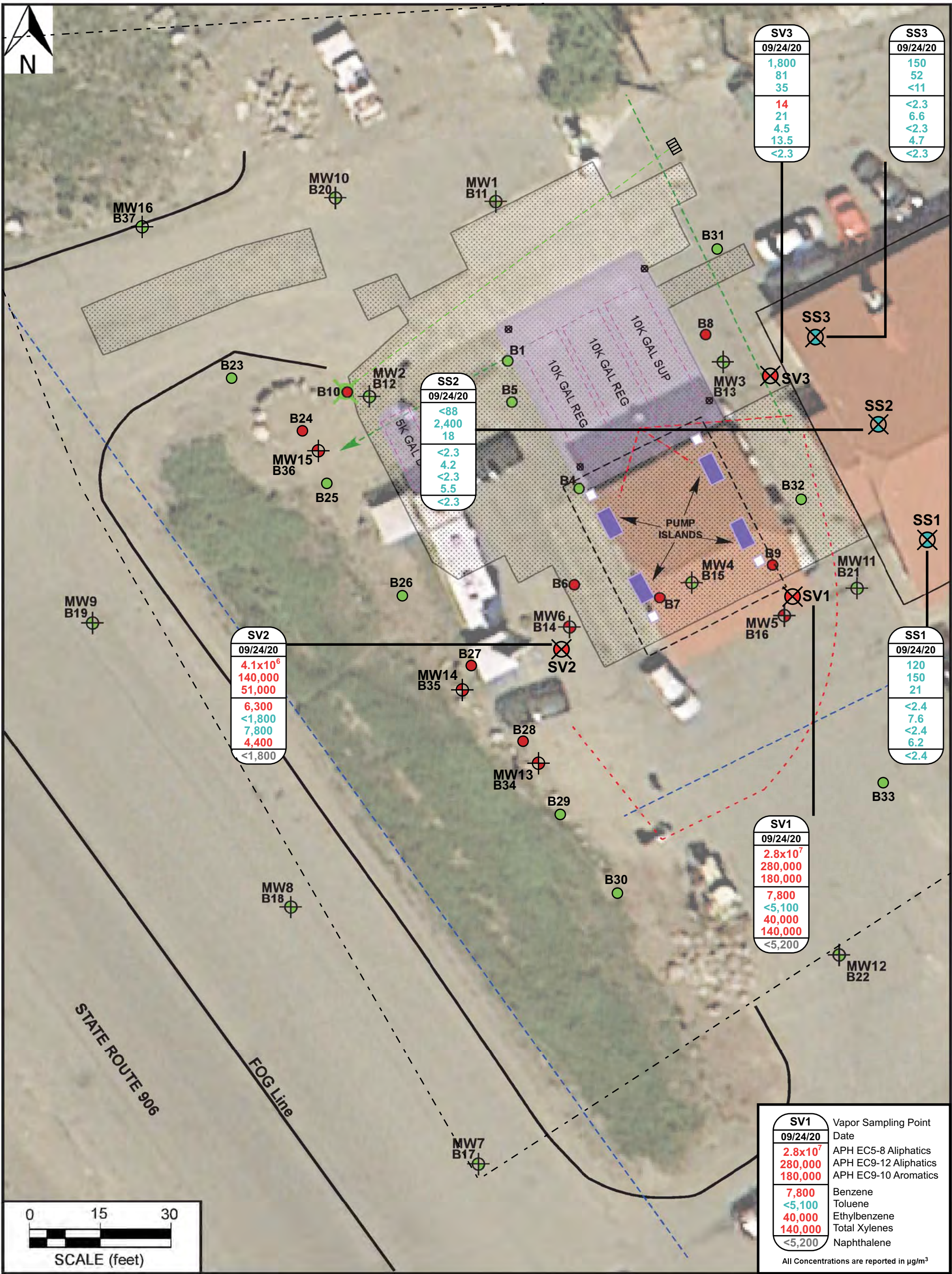
All Concentrations are reported in µg/kg



GROUNDWATER LABORATORY ANALYTICAL RESULTS

Bob's Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

Date: 11/20/20
By: Nick Gerkin
Figure: 8



Teal numbers and symbols indicate concentrations below the MTCA Method B Cleanup Levels for Subslab Soil Gas

Green numbers and symbols indicate concentrations below the MTCA Method A Cleanup Levels in Soil

Red numbers and symbols indicate concentrations above the MTCA Method A Cleanup Levels

Gray numbers and symbols indicate that the laboratory Minimum Detection Limit is greater than the MTCA Method B Screening Level

EXPLANATION			
MW16	SS3	Property Boundary	Catch Basin
Groundwater Monitoring Well	Subslab Vapor Pin	UST Basin Observation Well	Dry Well
B33	SV3		Underground Utility:
Soil Boring Location	Temporary Soil Vapor Sampling Location		Electrical (Red);
			Storm Water / Sanitary (Green);
			Water (Blue)

AEROTECH ENVIRONMENTAL CONSULTING	SUBSLAB & SOIL VAPOR ANALYTICAL RESULTS 09/24/20	Summit Deli & Chevron 521 State Route 906 Snoqualmie Pass, Washington	Date: 11/13/20
			By: Nick Gerkin
			Figure: 9

SV1	Vapor Sampling Point
09/24/20	Date
2.8x10 ⁷	APH EC5-8 Aliphatics
280,000	APH EC9-12 Aliphatics
180,000	APH EC9-10 Aromatics
7,800	Benzene
<5,100	Toluene
40,000	Ethylbenzene
140,000	Total Xylenes
<5,200	Naphthalene

All Concentrations are reported in µg/m³

SS2	09/24/20
<88	
2,400	
18	
<2.3	
4.2	
<2.3	
5.5	
<2.3	

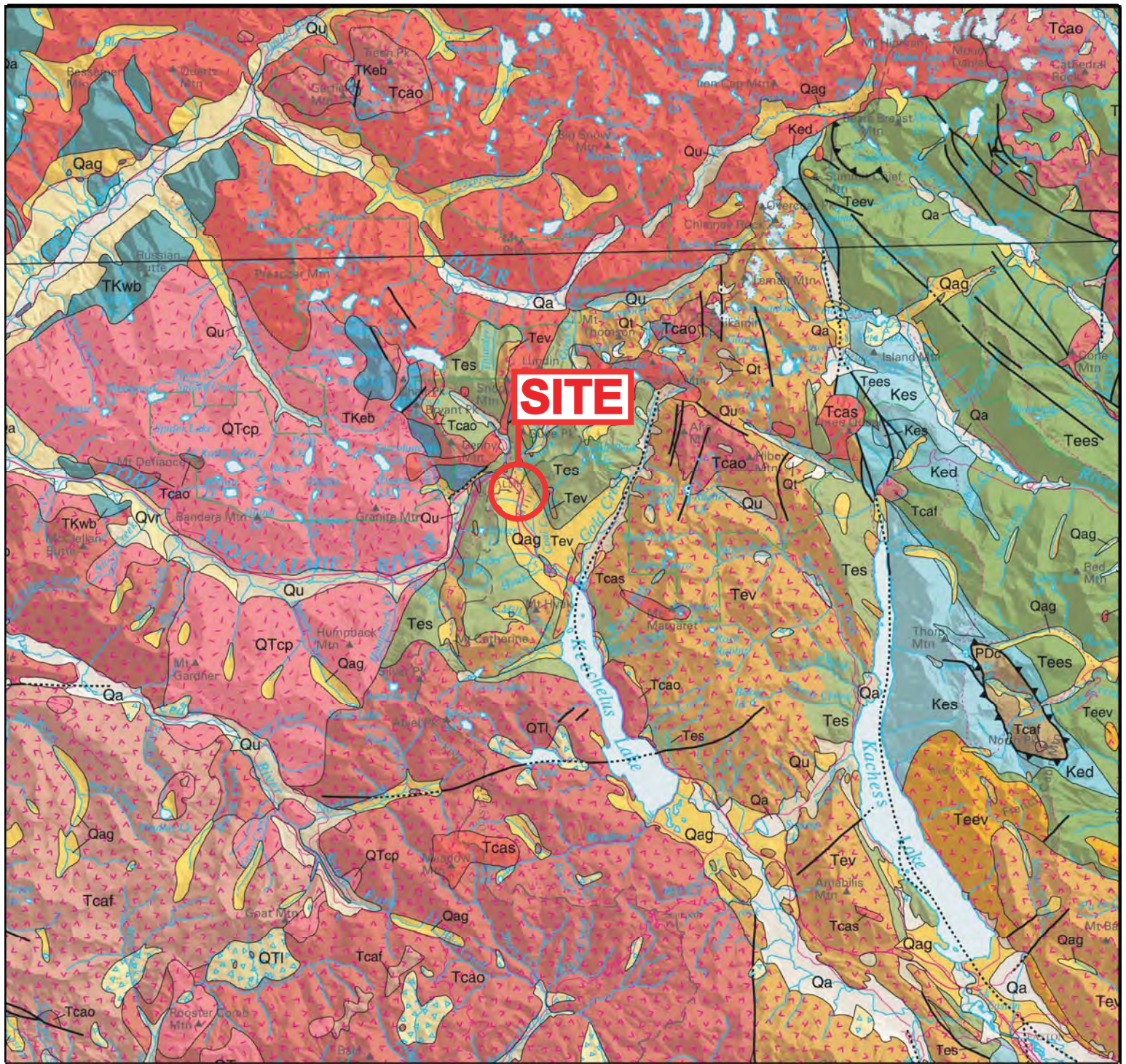
SV3	09/24/20
1,800	
81	
35	
14	
21	
4.5	
13.5	
<2.3	

SS3	09/24/20
150	
52	
<11	
<2.3	
6.6	
<2.3	
4.7	
<2.3	

SV2	09/24/20
4.1x10 ⁶	
140,000	
51,000	
6,300	
<1,800	
7,800	
4,400	
<1,800	

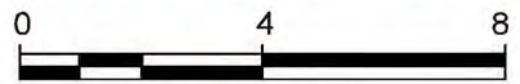
SS1	09/24/20
120	
150	
21	
<2.4	
7.6	
<2.4	
6.2	
<2.4	

SV1	09/24/20
2.8x10 ⁷	
280,000	
180,000	
7,800	
<5,100	
40,000	
140,000	
<5,200	



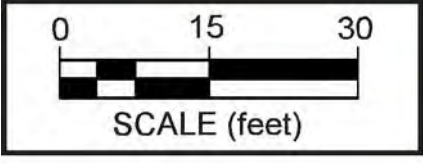
Modified from *Geologic Map of the North Cascade Range, Washington* by Haugerud and Tabor 2009

- | GLACIAL DEPOSITS | |
|---|--|
| | Alpine glacial deposits (Holocene and Pleistocene) |
| | Deposits of alpine glaciers and Cordilleran Ice Sheet (Holocene and Pleistocene) |
| ROCKS OF LATE- AND POST-OROGENIC TRANSTENSION | |
| EXTENSIONAL DEPOSITS | |
| | Extensional sedimentary rocks (early Oligocene and Eocene) |
| | Early extensional sedimentary rocks (middle and early Eocene) |
| | Silver Pass Volcanic Member of Swauk Formation |
| | Volcanic rocks (early Oligocene and Eocene) |



SCALE (mile)

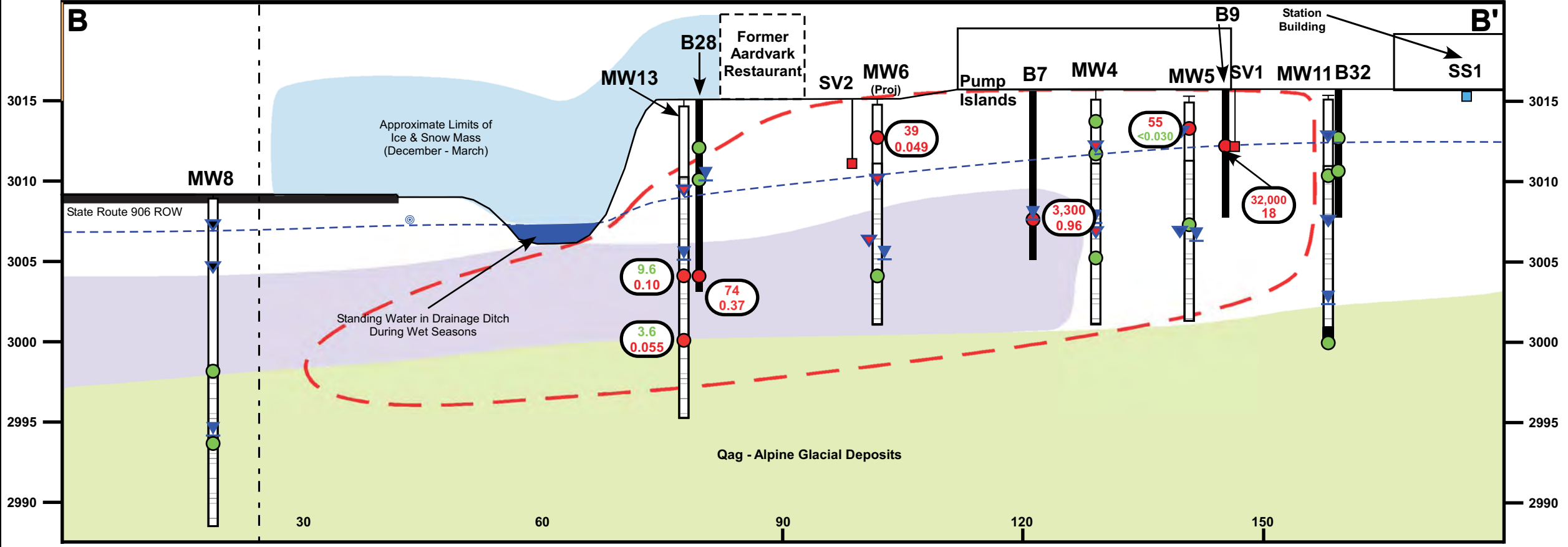
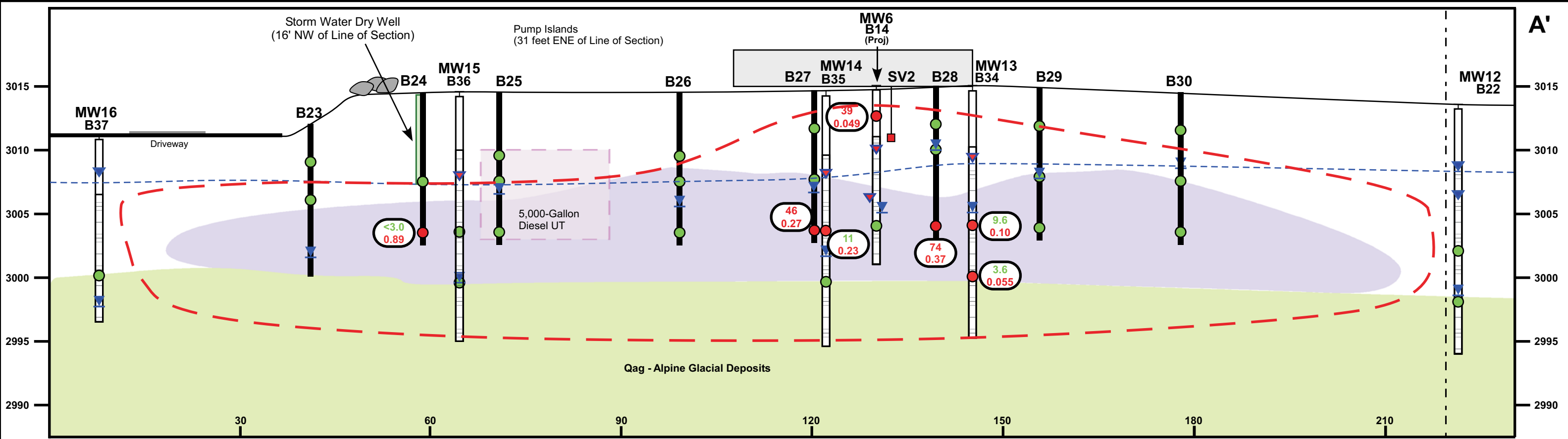
- | UNCONSOLIDATED DEPOSITS | |
|-------------------------|---|
| NONGLACIAL DEPOSITS | |
| | Alluvium of valley bottoms (Holocene and Pleistocene) |
| | Alluvium (Holocene and Pleistocene) |
| | Talus deposits (Holocene and Pleistocene) |
| | Landslide deposits (Holocene, Pleistocene, and Pliocene?) |



EXPLANATION			
●	Teal indicates concentrations below the MTCA Method B Cleanup Levels for Subslab Soil Gas		Groundwater Monitoring Well
●	Blue indicates concentrations below the MTCA Method A Cleanup Levels for Groundwater		Soil Boring
●	Green indicates concentrations below the MTCA Method A Cleanup Levels in Soil		UST Basin Observation Well
●	Red numbers and symbols indicate concentrations above the MTCA Method A Cleanup Levels		Catch Basin
			Dry Well
			Property Boundary
			Underground Utility: Electrical (Red); Storm Water / Sanitary (Green); Water (Blue)

<h2>CROSS SECTION TRAVERSE</h2>	Summit Deli & Chevron 521 State Route 906 Snoqualmie Pass, Washington	Date: 11/15/20 By: Nick Gerkin Figure: 11
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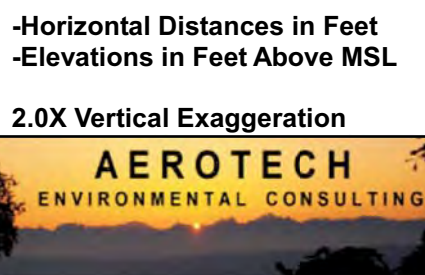




● Teal indicates concentrations below the MTCA Method B Cleanup Levels for Subslab Soil Gas
 ● Blue indicates concentrations below the MTCA Method A Cleanup Levels for Groundwater
 ● Green indicates concentrations below the MTCA Method A Cleanup Levels in Soil
 ● Red numbers and symbols indicate concentrations above the MTCA Method A Cleanup Levels

Gasoline & Benzene Concentrations in Soil (mg/kg)

● 80 TPHg
 ● 3.1 Benzene



EXPLANATION

<ul style="list-style-type: none"> ▲ Historical Water Level (Highs & Lows) ▼ Water Level ATD ▭ Screened Interval ● Soil Sample Location ■ Vapor Sample Location 	<ul style="list-style-type: none"> — MTCA Boundary - - - Property Boundary - - - - - Potentiometric Surface ▭ GW/GP/GM - Gravel with Sand ▭ OC/CL/SM - Silty Sand with Gravel ▭ SP/SM - Sand with Gravel (Water Bearing Unit)
--	---

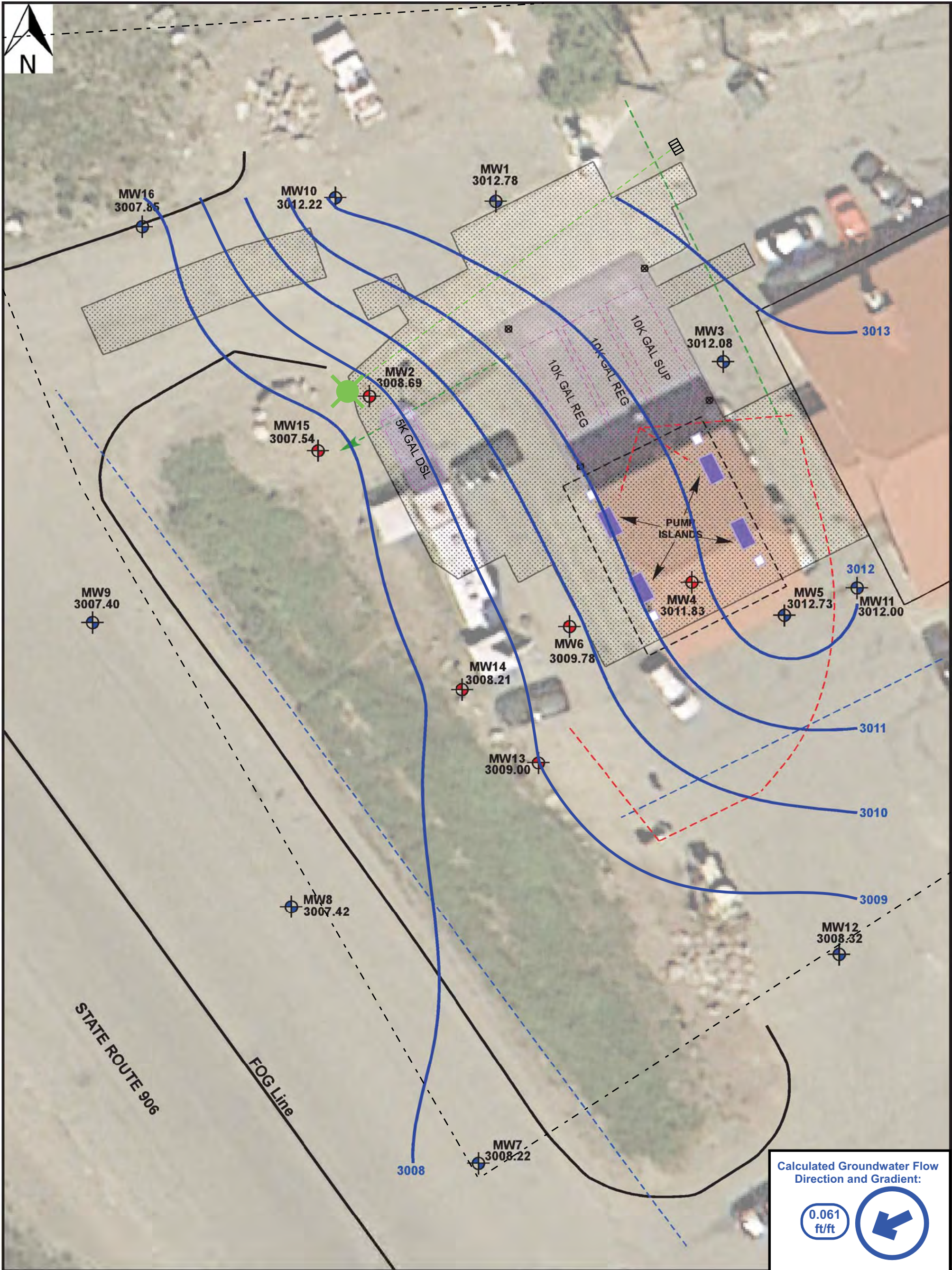
CROSS SECTIONS

Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

Date: 11/17/20
By: Nick Gerkin
Figure: 12

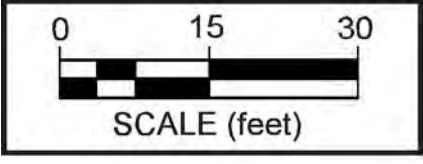
-Horizontal Distances in Feet
-Elevations in Feet Above MSL

2.0X Vertical Exaggeration



Calculated Groundwater Flow Direction and Gradient:

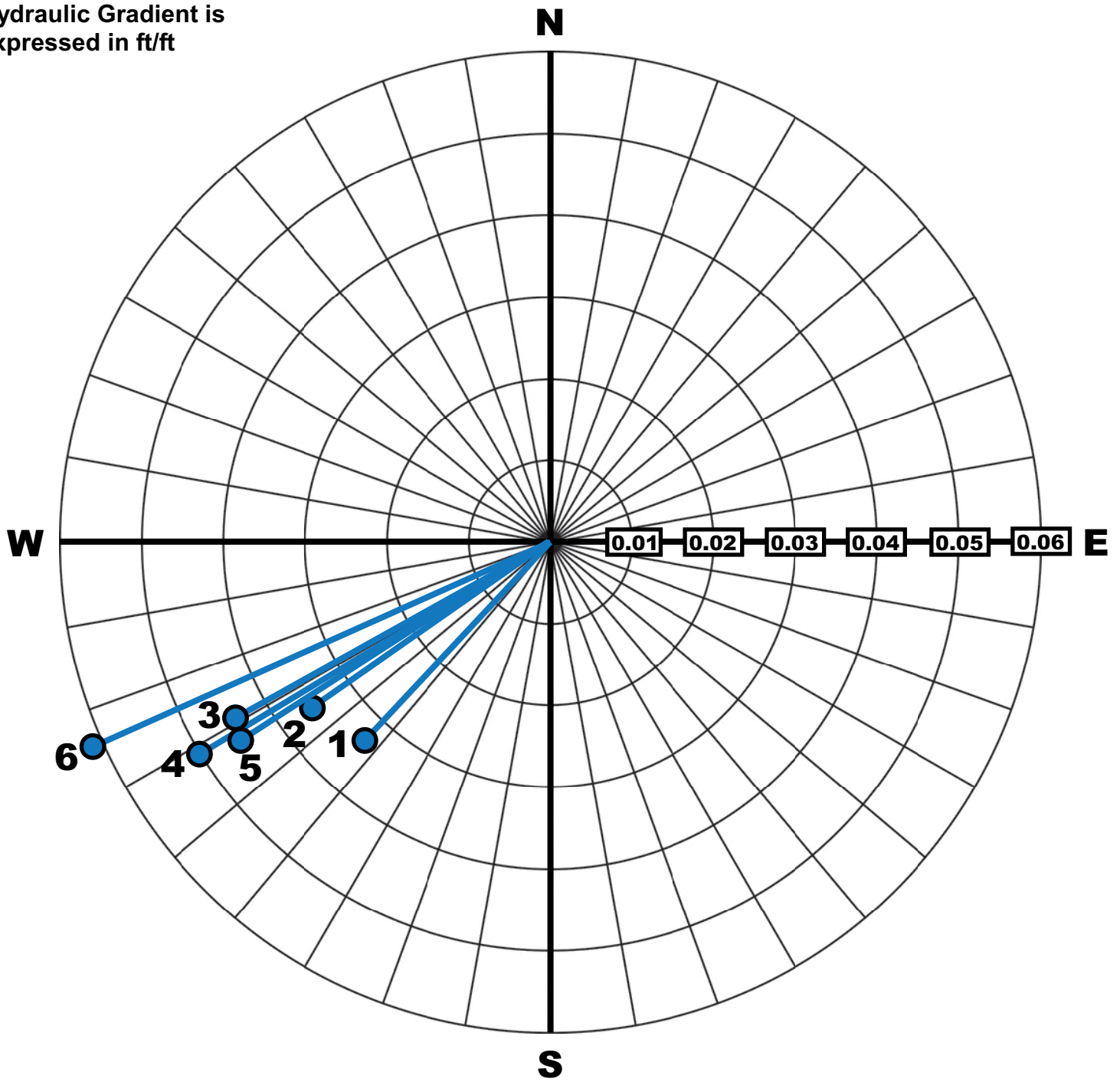
0.061 ft/ft



EXPLANATION			
MW16 3007.85	Groundwater Monitoring Well Groundwater Elevation (Feet Above Mean Sea Level)		Concrete Surface
NM	Not Measured		Groundwater Elevation Contour Line
	UST Basin Observation Well		Catch Basin
			Dry Well
			Property Boundary
			Underground Utility: Electrical (Red); Storm Water / Sanitary (Green); Water (Blue)

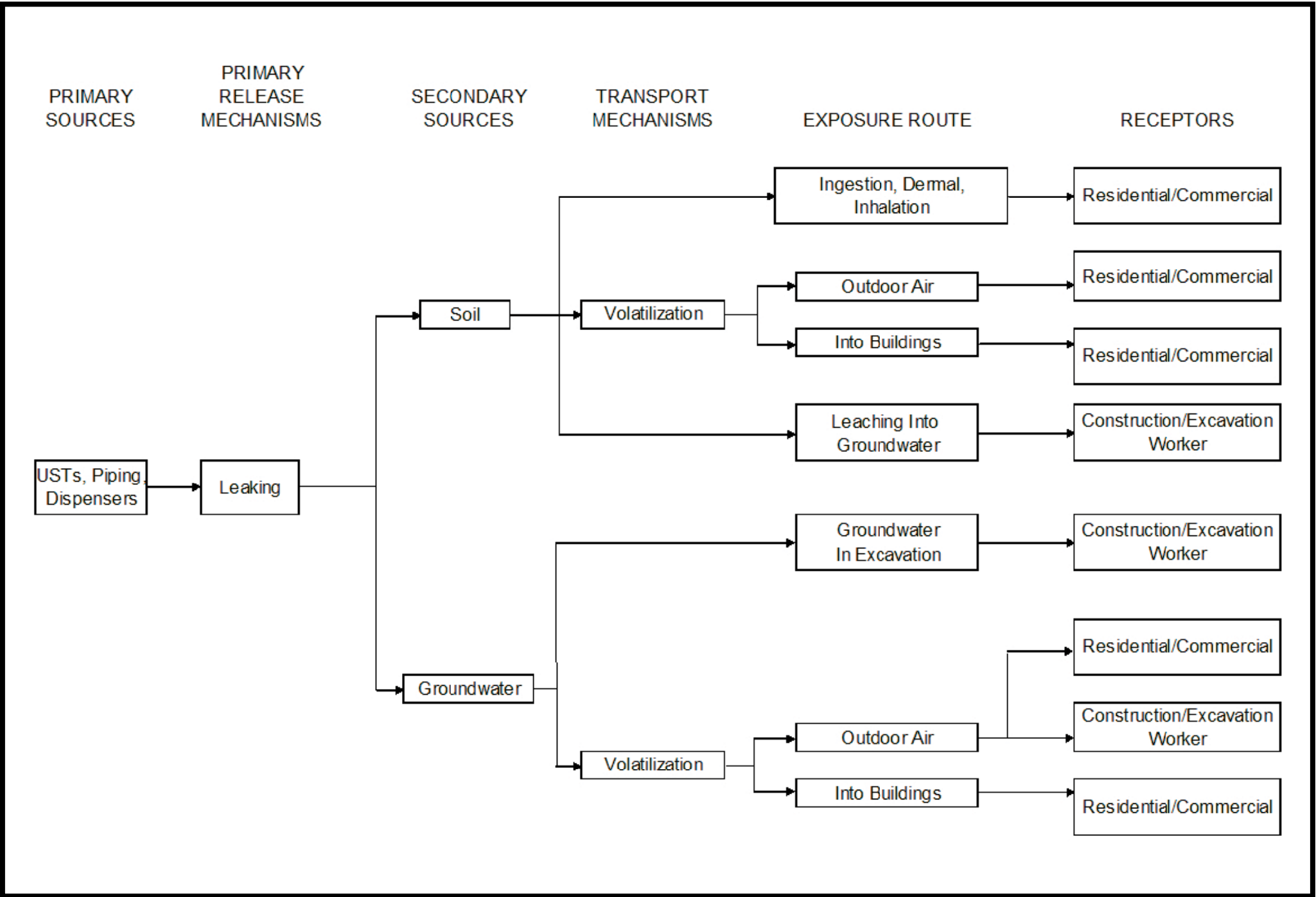
<p>AEROTECH ENVIRONMENTAL CONSULTING</p>	<p>GROUNDWATER POTENTIOMETRIC SURFACE MAP - 11/09/20</p>	<p>Summit Deli & Chevron 521 State Route 906 Snoqualmie Pass, Washington</p>	<p>Date: 11/13/20</p>
			<p>By: Nick Gerkin</p>
			<p>Figure: 13</p>

Hydraulic Gradient is expressed in ft/ft



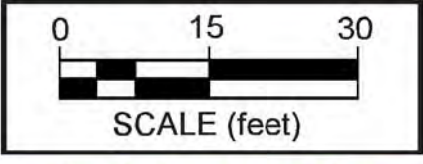
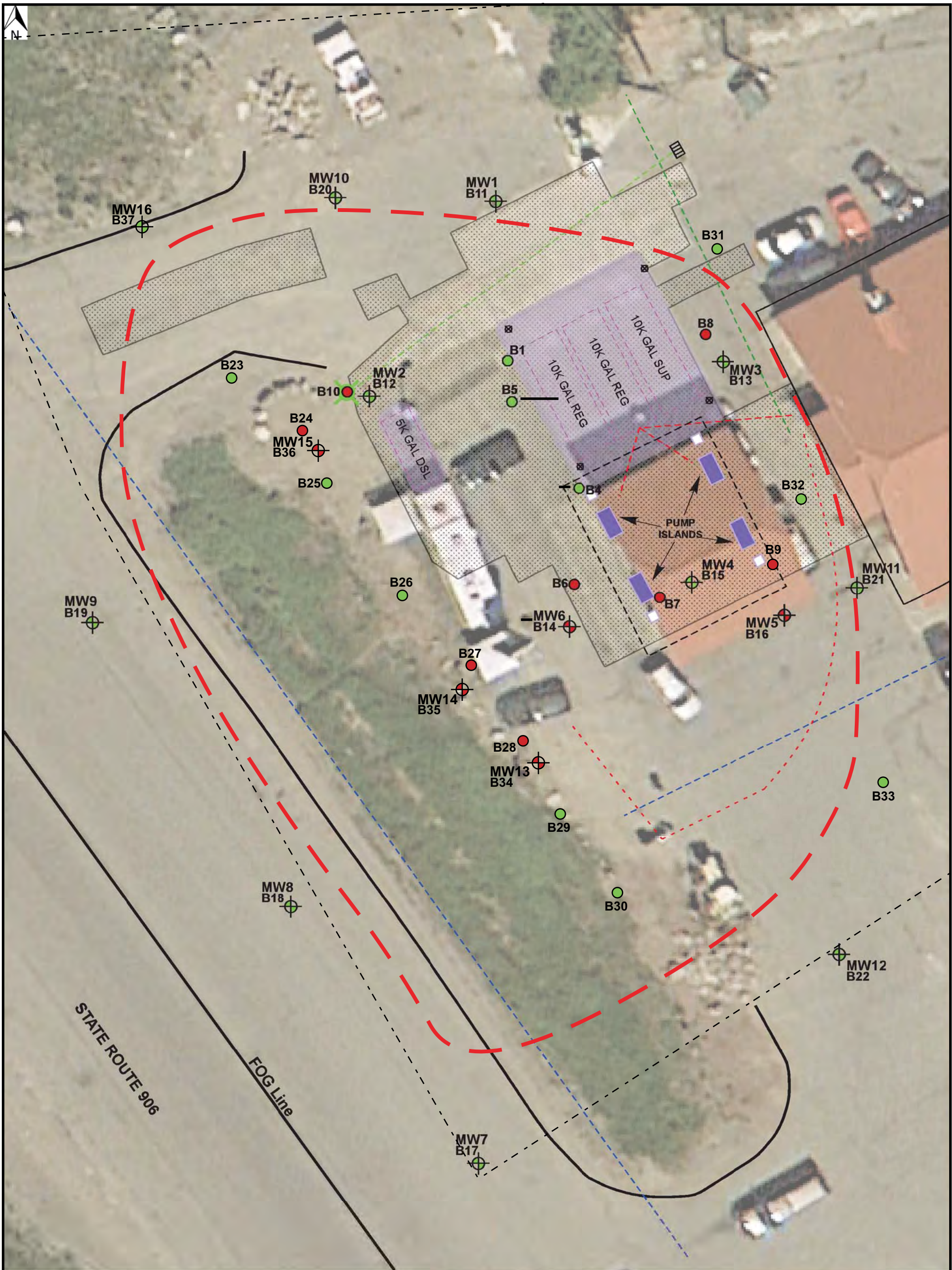
GAUGING EVENT

- 1 09/26/18
- 2 07/25/19
- 3 10/17/19
- 4 01/21/20
- 5 05/07/20
- 6 11/06/20



CONCEPTUAL SITE MODEL

Summit Deli & Chevron
 521 State Route 906
 Snoqualmie Pass, Washington



Green numbers and symbols indicate concentrations below the MTCA Method A Cleanup Levels

Red numbers and symbols indicate concentrations above the MTCA Method A Cleanup Levels

EXPLANATION			
	Groundwater Monitoring Well		Property Boundary
	UST Basin Observation Well		Underground Utility: Electrical (Red); Storm Water / Sanitary (Green); Water (Blue)
	Soil Boring		Dry Well
			Catch Basin

<h2>MTCA BOUNDARY MAP</h2>	Summit Deli & Chevron 521 State Route 906 Snoqualmie Pass, Washington	Date: 11/17/20
		By: Nick Gerkin
		Figure: <div style="text-align: center; font-size: 1.2em;">16</div>



- Tables

TABLE 1
WELL CONSTRUCTION DETAILS

Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

Well ID	Ecology Well ID	Installation Date	Elevation (TOC north)	Elevation (Rim)	Screen Interval	Diameter	Slot Size	Construction Material
			Feet Above MSL	Feet Above MSL	Feet BGS	Inches	Inches	
MW1	BKL 136	09/17/18	3014.07	3014.68	7.5 - 17.5	2	0.010	Schedule 40 PVC
MW2	BKL 137	09/17/18	3012.94	3013.46	7 - 17	2	0.010	Schedule 40 PVC
MW3	BKL 138	09/17/18	3014.78	3015.04	8 - 18	2	0.010	Schedule 40 PVC
MW4	BKL 139	09/18/18	3015.07	3015.41	4.5 - 14.5	2	0.010	Schedule 40 PVC
MW5	BKL 140	09/18/18	3014.91	3015.30	4 - 14	2	0.010	Schedule 40 PVC
MW6	BKL 141	09/18/18	3014.73	3015.07	4 - 14	2	0.010	Schedule 40 PVC
MW7	BLR 627	06/12/19	3009.10	3009.61	9 - 24	2	0.010	Schedule 40 PVC
MW8	BLR 630	06/13/19	3008.91	3009.15	11 - 21	2	0.010	Schedule 40 PVC
MW9	BLR 629	06/13/19	3008.40	3008.63	11 - 21	2	0.010	Schedule 40 PVC
MW10	BLR 628	06/12/19	3014.40	3014.63	5 - 15	2	0.010	Schedule 40 PVC
MW11	BLR 631	06/14/19	3015.08	3015.34	4 - 14	2	0.010	Schedule 40 PVC
MW12	BLR 632	06/14/19	3013.24	3013.61	4 - 19	2	0.010	Schedule 40 PVC
MW13	BJI132	10/01/20	3014.65	3015.08	5 - 20	2	0.010	Schedule 40 PVC
MW14	BJI133	10/01/20	3014.24	3014.66	5 - 20	2	0.010	Schedule 40 PVC
MW15	BJI134	10/01/20	3014.20	3014.60	5 - 20	2	0.010	Schedule 40 PVC
MW16	BJI136	10/01/20	3010.83	3011.17	5 - 15	2	0.010	Schedule 40 PVC

Horizontal and Vertical Datum: Washington State Reference Network (WSRN) NAD-2011 EPOCH 2010.00

TABLE 2
SOIL ANALYTICAL RESULTS

Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

Aerotech Environmental Consulting, Inc. - Phase II Limited and Targeted Subsurface Investigation, September 1, 2017

Sample ID	Soil Boring Samp Point ID	Sample Depth	Sampling Date	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl- benzene	Total Xylenes	EDB	EDC	MTBE	Lead
		Feet BGS		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B1(3)	B1	3	08/09/17	<5.0	<20	<50	<0.020	<0.050	<0.050	<0.050	<0.005	<0.02	<0.1	6.4
B2(3)	B2	3	08/10/17	--	<20	<50	--	--	--	--	--	--	--	--
B3(2)	B3	2	08/10/17	--	<20	<50	--	--	--	--	--	--	--	--
B4(9.5)	B4	9.5	08/10/17	<5.0	--	--	<0.020	<0.050	<0.050	<0.050	--	--	--	--
B5(7)	B5	7	08/10/17	<5.0	--	--	<0.020	<0.050	<0.050	<0.050	--	--	--	--
B6(5)	B6	5	08/10/17	9,300	--	--	3.4	24	48	280	<0.005	<0.02	<0.1	--
B6(9)	B6	9	08/10/17	9,400	--	--	2.4	85	48	260	--	--	--	--
B7(8)	B7	8	08/10/17	3,300	--	--	0.96	84	8.3	17	--	--	--	--
B8(9.5)	B8	9.5	08/10/17	110	--	--	<0.020	<0.050	0.47	1.1	--	--	--	--
B9(3.5)	B9	3.5	08/10/17	32,000	--	--	18	3.1	90	750	<0.005	<0.02	<0.1	--
B10(7)	B10	7	08/10/17	1,100	<20	<50	0.44	5.5	3.3	33	<0.005	<0.02	<0.1	51
MTCA Method A Cleanup Levels				30	2,000	2,000	0.03	7	6	9	0.005	0.0232*	0.1	250

Aerotech Environmental Consulting, Inc. - Groundwater Monitoring Well Installation Report, October 23, 2018

Sample ID	Soil Boring/Well Samp Point ID	Sample Depth	Sampling Date	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl- benzene	Total Xylenes	EDB	EDC	MTBE	Lead
		Feet BGS		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B11(3.5)	MW1	3.5	09/13/18	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B11(7.5)	MW1	7.5	09/13/18	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B12(11)	MW2	11	09/13/18	3.2	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B13(5)	MW3	5.0	09/13/18	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B13(12)	MW3	13	09/13/18	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B14(2.4)	MW6	2.4	09/14/18	39	--	--	0.049	<0.050	0.11	0.24	--	--	--	--
B14(11)	MW6	11	09/14/18	5.9	--	--	<0.030	<0.050	0.13	0.39	--	--	--	--
B15(2)	MW4	2	09/14/18	5.1	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B15(4)	MW4	4	09/14/18	4.5	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B15(10.5)	MW4	10.5	09/14/18	3.1	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B16(2)	MW5	2	09/14/18	55	--	--	<0.030	0.10	0.15	1.8	--	--	--	--
B16(8)	MW5	8	09/14/18	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
MTCA Method A Cleanup Levels				30	2,000	2,000	0.03	7	6	9	0.005	0.0232*	0.1	250

TABLE 2
SOIL ANALYTICAL RESULTS

Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

Aerotech Environmental Consulting, Inc. - *Right of Way Groundwater Monitoring Well Installation Report*, June 28, 2019

Sample ID	Soil Boring/Well Samp Point ID	Sample Depth	Sampling Date	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl-benzene	Total Xylenes	EDB	EDC	MTBE	Lead
		Feet BGS		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B17(5.5)	MW7	5.5	06/12/19	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B17(10.5)	MW7	10.5	06/12/19	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B18(11)	MW8	11	06/13/19	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B18(15.5)	MW8	15.5	06/13/19	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B19(7)	MW9	7	06/13/19	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B19(12.5)	MW9	12.5	06/13/19	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B20(6)	MW10	6	06/12/19	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B20(10.5)	MW10	10.5	06/12/19	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B21(5)	MW11	5	06/14/19	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B21(15.5)	MW11	15.5	06/14/19	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B22(11.5)	MW12	11.5	06/14/19	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B22(15.5)	MW12	15.5	06/14/19	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
MTCA Method A Cleanup Levels				30	2,000	2,000	0.03	7	6	9	0.005	0.0232*	0.1	250

Aerotech Environmental Consulting, Inc. - *Remedial Investigation Report, Revision 2*, November 23, 2020

Sample ID	Soil Boring/Well Samp Point ID	Sample Depth	Sampling Date	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl-benzene	Total Xylenes	EDB	EDC	MTBE	Lead
		Feet BGS		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B23(3)	B23	3	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B23(6)	B23	6	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B24(7)	B24	7	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B24(11)	B24	11	09/24/20	<3.0	--	--	0.89	<0.050	<0.050	<0.20	--	--	--	5.8
B25(5)	B25	5	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B25(7)	B25	7	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B25(11)	B25	11	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B26(5)	B26	5	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B26(7)	B26	7	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B26(11)	B26	11	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B27(3)	B27	3	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B27(7)	B27	7	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B27(11)	B27	11	09/24/20	11	--	--	0.23	<0.050	0.52	1.2	--	--	--	4.6
B28(3)	B28	3	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B28(5)	B28	5	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B28(11)	B28	11	09/24/20	74	--	--	0.37	<0.050	0.25	9.2	--	--	--	6.0
B29(3)	B29	3	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B29(7)	B29	7	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B29(11)	B29	11	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
MTCA Method A Cleanup Levels				30	2,000	2,000	0.03	7	6	9	0.005	0.0232*	0.1	250

TABLE 2
SOIL ANALYTICAL RESULTS

Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

Aerotech Environmental Consulting, Inc. - Remedial Investigation Report, Revision 2, November 23, 2020 (continued)

Sample ID	Soil Boring/Well Samp Point ID	Sample Depth	Sampling Date	TPHg	TPHd	TPHo	Benzene	Toluene	Ethylbenzene	Total Xylenes	EDB	EDC	MTBE	Lead
		Feet BGS		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B30(3)	B30	3	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B30(7)	B30	7	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B30(11)	B30	11	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B31(3)	B31	3	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B31(10)	B31	10	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B32(3)	B32	3	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B32(5)	B32	5	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B33(3)	B33	3	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B33(8)	B33	8	09/24/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B34(11)	MW13	11	10/01/20	9.6	--	--	0.10	<0.050	<0.050	1.5	--	--	--	10
B34(15)	MW13	15	10/01/20	3.6	--	--	0.055	<0.050	<0.050	<0.20	--	--	--	4.6
B35(11)	MW14	11	10/01/20	46	--	--	0.27	<0.050	0.093	6.0	--	--	--	3.5
B35(15)	MW14	15	10/01/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
B36(11)	MW15	11	10/01/20	<3.0	--	--	<0.030	<0.050	<0.050	0.49	--	--	--	16
B36(15)	MW15	15	10/01/20	<3.0	--	--	<0.030	<0.050	<0.050	0.22	--	--	--	--
B37(11)	MW16	11	10/01/20	<3.0	--	--	<0.030	<0.050	<0.050	<0.20	--	--	--	--
MTCA Method A Cleanup Levels				30	2,000	2,000	0.03	7	6	9	0.005	0.0232*	0.1	250

EXPLANATION

MTCA = Model Toxic Control Act Cleanup Level (WAC173-340-900)

BGS = Below Ground Surface TOC = Top of Casing mg/kg = milligram of analyte per kilogram of soil

< = not detected at indicated Laboratory Detection Limits -- = not analyzed

TPHg - Total Petroleum Hydrocarbons - Gasoline by NWTPH-Gx

TPHd - Total Petroleum Hydrocarbons - Diesel by NWTPH-Dx

TPHo - Total Petroleum Hydrocarbons - Motor Oil by NWTPH-Dx extended

Benzene, Toluene, Ethylbenzene, Xylenes by EPA Method 8021B

MTBE = Methyl-tert-butyl-ether EDC = 1,2-Dichloroethane EDB = 1,2-Dibromoethane HVOCs = Halogenated Volatile Organic Compounds; by EPA Method 8260B

* = Method B Cleanup Level, Ecology does not have a Method A Cleanup Level designated for EDC

Lead by EPA Method 6010/6020

Bolded numbers and red-shaded cells denote concentrations above the MTCA Method A Cleanup Levels

TABLE 3
GROUNDWATER ANALYTICAL RESULTS

Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

MW1

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
17.2	09/26/18	6.36	3016.57	3010.21	<50	<1.0	<1.0	<1.0	<3.0	<0.010	<0.020	<2.0	<1.0
	07/25/19	5.12	3014.07	3008.95	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	10/21/19	1.28	3014.07	3012.79	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	01/21/20	Inaccessible	3014.07	--	--	--	--	--	--	--	--	--	--
	05/07/20	1.22	3014.07	3012.85	<50	<2.0	<2.0	<2.0	<6.0	--	--	--	--
	11/06/20	1.29	3014.07	3012.78	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
MTCA Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

MW2

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
16.7	09/26/18	7.35	3015.43	3008.08	2,400	44	3.3	35	57	<0.010	<0.020	<2.0	<1.0
	07/26/19	6.32	3012.94	3006.62	2,900	46	<1.0	57	26	--	--	--	<1.0
	10/17/19	5.19	3012.94	3007.75	1,600	27	<1.0	27	19	--	--	--	<1.0
	01/20/20	Inaccessible	3012.94	--	--	--	--	--	--	--	--	--	--
	05/08/20	4.19	3012.94	3008.75	4,200	220	2	98	84	--	--	--	--
	11/09/20	4.25	3012.94	3008.69	3,600	100	<1.0	67	59	--	--	--	<1.0
MTCA Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

MW3

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
17.8	09/26/18	7.04	3017.28	3010.24	330	3.5	<1.0	<1.0	<3.0	<0.010	<0.020	<2.0	<1.0
	07/25/19	5.84	3014.78	3008.94	110	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	10/21/19	2.93	3014.78	3011.85	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	01/20/20	Inaccessible	3014.07	--	--	--	--	--	--	--	--	--	--
	05/07/20	1.94	3014.07	3012.13	<50	<2.0	<2.0	<2.0	<6.0	--	--	--	--
	11/06/20	1.99	3014.07	3012.08	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
MTCA Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

TABLE 3
GROUNDWATER ANALYTICAL RESULTS

Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

MW4

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
14.0	09/26/18	8.68	3017.58	3008.90	5,200	52	4.4	73	110	<0.010	<0.020	<2.0	<1.0
	07/26/19	6.90	3017.58	3010.68	7,200	58	43.0	110	340	--	--	--	<1.0
	10/21/19	3.52	3015.07	3011.55	4,400	69	5.5	45	170	--	--	--	<1.0
	01/21/20	4.34	3015.07	3010.73	4,700	45	6.1	88	360	--	--	--	<1.0
	05/08/20	3.34	3015.07	3011.73	5,300	31	2.6	81	372.4	--	--	--	--
	11/09/20	3.24	3015.07	3011.83	3,600	23	3.6	46	170	--	--	--	<1.0
MTC A Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

MW5

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
13.6	09/26/18	8.50	3017.43	3008.93	110	22	1.2	<1.0	<3.0	<0.010	<0.020	<2.0	<1.0
	07/26/19	5.83	3014.91	3009.08	<50	4	<1.0	<1.0	<3.0	--	--	--	<1.0
	10/21/19	2.79	3014.91	3012.12	<50	1.8	<1.0	<1.0	<3.0	--	--	--	<1.0
	01/20/20	3.30	3014.91	3011.61	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	05/08/20	2.25	3014.91	3012.66	<50	<2.0	<2.0	<2.0	<6.0	--	--	--	--
	11/09/20	2.18	3014.91	3012.73	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
MTC A Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

MW6

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
13.7	09/26/18	8.92	3017.24	3008.32	26,000	1,800	340	4,800	7,000	<0.010	<0.020	<2.0	<1.0
	07/26/19	7.75	3014.73	3006.98	39,000	460	210	1,700	3,600	--	--	--	<1.0
	10/21/19	5.61	3014.73	3009.12	19,000	330	130	1,100	1,900	--	--	--	<1.0
	01/21/20	6.05	3014.73	3008.68	44,000	640	1,200	2,300	7,700	--	--	--	<1.0
	05/08/20	5.10	3014.73	3009.63	38,000	550	780	2,000	6,450	--	--	--	--
	11/09/20	4.95	3014.73	3009.78	21,000	320	110	1,100	2,000	--	--	--	<1.0
MTC A Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

TABLE 3
GROUNDWATER ANALYTICAL RESULTS

Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

MW7

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
24.1	07/25/19	3.40	3009.10	3005.70	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	10/17/19	2.16	3009.10	3006.94	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	01/20/20	2.14	3009.10	3006.96	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	05/07/20	1.01	3009.10	3008.09	<50	<2.0	<2.0	<2.0	<6.0	--	--	--	--
	11/06/20	0.88	3009.10	3008.22	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
MTCA Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

MW8

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
20.4	07/25/19	4.70	3008.91	3004.21	160	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	10/17/19	3.36	3008.91	3005.55	170	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	01/20/20	3.43	3008.91	3005.48	140	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	05/07/20	2.09	3008.91	3006.82	170	<2.0	<2.0	<2.0	<6.0	--	--	--	--
	11/06/20	1.49	3008.91	3007.42	110	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
MTCA Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

MW9

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
20.5	07/25/19	4.39	3008.40	3004.01	150	1.1	<1.0	<1.0	<3.0	--	--	--	<1.0
	10/17/19	3.00	3008.40	3005.40	170	1.6	<1.0	<1.0	<3.0	--	--	--	<1.0
	01/20/20	3.04	3008.40	3005.36	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	05/07/20	1.61	3008.40	3006.79	140	<2.0	<2.0	<2.0	<6.0	--	--	--	--
	11/06/20	1.00	3008.40	3007.40	90	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
MTCA Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

TABLE 3
GROUNDWATER ANALYTICAL RESULTS

Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

MW10

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
14.8	07/25/19	5.63	3014.40	3008.77	120	1.3	<1.0	<1.0	<3.0	--	--	--	<1.0
	10/21/19	2.50	3014.40	3011.90	110	1.6	<1.0	<1.0	<3.0	--	--	--	<1.0
	01/21/20	3.37	3014.40	3011.03	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	05/07/20	2.09	3014.40	3012.31	64	<2.0	<2.0	<2.0	<6.0	--	--	--	--
	11/06/20	2.18	3014.40	3012.22	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
MTCA Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

MW11

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
14.2	07/25/19	7.98	3015.08	3007.10	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	10/17/19	6.48	3015.08	3008.60	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	01/20/20	4.62	3015.08	3010.46	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	05/07/20	2.72	3015.08	3012.36	<50	<2.0	<2.0	<2.0	<6.0	--	--	--	--
	11/06/20	3.08	3015.08	3012.00	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
MTCA Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

MW12

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
19.2	07/25/19	7.18	3013.24	3006.06	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	10/17/19	6.01	3013.24	3007.23	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	01/21/20	5.92	3013.24	3007.32	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
	05/07/20	4.90	3013.24	3008.34	<50	<2.0	<2.0	<2.0	<6.0	--	--	--	--
	11/09/20	4.92	3013.24	3008.32	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
MTCA Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

TABLE 3
GROUNDWATER ANALYTICAL RESULTS

Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

MW13

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
19.4	11/09/20	5.65	3014.65	3009.00	110	6.5	<1.0	1.5	3.2	--	--	--	<1.0
MTCA Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

MW14

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
19.7	11/09/20	6.03	3014.24	3008.21	390	7.3	<1.0	<1.0	37	--	--	--	<1.0
MTCA Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

MW15

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
19.2	11/09/20	6.66	3014.20	3007.54	2,100	36	1.5	65	12	--	--	--	<1.0
MTCA Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

MW16

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)*	Water Level Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	EDB	EDC	MTBE	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
14.3	11/09/20	3.32	3011.17	3007.85	<50	<1.0	<1.0	<1.0	<3.0	--	--	--	<1.0
MTCA Method A Cleanup Levels					800	5	1,000	700	1,000	0.01	5	20	15

EXPLANATION

MTCA = Model Toxic Control Act Cleanup Level (WAC173-340-900)

TOC = Top of Casing MSL = Mean Sea Level * = The Site was resurveyed on July 10, 2019 by Bush, Roed & Hitchings

< = not detected at indicated Laboratory Detection Limits -- = not analyzed NM = Not Measured

TPHg - Total Petroleum Hydrocarbons - Gasoline by Method NWTPH-Gx Benzene, Toluene, Ethylbenzene and Xylenes by EPA Method 8021B or 8260

MTBE = Methyl-tert-butyl-ether EDC = 1,2-Dichloroethane EDB = 1,2-Dibromoethane; by EPA Method 8260 SIM Total Lead by EPA Method 200.1

Bolded numbers and red-shaded cells denote concentrations above the MTCA Method A Cleanup Levels for groundwater

TABLE 4
SUBSLAB SOIL VAPOR RESULTS

Summit Deli & Chevron
521 State Route 906
Snoqualmie Pass, Washington

Aerotech Environmental Consulting, Inc. - Remedial Investigation Report, Revision 2, November 23, 2020

Sample Name	Vapor Point ID	Sample Date	Depth	APH EC5-8 Aliphatics	APH EC9-12 Aliphatics	APH EC9-10 Aromatics	Benzene	Toluene	Ethyl- benzene	Xylenes	Naphthalene	Helium
			Feet BGS	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	%
V-SS1	SS1	09/24/20	0.50	120	150	21	<2.4	7.6	<2.4	6.2	<2.4	0.0088
V-SS2	SS2	09/24/20	0.50	<88	2,400	18	<2.3	4.2	<2.3	5.5	<2.3	<0.0046
V-SS3	SS3	09/24/20	0.50	150	52	<11	<2.3	6.6	<2.3	4.7	<2.3	0.0079
V-SV1	SV1	09/24/20	3.5	2.8 x 10⁷	280,000	180,000	7,800	<5,100	40,000	140,000	<5,200	<0.0050
V-SV2	SV2	09/24/20	4.0	4.1 x 10⁶	140,000	51,000	6,300	<1,800	7,800	4,400	<1,800	0.0065
V-SV3	SV3	09/24/20	2.0	1,800	81	35	14	21	4.5	13.5	<2.3	0.0140
MTCA Method B Subslab Soil Gas Screening Levels				90,000	4,700	6,000	10.7	76,200	15,200	1,520	2.45	5*

EXPLANATION

MTCA = Model Toxic Control Act Cleanup Level (WAC173-340-900)

< = not detected at indicated Laboratory Detection Limits -- not analyzed NM = Not Measured

APH Aliphatics and Aromatics by Massachusetts APH, Rev. 1, 12/09

Benzene, Toluene, Ethylbenzene, Xylenes, Naphthalene by EPA TO-15

Helium by EPA 3C Modified

Bolded values indicate that the laboratory Minimum Detection Level is above the MTCA Method B Screening Level

Bolded numbers in red-shaded cells denote concentrations above the MTCA Method B Screening Levels for Subslab Vapor

Appendix A

Legal Description of Property

APPENDIX A
LEGAL DESCRIPTION OF PROPERTY

Parcel Number: 131936 (Kittitas County)

Name: Robert Etux Shin

Site Address: 521 SR 906 SNOQUALMIE PASS

**Legal Description: ACRES .88, SNOQUALMIE SUMMIT INN SHORT PLAT 89-01 LOT 2;
SEC. 4; TWP. 22; RGE. 11;**

Appendix B

Summary of Previous Investigations

APPENDIX B

Summary of Previous Investigations

Summit Deli & Chevron
521 WA 906
Snoqualmie Pass, Washington

Site Assessment

A Phase I Environmental Site Assessment (“ESA”), completed June 27, 2017 by Aerotech Environmental Consulting, Inc (“Aerotech”), identified Contaminants of Concern as compounds related to gasoline fueling operations and auto repair activities: Total Petroleum as Gasoline (“TPHg”), Diesel (“TPHd”), and Motor Oil (“TPHo”); Benzene, Toluene, Ethylbenzene, Xylenes (“BTEX”), the Fuel Additives Ethylene Dibromide (“EDB”), Ethylene Dichloride (“EDC”), and Methyl Tert-Butyl Ether (“MTBE”); Halogenated Volatile Organic Compounds (“HVOCs”), and Lead.

Based on the recommendations of the June 27, 2017 Phase I ESA, First Financial Northwest Bank retained Aerotech to conduct a Limited & Targeted Phase II Subsurface Investigation to determine if petroleum hydrocarbons had been released into the surrounding soil and groundwater. A total of 11 discrete soil samples were collected on August 9 and 10, 2017 from ten (10) soil boring locations for laboratory analysis. Additionally, four (4) water samples were collected from observation wells OBS-N, OBS-S, OBS-E, and OBS-W.

TPHg and BTEX were detected in concentrations above the Model Toxics Control Act (“MTCA”) Method A Cleanup Levels at the Site in soil in the vicinity of the UST Basin, Pump Islands, and the northwest Catch/Drainage Basin and in water from inside the UST Basin.

Based on the above results, Aerotech proposed additional assessment activities in a November 6, 2017 Proposed Work Plan - Colony Claim No. 258603. The objective of the scope of work was to provide additional lateral and vertical delineation of TPHg and benzene in soil and to install groundwater monitoring wells in order to initiate monitoring of TPHg and benzene in groundwater.

During the month of September 2018, Aerotech directed the installation of six on-Site groundwater monitoring wells, designated MW1 through MW6. Laboratory analytical results further confirmed the presence of TPHg and Benzene at concentrations above MTCA Method A cleanup levels in shallow soil to the south and west of the Pump Island, to the east of the UST Basin and in the vicinity of the western catch basin/dry well. Additionally, the groundwater sampling event conducted on September 26, 2018 indicated the presence of dissolved-phase petroleum hydrocarbons in groundwater.

In June 2019, Aerotech installed 6 additional groundwater monitoring wells. Three (MW7-MW9) groundwater monitoring wells were installed under a permit with the Washington State Department of Transportation within the shoulder of State Route 906. Three additional wells installed on the Bob’s Summit Deli & Chevron Property to laterally delineate the presence of petroleum hydrocarbons in groundwater. All soil

samples were reported below laboratory reporting limits. Samples collected from the newly installed wells will be discussed in a forthcoming groundwater monitoring report.

In September and October 2020, Aerotech installed eleven (11) soil borings, three (3) temporary soil vapor points, three (3) sub slab vapor points and four (4) additional wells. The soil borings and monitoring wells were installed along the western portion of the Site to further delineate in areas not previously accessible. The vapor samples collected from points installed beneath the sub-slab floor of the convenience store and from temporary locations beneath the canopy in the source area and near preferential pathways

Historical Remediation Activities

No interim remedial actions have been completed at the Site as of the date of this report.

Groundwater Monitoring Activities

On September 26, 2018, Aerotech initiated groundwater monitoring and sampling at the Site. Laboratory analytical results indicated the presence of TPHg and BTEX. Concentrations of TPHg, benzene, ethylbenzene, and xylenes were detected above MTCA Method A screening levels.

The most recent event in November 2020 indicates groundwater samples from MW2, MW4, MW6, MW13, MW14 and MW15 contain (TPHg and/or BTEX) at concentrations above the MTCA Method A screening levels.

Appendix C

Historical Soil Boring Logs

Depth (ft)	Groundwater	Visual or Olfactory Evidence	Blow Counts	Recovery	USCS Classification	Soil Classification/ Description	Well Construction
						UNIFIED SOIL CLASSIFICATION SYSTEM EXPLANATION	
					GW	GRAVELS , well-graded* OR Gravel+Sand mix, little-no fines	
					GP	GRAVELS , poorly-graded* OR Gravel+Sand mix, little-no fines	
					GM	GRAVELS , silty OR Gravel-sand-silt mix	
					GC	GRAVELS , clayey OR Gravel-sand-clay mix	
					SW	SAND , well-graded OR Gravelly Sands , little-no fines	
					SP	SAND , poorly-graded OR Gravelly Sands , little-no fines	
					SM	SAND , silty OR Sand-silt mix	
					SC	SAND , clayey OR Sand-clay mix	
					ML	SILT , inorganic (very fine sands, rock flour, silty or clayey fine sands) OR Clayey silts with slight plasticity	
					CL	CLAY , inorganic, low-med plasticity (gravelly, sandy, silty, lean)	
					OL	SILT , organic, AND SILT-CLAY , organic, low plasticity	
					MH	SILT , inorganic (micaceous or diatomaceous fn sandy/silty soils) OR SILTY SOILS, elastic SILTS	
					CH	CLAY , inorganic, high plasticity, fat clays	
					OH	CLAY , organic, med-high plasticity OR Organic SILTS	
					PT	PEAT and other highly organic SOILS	
						<p><i>* Terminology clarification: The term "Well graded" is a synonym for "Poorly sorted," both meaning that a wide range of particle sizes are present. The former term is employed in geotechnical descriptions, while the latter is preferred by the USDA in characterizing topsoils and subsoils.</i></p>	

Project Name: Summit Deli & Chevron

Project Number: 217-4028

Drilling Information

Drilling Contractor: SEP, Tumwater, WA
 Drilling Method: 2-inch Direct Push
 Sampler Type: Core sampler +
virgin poly-sleeve
 ECY Well Tag: N/A

Site Location: 521 State Route 906, Snoqualmie Pass, WA
AOC: Adjacent to Southern corner of the UST Basin
Borehole Location: 5.5' South of OBS-S

Approx. Surface Elev.: 3016' above MSL
 Work Date: 08/10/17

Logged by: N. Gerkin **Boring Depth:** 16 feet **GW Encountered:** YES

Depth (ft)	Groundwater	PID (ppm)	Sample	Blow Counts	Recovery	USCS Classification	Soil Classification/ Description	Well Construction
1							Asphalt	
2						GW	GRAVEL and SAND, fine to coarse subangular, gray-brown, dry, fine to coarse sand, very well graded, trace silt, No distinct odor.	
3		1.2						
4						SM	Silty SAND, fine to medium, dark brown, moist, trace organics, No distinct odor.	
5						GW	GRAVEL and SAND, fine to coarse subangular, gray-brown, dry, fine to coarse sand, very well graded, trace silt, Very slight petrol odor.	
6		1.8				GW	GRAVEL, small to med subang to subround, saturated (no fines)	
7						SM	Silty SAND, fine to coarse, gray, slightly moist, trace fine to medium subrounded to subangular gravel. Slight petrol odor.	
8								
9								
10		2.1	Lab			GM	GRAVEL and SAND with Silt, small to large subrounded to subangular gravel, fine to coarse sand, dark gray, moist, well graded, moderate petrol odor.	
11		1.9				GM	GRAVEL and SAND with Silt, small to large subrounded to subangular gravel, fine to coarse sand, dark gray, saturated @ 11, well graded, increased silt, moderate petrol odor.	
12								
13		0.1						
14								
15		0.0						
16								
17								
18								
19								
20								
21								
22								
23								
24							Bottom of borehole at 16 feet.	
25							No well installed. Borehole completed with bentonite chips.	



Project: Summit Deli and Chevron
Project No.: 218-09010
Address: 521 State Route 906
 Snoqualmie Pass, WA

Drilling Contractor: Standard Environmental Probe
Drilling Method: Direct Push
Borehole Diameter: 2-inch
Sampler Type: Macrocore

Logged by: Simon Payne
 Boring Depth: 20 Feet
 Groundwater Encountered: 8 Feet
 Static Groundwater: 6.36

Surface Elevation: 3,016.57
 Lat/Long: 47.423156° / -121.412676°
 Start Date: 09/13/18
 End Date: 09/17/18

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GP	Surface: 1-inch asphalt GRAVEL: Dark brown angular fine gravel with 25% coarse gravel; 20% coarse sand; wet; no product odor	
2						
3						
4				GM	SILTY GRAVEL: Dark grey angular coarse gravel with 20% fine gravel; 25% silt; strong induration; damp to wet; no product odor	
5						
6						
7						
8				GP	GRAVEL: Dark grey fine gravel with 35% angular coarse gravel; 10% coarse sand; trace silt; saturated; no product odor	
9						
10						
11						
12						
13						
14						
15						
16					Boring terminated at 16 feet below ground surface ("bgs"). On 09/17/18 Holt Services, Inc. overdrilled the boring to 20 feet bgs and installed a 2-inch diameter groundwater monitoring well screened from 7.5 to 17.5 feet bgs.	
17						
18						
19						



Project: Summit Deli and Chevron
Project No.: 218-09010
Address: 521 State Route 906
 Snoqualmie Pass, WA

Drilling Contractor: Standard Environmental Probe
Drilling Method: Direct Push
Borehole Diameter: 2-inch
Sampler Type: Macrocore

Logged by: Simon Payne
 Boring Depth: 20 Feet
 Groundwater Encountered: 8 Feet
 Static Groundwater: 7.35

Surface Elevation: 3,015.43
 Lat/Long: 47.423040° / -121.412792°
 Start Date: 09/13/18
 End Date: 09/17/18

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GP	Surface: 1-inch asphalt GRAVEL: Dark brown fine gravel with 25% angular coarse gravel; 15% coarse sand; damp; faint product odor	
2						
3						
4						
5				GC	CLAYEY GRAVEL: Dark olive green subangular coarse gravel with 20% fine gravel; 25% low plasticity clay; weak induration; wet; faint product odor	
6						
7						
8						
9						
10				SP	SAND with SILT: Dark olive brown medium sand with 20% coarse sand; 10% subangular coarse gravel; 15% fine sand; 5% silt; saturated; weak induration; faint product odor	
11			0.5			
12						
13					Boring terminated at 16 feet below ground surface ("bgs"). On 09/17/18 Holt Services, Inc. overdrilled the boring to 20 feet bgs and installed a 2-inch diameter groundwater monitoring well screened from 7 to 17 feet bgs.	
14						
15						
16						
17						
18						
19						



Project: Summit Deli and Chevron
Project No.: 219-09010
Address: 521 State Route 906
 Snoqualmie Pass, WA

Drilling Contractor: Standard Environmental Probe
Drilling Method: Direct Push
Borehole Diameter: 2-inch
Sampler Type: Macrocore

Logged by: Simon Payne
 Boring Depth: 20 Feet
 Groundwater Encountered: 10 Feet
 Static Groundwater: 7.04

Surface Elevation: 3,017.28
 Lat/Long: 47.423087° / -121.412494°
 Start Date: 09/13/18
 End Date: 09/17/18

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GP	Surface: 1-inch asphalt GRAVEL: Dark grey fine gravel with 20% subangular coarse gravel; 15% coarse sand; damp; no product odor	
2						
3						
4						
5						
6			0.0			
7						
8						
9						
10				SP	SAND with SILT: Dark grey coarse sand with 20% fine gravel; 30% medium sand; strong induration; saturated; no product odor	
11			0.1			
12						
13				GP	GRAVEL: Dark grey angular coarse gravel with 20% fine gravel; 10% coarse sand; trace silt; strong induration; saturated; no product odor	
14						
15			0.1			
16					Boring terminated at 16 feet below ground surface ("bgs"). On 09/17/18 Holt Services, Inc. overdrilled the boring to 20 feet bgs and installed a 2-inch diameter groundwater monitoring well screened from 8 to 18 feet bgs.	
17						
18						
19						



Project: Summit Deli and Chevron
Project No.: 218-09010
Address: 521 State Route 906
 Snoqualmie Pass, WA

Drilling Contractor: Standard Environmental Probe
Drilling Method: Direct Push
Borehole Diameter: 2-inch
Sampler Type: Macrocore

Logged by: Simon Payne
 Boring Depth: 15 Feet
 Groundwater Encountered: No
 Static Groundwater: 8.68

Surface Elevation: 3,017.58
 Lat/Long: 47.422906° / -121.412627°
 Start Date: 09/14/18
 End Date: 09/18/18

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: 1-inch asphalt SILTY GRAVEL: Dark red-brown subangular coarse gravel with 20% fine gravel; 15% silt; moderate induration; damp; faint to strong product odor	
2			8.6			
3						
4			28			
5						
6						
7				SM	SILTY SAND: Dark olive green fine sand with 40% silt; strong induration; damp; strong product odor	
8			8.6 2.8			
9						
10			6.5			
11						
12						
13						
14						
15					Boring terminated at 12 feet below ground surface ("bgs"). On 09/18/18 Holt Services, Inc. overdrilled the boring to 15 feet bgs and installed a 2-inch diameter groundwater monitoring well screened from 4 to 14 feet bgs.	
16						
17						
18						
19						



Project: Summit Deli and Chevron
Project No.: 218-09010
Address: 521 State Route 906
 Snoqualmie Pass, WA

Drilling Contractor: Standard Environmental Probe
Drilling Method: Direct Push
Borehole Diameter: 2-inch
Sampler Type: Macrocore

Logged by: Simon Payne
 Boring Depth: 15 Feet
 Groundwater Encountered: 8 feet
 Static Groundwater: 8.50

Surface Elevation: 3,017.43
 Lat/Long: 47.422914° / -121.412543°
 Start Date: 09/14/18
 End Date: 09/18/18

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction	
1				GM	Surface: 6-inch concrete		
2			60			SILTY GRAVEL: Dark brown fine gravel with 20% coarse sand; trace silt; damp; strong product odor	
3							
4			127.3			No recovery 4 to 8 feet	
5							
6							
7							
8							
9						Dark grey to dark brown angular coarse gravel with 20% fine gravel; 10% coarse sand; 5% silt; strong induration; saturated; strong product odor below 8 feet	
10			54.3				
11							
12							
13							
14							
15						Boring terminated at 12 feet below ground surface ("bgs"). On 09/18/18 Holt Services, Inc. overdrilled the boring to 15 feet bgs and installed a 2-inch diameter groundwater monitoring well screened from 4 to 14 feet bgs.	
16							
17							
18							
19							



Project: Summit Deli and Chevron
Project No.: 218-09010
Address: 521 State Route 906
 Snoqualmie Pass, WA

Drilling Contractor: Standard Environmental Probe
Drilling Method: Direct Push
Borehole Diameter: 2-inch
Sampler Type: Macrocore

Logged by: Simon Payne
 Boring Depth: 15 Feet
 Groundwater Encountered: 9 feet
 Static Groundwater: 8.92

Surface Elevation: 3,017.24
 Lat/Long: 47.422903° / -121.412473°
 Start Date: 09/14/18
 End Date: 09/18/18

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: 1-inch asphalt SILTY GRAVEL: Dark brown coarse gravel with 20% fine gravel; 10% coarse sand; 15% silt; damp; strong induration; strong product odor	
2		49.6				
3						
4						
5					Dark grey with 60% angular coarse gravel; 20% fine gravel; 5% coarse sand; 15% silt; strong induration; damp to dry; no product odor	
6						
7						
8			0.5			
9					Saturated below 9 feet	
10						
11						
12						
13						
14						
15					Boring terminated at 12 feet below ground surface ("bgs"). On 09/18/18 Holt Services, Inc. overdrilled the boring to 15 feet bgs and installed a 2-inch diameter groundwater monitoring well screened from 4 to 14 feet bgs.	
16						
17						
18						
19						



Project: Summit Deli and Chevron
Address: 521 State Route 906
Snoqualmie Pass, WA

Drilling Contractor: Holt Services Inc.
Drilling Method: Hollow Stem Auger
Borehole Diameter: 8.25-inch
Sampler Type: Split Spoon

Logged by: Nick Gerkin
Boring Depth: 24 feet
Groundwater Encountered: 15 feet
Static Groundwater: 4.05

Surface Elevation: 3,009.45
Northing/Easting: 154688.0899/1497000.7914
Start Date: 06/12/19
End Date: 06/12/19

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: 1-inch asphalt SILTY GRAVEL: Dark brown coarse gravel with 20% fine gravel; 10% coarse sand; 15% silt; damp	
2		9	0.2			
3		15				
4		10	0.2		Dark brown, highly organic, lightweight, peaty, damp	
5		7				
6		8				
7		3				
8		7	0.0	SM	SILTY SAND: Dark grey with 60% angular coarse gravel; 20% fine gravel; 5% coarse sand; 15% silt; strong induration; damp to dry; no product odor	
9		13				
10		10				
11		7	0.0	SP	SAND with Gravel: coarse sand, fine gravel, heaving sand and water	
12		13				
13		10				
14						
15		10	0.0			
16		11				
17		12				
18						
19						



Project: Summit Deli and Chevron
Address: 521 State Route 906
Snoqualmie Pass, WA

Drilling Contractor: Holt Services Inc.
Drilling Method: Hollow Stem Auger
Borehole Diameter: 8.25-inch
Sampler Type: Split Spoon

Logged by: Nick Gerkin
Boring Depth: 24 feet
Groundwater Encountered: 15 feet
Static Groundwater: 4.05

Surface Elevation: 3,009.45
Northing/Easting: 154688.0899/1497000.7914
Start Date: 06/12/19
End Date: 06/12/19

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
21				SP	SAND with Gravel: coarse sand, fine gravel, heaving sand and water	
22						
23						
24						
25					Boring terminated at 24 feet below ground surface ("bgs"). Holt Services, Inc. installed a 2-inch diameter groundwater monitoring well screened from 9 to 24 feet bgs.	
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						



Project: Summit Deli and Chevron
Address: 521 State Route 906
Snoqualmie Pass, WA

Drilling Contractor: Holt Services Inc.
Drilling Method: Hollow Stem Auger
Borehole Diameter: 8.25-inch
Sampler Type: Split Spoon

Logged by: Nick Gerkin
Boring Depth: 21 feet
Groundwater Encountered: 15 feet
Static Groundwater: 4.05

Surface Elevation: 3,009.13
Northing/Easting: 154742.5706/1496960.8811
Start Date: 06/13/19
End Date: 06/13/19

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GP	Surface: 1-inch asphalt GRAVEL: Gray - brown coarse gravel trace silt; moist	
2		9	0.2			
3		15				
4		10				
5		2	0.0	SM	SILT: Brown, dry, medium plasticity	
6		2				
7		1				
8		2	0.0			
9		4				
10		4	0.0			
11		16			SILT: Gray	
12		16		SP	SAND with Gravel: Gray, coarse sand, fine gravel, moist	
13		8	0.0			
14		22				
15		16				
16						
17						
18						
19						



Project: Summit Deli and Chevron
Address: 521 State Route 906
Snoqualmie Pass, WA

Drilling Contractor: Holt Services Inc.
Drilling Method: Hollow Stem Auger
Borehole Diameter: 8.25-inch
Sampler Type: Split Spoon

Logged by: Nick Gerkin
Boring Depth: 21 feet
Groundwater Encountered: 15 feet
Static Groundwater: 4.05

Surface Elevation: 3,009.13
Northing/Easting: 154742.5706/1496960.8811
Start Date: 06/12/19
End Date: 06/12/19

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
21				SP	SAND with Gravel: Gray coarse sand, fine gravel, saturated	
22					Boring terminated at 21 feet below ground surface ("bgs"). Holt Services, Inc. installed a 2-inch diameter groundwater monitoring well screened from 4 to 14 feet bgs.	
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						



Project: Summit Deli and Chevron
Address: 521 State Route 906
Snoqualmie Pass, WA

Drilling Contractor: Holt Services Inc.
Drilling Method: Hollow Stem Auger
Borehole Diameter: 8.25-inch
Sampler Type: Split Spoon

Logged by: Nick Gerkin
Boring Depth: 21 feet
Groundwater Encountered: 6 feet
Static Groundwater:

Surface Elevation: 3,008.57
Northing/Easting 154803.2729/1496918.5185
Start Date: 06/13/19
End Date: 06/13/19

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GP	Surface: 1-inch asphalt	
2						
3						
4						
5		0	0.1		GRAVEL: Brown-gray, saturated, small to medium	
6		1				
7		2				
8		1	0.4		SILTY SAND: Brown-gray, wet, well graded	
9		2				
10		2				
11		40	0.0		SILT with CLAY: Brown to 11' bgs then gray, trace fine sand, dry	
12		8				
13		10				
14		2	0.5	SP	SAND with Gravel: Gray, medium to coarse sand, small to medium gravel, saturated	
15		4				
16		4				
17						
18						
19						

while drilling to 15 ft bgs water rose rapidly to ~4 ft bgs



Project: Summit Deli and Chevron
Address: 521 State Route 906
Snoqualmie Pass, WA

Drilling Contractor: Holt Services Inc.
Drilling Method: Hollow Stem Auger
Borehole Diameter: 8.25-inch
Sampler Type: Split Spoon

Logged by: Nick Gerkin
Boring Depth: 21 feet
Groundwater Encountered: 6 feet
Static Groundwater:

Surface Elevation: 3,008.57
Northing/Easting 154803.2729/1496918.5185
Start Date: 06/13/19
End Date: 06/13/19

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
21						
22					Boring terminated at 21 feet below ground surface ("bgs"). Holt Services, Inc. installed a 2-inch diameter groundwater monitoring well screened from 4 to 14 feet bgs.	
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						



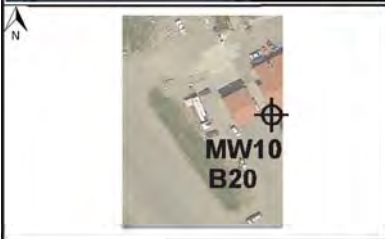
Project: Summit Deli and Chevron
Address: 521 State Route 906
Snoqualmie Pass, WA

Drilling Contractor: Holt Services Inc.
Drilling Method: Hollow Stem Auger
Borehole Diameter: 8.25-inch
Sampler Type: Split Spoon

Logged by: Nick Gerkin
Boring Depth: 15 feet
Groundwater Encountered: 6 feet
Static Groundwater: 3.70

Surface Elevation: 3,014.58
Northing/Easting: 154893.6957/1496970.3680
Start Date: 06/12/19
End Date: 06/12/19

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1						
2						
3						
4						
5		50-6"	0.1	GM	GRAVEL SAND SILT: Brown-gray, dry at 5 ft then moist at 6 ft bgs	
6						
7						
8						
9						
10		10-24	0.0	SP	SAND with Gravel: Gray, medium to coarse sand, small to medium gravel, saturated	
11		50-5"				
12						
13						
14						
15						
16					Boring terminated at 15 feet below ground surface ("bgs"). Holt Services, Inc. installed a 2-inch diameter groundwater monitoring well screened from 5 to 15 feet bgs.	
17						
18						
19						



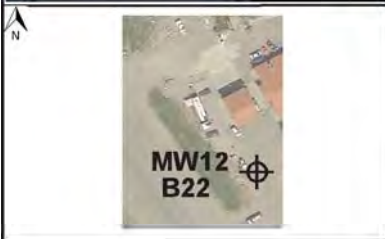
Project: Summit Deli and Chevron
Address: 521 State Route 906
Snoqualmie Pass, WA

Drilling Contractor: Holt Services Inc.
Drilling Method: Hollow Stem Auger
Borehole Diameter: 8.25-inch
Sampler Type: Split Spoon

Logged by: Nick Gerkin
Boring Depth: 15 feet
Groundwater Encountered: 13 feet
Static Groundwater: 4.48

Surface Elevation: 3,015.33
Northing/Easting: 154810.7107/1497081.2275
Start Date: 06/14/19
End Date: 06/14/19

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1						
2		50-2"	0.0	GM	GRAVEL SAND SILT: Brown-gray, dry	
3						
4		50-5"	0.0		moist at 4-5 ft bgs, then dry	
5		36	0.0		Same as above	
6		50-6"				
7						
8		50-4"	0.0		Same as above	
9						
10		30	0.0		Same as above	
11		25				
12		50-5"				
13				SM	SILTY SAND with Gravel: Gray, medium to coarse sand, small to medium gravel, saturated	
14					soupy, saturated, silt and sand with some small gravel rising as going to 15 ft bgs	
15						
16					Boring terminated at 15 feet below ground surface ("bgs"). Holt Services, Inc. installed a 2-inch diameter groundwater monitoring well screened from 4 to 14 feet bgs.	
17						
18						
19						



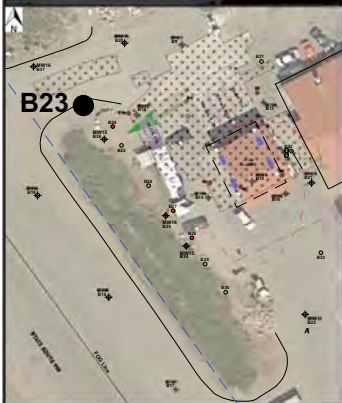
Project: Summit Deli and Chevron
Address: 521 State Route 906
Snoqualmie Pass, WA

Drilling Contractor: Holt Services Inc.
Drilling Method: Hollow Stem Auger
Borehole Diameter: 8.25-inch
Sampler Type: Split Spoon

Logged by: Nick Gerkin
Boring Depth: 19 feet
Groundwater Encountered: 15 feet
Static Groundwater: 6.83

Surface Elevation: 3,013.65
Northing/Easting: 154732.4836/1497077.5093
Start Date: 06/14/19
End Date: 06/14/19

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1						
2						
3						
4						
5		31	0.0	GM	SILTY GRAVEL: Brown-gray, dry, medium to large gravel	
6		50-6"				
7						
8						
9						
10		11	0.0	GP	GRAVEL with SAND: Brown gray, moist, grades to Sand with Gravel	
11		31				
12		31				
13						
14						
15				SP	SAND with GRAVEL: Gray, medium to coarse sand, small gravel, saturated	
16						
17						
18					Boring terminated at 19 feet below ground surface ("bgs"). Holt Services, Inc. installed a 2-inch diameter groundwater monitoring well screened from 4 to 19 feet bgs.	
19						



Site: Bob's Summit Deli and Chevron
Project: RI Rev 2
Address: 521 State Route 906
 Snoqualmie Pass, WA

Drilling Contractor: Standard Environmental Probe
Drilling Method: Direct Push
Borehole Diameter: 2-inch
Sampler Type: Macrocore

Logged by: Simon Payne
 Boring Depth: 12 Feet
 Groundwater Encountered:
 Static Groundwater:

Surface Elevation: ~3,020
 Lat/Long:
 Start Date: 09/24/20
 End Date: 09/24/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: Gravel SILTY GRAVEL: Dark green-brown coarse subangular gravel with 15% medium sand; 25% silt; strong induration; dry; no product odor	[Well Construction Diagram]
2						
3			0.3			
4						
5			0.2			
6						
7				SP	SAND with SILT: Dark green fine sand with 10% silt; strong induration; dry; no product odor	
8						
9						
10						
11				GM	SILTY GRAVEL: Dark green brown coarse gravel with 20% coarse sand; 20% silt; strong induration; wet; no product odor	
12					Boring terminated at 12 feet below ground surface	
13						
14						
15						
16						
17						
18						
19						



Site: Bob's Summit Deli and Chevron
Project: RI Rev 2
Address: 521 State Route 906
 Snoqualmie Pass, WA

Drilling Contractor: Standard Environmental Probe
Drilling Method: Direct Push
Borehole Diameter: 2-inch
Sampler Type: Macrocore

Logged by: Simon Payne
 Boring Depth: 12 Feet
 Groundwater Encountered:
 Static Groundwater:

Surface Elevation: ~3,020
 Lat/Long:
 Start Date: 09/24/20
 End Date: 09/24/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: Gravel SILTY GRAVEL: Light brown coarse subangular gravel with 20% fine sand; 35% silt; moderate induration; dry; no product odor	
2						
3						
4						
5						
6						
7			1.2			
8				OL	ORGANIC CLAY: Black low plasticity clay with 0 to 20% fine sand; 30% rootlets and organic matter; moderate induration; wet; no product odor	
9						
10						
11			5.0			
12				GM	SILTY GRAVEL: Dark green-brown subangular coarse gravel with 25% coarse sand; 25% silt; strong induration; wet; no product odor	
Boring terminated at 12 feet below ground surface						
13						
14						
15						
16						
17						
18						
19						



Site: Bob's Summit Deli and Chevron
Project: RI Rev 2
Address: 521 State Route 906
 Snoqualmie Pass, WA

Drilling Contractor: Standard Environmental Probe
Drilling Method: Direct Push
Borehole Diameter: 2-inch
Sampler Type: Macrocore

Logged by: Simon Payne
 Boring Depth: 12 Feet
 Groundwater Encountered: 8 Feet
 Static Groundwater:

Surface Elevation: ~3,020
 Lat/Long:
 Start Date: 09/24/20
 End Date: 09/24/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: Gravel SILTY GRAVEL: Light brown fine gravel with 25% subangular coarse gravel; 10% coarse to medium sand; weak induration; dry; no product odor	
2						
3						
4						
5						
6				GW	WELL GRADED GRAVEL: Dominantly dark green-brown coarse gravel with 20% fine sand; trace silt; damp; no product odor	
7			0.7			
8					Saturated below 8 feet	
9				OL	ORGANIC CLAY: Dark brown low plasticity clay with 30% organic matter; 0 to 20% fine to medium sand; moderate induration; no product odor	
10						
11			1.5			
12					Boring terminated at 12 feet below ground surface	
13						
14						
15						
16						
17						
18						
19						



Site: Bob's Summit Deli and Chevron

Drilling Contractor: Standard Environmental Probe

Project: RI Rev 2

Drilling Method: Direct Push

Address: 521 State Route 906
Snoqualmie Pass, WA

Borehole Diameter: 2-inch

Sampler Type: Macrocore

Logged by: Simon Payne
Boring Depth: 12 Feet
Groundwater Encountered: 9 Feet
Static Groundwater:

Surface Elevation: ~3,020
Lat/Long:
Start Date: 09/24/20
End Date: 09/24/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: Gravel SILTY GRAVEL: Light brown to dark green-brown subangular coarse gravel; 20% fine gravel; 10% coarse sand; 20% silt; strong induration; dry; no product odor	
2						
3						
4						
5			0.8			
6				OL	ORGANIC CLAY: Dark brown low plasticity clay with 20% organic matter; 10% fine sand; moderate induration; damp; no product odor	
7			0.6			
8						
9				GM	SILTY GRAVEL: Dark green angular coarse gravel with 20% coarse sand; 30% silt; strong induration; saturated; no product odor	
10						
11			1.3			
12					Boring terminated at 12 feet below ground surface	
13						
14						
15						
16						
17						
18						
19						



Site: Bob's Summit Deli and Chevron

Drilling Contractor: Standard Environmental Probe

Project: RI Rev 2

Drilling Method: Direct Push

Address: 521 State Route 906
Snoqualmie Pass, WA

Borehole Diameter: 2-inch

Sampler Type: Macrocore

Logged by: Simon Payne

Surface Elevation: ~3,020

Boring Depth: 12 Feet

Lat/Long:

Groundwater Encountered:

Start Date: 09/24/20

Static Groundwater:

End Date: 09/24/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: Gravel SILTY GRAVEL: Light brown to dark brown subangular coarse gravel with 20% fine sand; 25% silt; moderate induration; dry; no product odor	
2						
3			1.2			
4						
5						
6						
7			1.2			
8				OL	ORGANIC CLAY: Dark brown low plasticity clay with 10% organic matter; 10% fine sand; moderate induration; damp; no product odor	
9				SM	SILTY SAND: Green to yellow-brown medium sand with 20% fine sand; 10% coarse sand; 20% silt; strong induration; damp to wet; no product odor	
10						
11			11.2			
12					Boring terminated at 12 feet below ground surface	
13						
14						
15						
16						
17						
18						
19						



Site: Bob's Summit Deli and Chevron

Drilling Contractor: Standard Environmental Probe

Project: RI Rev 2

Drilling Method: Direct Push

Address: 521 State Route 906
Snoqualmie Pass, WA

Borehole Diameter: 2-inch

Sampler Type: Macrocore

Logged by: Simon Payne

Surface Elevation: ~3,020

Boring Depth: 12 Feet

Lat/Long:

Groundwater Encountered:

Start Date: 09/24/20

Static Groundwater:

End Date: 09/24/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: Gravel SILTY GRAVEL: Light brown and light olive green subangular coarse gravel with 20% fine gravel; 30% silt; strong induration; dry; no product odor	
2						
3			0.6			
4						
5			0.8			
6						
7						
8						
9						
10				SC	CLAYEY SAND: Olive green fine sand with 30% low plasticity clay; moderate induration; wet; no product odor	
11			11.1			
12				SM	SILTY SAND: Olive-green medium sand with 10% coarse sand; 30% silt; strong induration; dry; no product odor	
					Boring terminated at 12 feet below ground surface	
13						
14						
15						
16						
17						
18						
19						



Site: Bob's Summit Deli and Chevron

Drilling Contractor: Standard Environmental Probe

Project: RI Rev 2

Drilling Method: Direct Push

Address: 521 State Route 906
Snoqualmie Pass, WA

Borehole Diameter: 2-inch

Sampler Type: Macrocore

Logged by: Simon Payne

Surface Elevation: ~3,020

Boring Depth: 12 Feet

Lat/Long:

Groundwater Encountered:

Start Date: 09/24/20

Static Groundwater:

End Date: 09/24/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: Gravel SILTY GRAVEL: Yellow-brown subrounded coarse gravel with 20% fine gravel; 15% fine sand; 20% silt; strong induration; dry; no product odor	
2						
3			1.2			
4						
5						
6						
7			1.1			
8				SM	SILTY SAND: Dark brown fine sand with 10% coarse gravel; 35% silt; 5% low plasticity clay and organic matter; damp to wet; no product odor	
9						
10						
11			0.8			
12					Boring terminated at 12 feet below ground surface	
13						
14						
15						
16						
17						
18						
19						



Site: Bob's Summit Deli and Chevron

Drilling Contractor: Standard Environmental Probe

Project: RI Rev 2

Drilling Method: Direct Push

Address: 521 State Route 906
Snoqualmie Pass, WA

Borehole Diameter: 2-inch

Sampler Type: Macrocore

Logged by: Simon Payne
Boring Depth: 12 Feet
Groundwater Encountered:
Static Groundwater:

Surface Elevation: ~3,020
Lat/Long:
Start Date: 09/24/20
End Date: 09/24/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: Gravel SILTY GRAVEL: Light to dark brown angular coarse gravel with 25% fine gravel; 10 to 25% silt; strong induration; dry; no product odor	
2						
3			0.9			
4						
5						
6			0.6	OL	ORGANIC CLAY: Dark brown low plasticity clay with organic matter with inch-scale sand lens; 20% fine sand; moderate induration; wet; no product odor	
7						
8						
9						
10			0.5	SM	SILTY SAND: Dark olive-green fine sand with 30% silt; strong induration; wet; no product odor	
11						
12					Boring terminated at 12 feet below ground surface	
13						
14						
15						
16						
17						
18						
19						



Site: Bob's Summit Deli and Chevron

Drilling Contractor: Standard Environmental Probe

Project: RI Rev 2

Drilling Method: Direct Push

Address: 521 State Route 906
Snoqualmie Pass, WA

Borehole Diameter: 2-inch

Sampler Type: Macrocore

Logged by: Simon Payne

Surface Elevation: ~3,020

Boring Depth: 12 Feet

Lat/Long:

Groundwater Encountered:

Start Date: 09/24/20

Static Groundwater:

End Date: 09/24/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: Gravel SILTY GRAVEL: Dark grey angular coarse gravel with 20% fine gravel; 20% silt; strong induration; damp; no product odor	
2						
3			0.9			
4						
5					Wet below 5 feet	
6			0.6			
7						
8						
9						
10						
11			0.4			
12					Boring terminated at 12 feet below ground surface	
13						
14						
15						
16						
17						
18						
19						



Site: Bob's Summit Deli and Chevron

Drilling Contractor: Standard Environmental Probe

Project: RI Rev 2

Drilling Method: Direct Push

Address: 521 State Route 906
Snoqualmie Pass, WA

Borehole Diameter: 2-inch

Sampler Type: Macrocore

Logged by: Simon Payne

Surface Elevation: ~3,020

Boring Depth: 6 Feet

Lat/Long:

Groundwater Encountered:

Start Date: 09/24/20

Static Groundwater:

End Date: 09/24/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: Gravel SILTY GRAVEL: Red-brown angular coarse gravel with 35% silt; moderate induration; wet; no product odor	
2			0.7			
3						
4					Dark olive-green below 4 feet	
5			0.3			
6					Boring terminated at 6 feet below ground surface	
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						



Site: Bob's Summit Deli and Chevron

Drilling Contractor: Standard Environmental Probe

Project: RI Rev 2

Drilling Method: Direct Push

Address: 521 State Route 906
Snoqualmie Pass, WA

Borehole Diameter: 2-inch

Sampler Type: Macrocore

Logged by: Simon Payne
Boring Depth: 9 Feet
Groundwater Encountered:
Static Groundwater:

Surface Elevation: ~3,020
Lat/Long:
Start Date: 09/24/20
End Date: 09/24/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: 1-inch asphalt SILTY GRAVEL: Light brown angular coarse gravel with 25% coarse sand; 30% silt; strong induration; dry; no product odor	
2			0.8			
3					Trace organic matter 3 to 4 feet	
4						
5						
6					Dark grey with 70% coarse angular gravel; 10% coarse sand; 20% silt; damp to wet; no product odor	
7						
8			0.5			
9					Boring terminated at 9 feet below ground surface	
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						



Site: Bob's Summit Deli and Chevron

Drilling Contractor: Boretac 1

Project: RI Rev 2

Drilling Method: Hollow Stem Auger

Address: 521 State Route 906
Snoqualmie Pass, WA

Borehole Diameter: 6.25-inch

Sampler Type: Split Spoon

Logged by: Simon Payne

Surface Elevation: ~3,020

Boring Depth: 20 Feet

Lat/Long:

Groundwater Encountered: 15 Feet

Start Date: 10/01/20

Static Groundwater:

End Date: 10/01/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: Gravel SILTY GRAVEL: Dark green-brown coarse subangular gravel with 15% medium sand; 25% silt; strong induration; dry; no product odor	
2						
3						
4						
5						
6						
7						
8						
9						
10		26				
11		50/3				
12		12	4.6			
12		50/4				
13						
14						
15		50/4			Saturated below 15 feet	
16						
17						
18						
19						
Boring terminated at 20 feet below ground surface						



Site: Bob's Summit Deli and Chevron

Drilling Contractor: Boretac 1

Project: RI Rev 2

Drilling Method: Hollow Stem Auger

Address: 521 State Route 906
Snoqualmie Pass, WA

Borehole Diameter: 6.25-inch

Sampler Type: Split Spoon

Logged by: Simon Payne
Boring Depth: 20 Feet
Groundwater Encountered: 15 Feet
Static Groundwater:

Surface Elevation: ~3,020
Lat/Long:
Start Date: 10/01/20
End Date: 10/01/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: Gravel SILTY GRAVEL: Dark grey coarse subangular gravel with 30% coarse sand; 20% silt; very dense; damp; no product odor	
2						
3						
4						
5						
6						
7						
8						
9						
10		23	7.7		Strong product odor below 10 feet	
11		50		OC	ORGANIC CLAY: Dark brown low plasticity clay with 10% subrounded coarse gravel; very dense; wet; no product odor	
12						
13				GM	SILTY GRAVEL: Dark grey subangular coarse gravel with 35% coarse sand; 15% silt; very dense; saturated; no product odor	
14						
15		12			Saturated below 15 feet	
16		16				
17		50				
18						
19						
Boring terminated at 20 feet below ground surface						



Site: Bob's Summit Deli and Chevron

Drilling Contractor: Boretac 1

Project: RI Rev 2

Drilling Method: Hollow Stem Auger

Address: 521 State Route 906
Snoqualmie Pass, WA

Borehole Diameter: 6.25-inch

Sampler Type: Split Spoon

Logged by: Simon Payne
Boring Depth: 20 Feet
Groundwater Encountered: 15 Feet
Static Groundwater:

Surface Elevation: ~3,020
Lat/Long:
Start Date: 10/01/20
End Date: 10/01/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction	
1				GM	Surface: Gravel SILTY GRAVEL: Medium brown subangular coarse gravel with 20% coarse sand; 25% silt; 5% organic low plasticity clay; loose; damp; no product odor		
2							
3							
4							
5							
6							
7							
8							
9							
10		2	7.7				
11		2 6					
12							
13							
14							
15		50/6					Saturated below 15 feet
16							
17							
18							
19							
Boring terminated at 20 feet below ground surface							



Site: Bob's Summit Deli and Chevron

Drilling Contractor: Boretac 1

Project: RI Rev 2

Drilling Method: Hollow Stem Auger

Address: 521 State Route 906
Snoqualmie Pass, WA

Borehole Diameter: 6.25-inch

Sampler Type: Split Spoon

Logged by: Simon Payne

Surface Elevation: ~3,020

Boring Depth: 15 Feet

Lat/Long:

Groundwater Encountered:

Start Date: 10/01/20

Static Groundwater:

End Date: 10/01/20

Depth (Ft)	Sample Interval/ Recovery	Blow Counts	PID Reading	USCS Classification	Description	Well Construction
1				GM	Surface: Gravel SILTY GRAVEL: Dark grey coarse gravel with 25% coarse sand; 25% silt; very dense; damp; no product odor	
2						
3						
4						
5						
6						
7						
8						
9						
10		15				
11		23				
12		50				
13						
14						
15					Boring terminated at 15 feet below ground surface	
16						
17						
18						
19						

Appendix D
Field Protocols

AEROTECH

Environmental Consulting Inc.

13925 Interurban Avenue South, Suite 210
Seattle, Washington 98168
(360) 710-5899

512 W. International Airport Road, Suite 201
Anchorage, Alaska 99518
(907) 575-6661

SOIL BORING AND WELL INSTALLATION STANDARD OPERATING PROCEDURE

EQUIPMENT (*Items in italic provided by drilling subcontractor, verify according to the site sampling plan they bring the appropriate equipment and material.*)

- Sampling and Analyses Plan (SAP)
- Site-specific sampling plan
- Sample location map
- Sample table
- Safety equipment, as specified in the Health and Safety Plan
- Permanent pens/marker (e.g. Sharpies®)
- Site logbook, boring log and/or sampling form
- Camera
- Candlestick/cones/barricade
- Caution tape
- Trash bags/plastic sheeting
- Assorted tools (e.g. shovels, wrenches, etc.)
- *Annular materials: silica sand, bentonite pellets and chips, grout*
- *Monitoring well materials: 2-inch schedule 40 PVC riser, well screen and end caps*
- *Completion materials: posts or traffic rated steel monuments, concrete mix, concrete forms*
- *Drilling rig (e.g. hollow stem auger, air/mud rotary, direct push, or sonic)*
- *Disposable acetate liners for direct push*
- *Decontamination equipment such as pressure washer to decontaminate rig and bucket with water and phosphate-free soap (e.g. Alconox®, Liquinox®) for split spoon samplers*

Preliminary Activities

Prior to the onset of field activities at the site, Aerotech obtains the appropriate permit(s) from the governing agency(s). Advance notification is made as required by the agency(s) prior to the start of work. Aerotech marks the borehole locations and contacts the local one call utility locating service at least 2 full business days prior to the start of work to mark buried utilities. Borehole locations may also be checked for buried utilities by a private geophysical surveyor. Additionally, borehole locations may be cleared via air-knife and vacuum operations where proposed locations are in close proximity of buried utilities. Fieldwork is conducted under the advisement of a state registered professional geologist. Monitoring well construction will

comply with Monitoring Well Construction: General, 690-240-100 through Well Seals, WAC 173-160.

Drilling

Aerotech contracts a licensed driller to advance each boring and collect soil samples. The specific drilling method (e.g., hollow-stem auger, direct push method, or sonic drilling), sampling method [e.g., core barrel or California-modified split spoon sampler (CMSSS)] and sampling depths are documented on the boring log and may be specified in a work plan. Soil samples are typically collected at the capillary fringe and at 5-foot intervals to the total depth of the boring. To determine the depth of the capillary fringe prior to drilling, the static groundwater level is measured with a water level indicator in the closest monitoring well to the boring location, if available.

The borehole is advanced to just above the desired sampling depth. For CMSSSs, the sampler is placed inside the auger and driven to a depth of 18 inches past the bit of the auger. The sampler is driven into the soil with a standard 140-pound hammer repeatedly dropped from a height of 30 inches onto the sampler. The number of blows required to drive the sampler each 6-inch increment is recorded on the boring log. For core samplers (e.g., direct push), the core is driven 18 inches using the rig apparatus.

Soil Sampling

Soil is collected according to Aerotech's SOIL SAMPLING STANDARD OPERATING PROCEDURE.

Grab Groundwater Sampling from Soil Boring

In the event that undeveloped grab-groundwater samples are necessary for the scope of work, a temporary well screen is placed across the desired interval of the soil boring. The sample can be collected via disposable bailer or peristaltic pump and disposable tubing. Additionally if direct push technology has been utilized for advancing the soil boring, a groundwater sample, is collected from the boring by using Hydropunch™ sampling technology. In the case of using Hydropunch™ technology, after collecting the capillary fringe soil sample, the boring is advanced to the top of the soil/groundwater interface and a sampling probe is pushed to approximately 2 feet below the top of the static water level. The probe is opened by partially withdrawing it and thereby exposing the screen. New polyethylene tubing with a peristaltic pump or decontaminated bailer is used to collect a water sample from the probe. The water sample is then emptied into laboratory-supplied containers constructed of the correct material and with the correct volume and preservative to comply with the proposed laboratory test. The container is slowly filled with the retrieved water sample until no headspace remains and then promptly sealed with a Teflon-lined cap, checked for the presence of bubbles, labeled, entered onto a COC record and placed in chilled storage at 4° Celsius. Laboratory-supplied trip blanks accompany the water samples as a quality assurance/quality control procedure. Equipment blanks may be collected as required. The samples are kept in chilled storage and transported under COC protocol to a client-approved, state-certified laboratory for analysis.

Field Screening Procedures

Aerotech staff place the soil from the middle of the sampling interval into a plastic re-sealable bag. The bag is then labeled with the sample number. The tip of a photoionization detector (PID) or similar device is inserted through the plastic bag to measure organic vapor concentrations in the headspace. The highest sustained PID measurement is recorded on the boring log. At a minimum, the PID or organic vapor monitoring device is calibrated on a daily basis in accordance with manufacturer's specifications using a hexane or isobutylene standard. The calibration gas and concentration are recorded on a calibration log. Instruments such as the PID are useful for evaluating relative concentrations of volatilized hydrocarbons, but they do not measure the concentration of petroleum hydrocarbons in the soil matrix with the same precision as laboratory analysis. Aerotech trained personnel describe the soil in the bag according to the Unified Soil Classification System and record the description on the boring log, which is included in the final report.

Backfilling of Soil Boring

If a well is not installed, the boring is backfilled from total depth to approximately 5 feet below ground surface (bgs) with either neat cement or bentonite grout using a tremie pipe. The boring is backfilled from 5 feet bgs to approximately 1 foot bgs with hydrated bentonite chips. The borehole is completed from 1 foot bgs to surface grade with material that best matches existing surface conditions and meets local agency requirements. Site-specific backfilling details are shown on the respective boring log.

Monitoring Well Construction

A well (if constructed) is completed using materials documented on the boring log or specified in a work plan. The well is constructed with slotted casing across the desired groundwater sampling depth(s) and completed with blank casing to within 6 inches of surface grade. No further construction is conducted on temporary wells. For permanent wells, the annular space of the well is backfilled with Monterey sand from the total depth to approximately 2 feet above the top of the screened casing. A hydrated granular bentonite seal is placed on top of the sand filter pack. Grout may be placed on top of the bentonite seal to the desired depth using a tremie pipe. The well may be completed to surface grade with a 1-foot thick concrete pad. A traffic-rated well vault and locking cap for the well casing may be installed to protect against surface-water infiltration and unauthorized entry. Site-specific well construction details including type of well, well depth, casing diameter, slot size, length of screen interval and sand size are documented on the boring log or specified in the work plan.

Monitoring Well Development

Following well construction, each monitoring well is developed and surveyed according to Aerotech's MONITORING WELL DEVELOPMENT AND SURVEYING STANDARD OPERATING PROCEDURE.

Well Sampling

Following development, groundwater is collected according to Aerotech's LOW-FLOW GROUNDWATER SAMPLING STANDARD OPERATING PROCEDURE.

Decontamination Procedures

Aerotech and/or the contracted driller decontaminate soil and water sampling equipment between each sampling event with a non-phosphate solution, followed by a minimum of two tap water rinses. Deionized water may be used for the final rinse. Downhole drilling equipment is steam-cleaned prior to drilling the borehole and at completion of the borehole.

Waste Treatment and Soil Disposal

Soil cuttings and decontamination fluids generated from the drilling or sampling are stored on site in labeled, Department of Transportation-approved, 55-gallon drums or other appropriate storage container. Unless otherwise specified in the contract with Aerotech, the client is responsible for disposal of investigation derived waste. Should Aerotech be contracted to complete disposal for the client, drums containing investigation derived waste are subsequently transported under manifest to a client- and regulatory-approved facility for disposal.

AEROTECH

Environmental Consulting Inc.

13925 Interurban Avenue South, Suite 210
Seattle, Washington 98168
(360) 710-5899

512 W. International Airport Road, Suite 201
Anchorage, Alaska 99518
(907) 575-6661

LOW-FLOW GROUNDWATER SAMPLING STANDARD OPERATING PROCEDURE

EQUIPMENT

- Sampling and Analyses Plan (SAP)
- Site-specific sampling plan
- Sample location map
- Sample table
- Safety equipment, as specified in the Health and Safety Plan
- Permanent pens and markers (e.g. Sharpies®)
- Field notebook and/or sampling form
- Camera
- YSI water quality monitoring equipment (e.g. YSI monitor and flow through cell)
- Sample containers, precleaned (e.g., I-Chem)
- 55-Gallon Drums
- Two 5-Gallon Buckets
- 3/8" Tubing
- Power Source/cables
- Peristaltic or down-well pump
- Water Level Indicator
- Tool box with hand tools (e.g. socket set, screw drivers)
- Trash bags/plastic sheeting
- Candlestick/cones/barricade
- Caution tape
- Scissors/knife
- Paper towels
- Watch
- Decontamination equipment including tap water and/or deionized water and phosphate-free soap (e.g. Alconox®, Liquinox®)
- Chain-of-custody forms, custody seals, sample labels
- Ziploc® Bags
- Insulated cooler
- Ice
- Plastic bags for sample containers and ice

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SUBSLAB SOIL VAPOR SAMPLING STANDARD OPERATING PROCEDURE

Samples are collected using a soil vapor purging and sampling manifold consisting of a flow regulator, vacuum gauges, vacuum pump, shroud, and laboratory-prepared, gas-tight, Summa™ canisters. Prior to use, Summa™ canisters are checked to ensure they are under the laboratory induced vacuum between 25 and 30 inches of mercury (in. Hg). New inert tubing is used to purge and sample each well. Prior to purging and sampling each SVS well, Aerotech will conduct a vacuum leak test on the sampling equipment. To perform the leak test, the Summa™ canister is connected to the sampling manifold which is connected to the gas-tight vacuum fitting or valve at the wellhead, and the downstream tubing and fittings are vacuum tested at or above 10 in. Hg. Purging and sampling are conducted only on SVS wells when the tubing and fittings hold the applied vacuum for 5 minutes per vacuum gauge reading. If the vacuum is not maintained, Aerotech field personnel will isolate the leak and reattach the fittings and tubing until the vacuum is held for 5 minutes. Purging is performed with the sampling manifold equipped with a vacuum gauge, flow regulator and a peristaltic pump. The flow regulator will be set to a rate of no more than 200 ml/min.

Prior to sampling, a helium leak test is performed at each SVS well, including a Summa™ canister and its fittings, to check for leaks in the SVS well annulus. To assess the potential for leaks in the SVS well annulus, a shroud is placed over the SVS well and Summa™ canister and the shroud was filled with a measured amount of helium (20%). Helium screening is performed in the field by pumping soil gas into a Tedlar bag and screening the contents of the Tedlar bag with a helium meter. Pumping is conducted at approximately the same rate of purging, at 100 to 200 ml/min. The concentration of helium in the sample divided by the concentration of helium in the shroud provides a measure of the proportion of the sample attributable to leakage. A sample that contains less than 5% Helium when collected while the shroud is 20% Helium is considered valid. Helium screening will also be performed using laboratory analysis of the contents of the Summa™ canister collected under the shroud.

After purging and the helium leak test, the Summa™ canister is opened and allowed to fill. Sampling is conducted at approximately the same rate of purging, at 100 to 200 ml/min. The canister vacuum readings at the beginning and end of sampling will be recorded. The soil vapor sample collection will end when the vacuum within the sample canister is approximately 5 in Hg. Aerotech field personnel will label the sample containers, store the samples at ambient temperature in laboratory-supplied containers, and initiate COC records.

Please feel free to contact the Aerotech Geologist, Mr. Simon Payne, at (206) 247-9155, or the Aerotech Principal Environmental Scientist/Field Sampling Coordinator, Mr. Nicholas Gerkin, at (206) 482-2287, if you have questions regarding the preceding methodology in this document.

The following protocol and sampling procedures were designed to meet or exceed standards for groundwater monitoring well sampling, as specified by the State of Washington Department of Ecology “*Standard Operating Procedures for Purging and Sampling Monitoring Wells, Version 1.0,*” dated and approved on October 4, 2011. These procedures are strictly adhered to by Aerotech field staff:

Cross-Contamination Mitigation Protocol

A sampling table is set up adjacent to the well head in order to protect field equipment from contact with the ground, to prevent or minimize the possible introduction of foreign materials into the wells, and in general in order to mitigate the possibility of cross-contamination. Where previous laboratory data is available, or where visual or olfactory indicators provide initial evidence, well sampling order is arranged to proceed with the least contaminated well, often the upgradient groundwater monitoring wells, and sampling order proceeds by sampling wells associated with successively higher contamination levels. Thus, the wells exhibiting the highest contamination levels are sampled last, in order to minimize the possibility of cross contamination.

A fresh pair of disposable Nitrile gloves is worn at each well. Equipment neither disposable nor dedicated to wells, is washed in a dedicated container prepared with non-phosphate detergent and triple rinsed in a second container prepared with distilled and/or deionized water. Surfaces that cannot be readily submerged for the purpose of decontamination, are sprayed with wash water followed by rinse water, and wiped with a fresh disposable paper towel. For shallow wells that require a peristaltic pump, dedicated tubing is left in each well after sampling, however, for deeper wells that require a submersible pump, dedicated tubing is recovered from wells after each use, and deployed to a designated dedicated clean plastic bag, bearing a label indicating well identification information.

Water Level Measurement

Prior to the well purge process and the collection of groundwater samples, groundwater levels are measured at the north side of the (“TOC”) with a piezometer/water level indicator, by slowly lowering the sensor into wells prior to purging, in order to minimize disturbances. The water levels are measured twice, with tape a marked in 0.01 foot increments, in order to reduce possible reading error. Where appropriate, free product thickness is measured with gas level indicator paste or an interface indicator. Upon arrival, each well is visual inspected and the condition of the well and well head are noted.

Groundwater Monitoring Well Purge and Sampling Methodologies

Prior to groundwater sample collection, A dedicated length of high density polyethylene tubing is lowered into each well to a level near the middle of the screened interval. A dedicated length of clean silicone tubing is utilized within the pump mechanism. The wells are purged by means of low flow techniques, during which time groundwater is monitored for physical parameters, including temperature, pH, specific conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP), by means of a multi-parameter device mounted upon a flow cell, until such time as values recorded have stabilized and equilibrium conditions are verified according to State guidelines. This protocol ensures that collected groundwater samples are

representative of in-situ groundwater conditions. Readings are recorded once every 2 to 5 minutes, including water level measurement. The pumping rate shall remain below 1 L/min during monitoring and sampling procedures. This is verified by periodically filling a one-Liter graduated cylinder and recording the rate, adjusting the pump as necessary. The water column within the well should remain within 5% of the static height during the purge and sample process, if this cannot be achieved, the pump rate will be reduced until the water level stabilizes. The following conditions must be met in three consecutive readings prior to sampling:

- pH +/- 0.1 standard units
- Specific Conductivity +/- 10.0 mS/cm for values < 1,000 mS/cm
+/- 20.0 mS/cm for values > 1,000 mS/cm
- DO +/- 0.05 mg/L for values < 1 mg/L
+/- 0.2 mg/L for values > 1 mg/L
- Temperature +/- 0.1 degrees Celcius
- ORP +/- 10 mV

Groundwater samples are collected in containers specified by the laboratory for the analyses established at the Site, and in accordance with State of Washington regulations or guidelines. Sample containers are labeled with site name, well identification, and date of collection information. Each sample is documented on a *Chain of Custody* (“COC”) form, and immediately placed in an iced cooler (maintained at 4 degrees Celcius or less) for transport to a certified laboratory for analysis. Please note that any purge water suspected or confirmed to contain concentrations above the MTCA Cleanup Levels is drummed and left on Site.

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SUBSLAB SOIL VAPOR SAMPLING STANDARD OPERATING PROCEDURE

Samples are collected using a soil vapor purging and sampling manifold consisting of a flow regulator, vacuum gauges, vacuum pump, shroud, and laboratory-prepared, gas-tight, Summa™ canisters. Prior to use, Summa™ canisters are checked to ensure they are under the laboratory induced vacuum between 25 and 30 inches of mercury (in. Hg). New inert tubing is used to purge and sample each well. Prior to purging and sampling each SVS well, Aerotech will conduct a vacuum leak test on the sampling equipment. To perform the leak test, the Summa™ canister is connected to the sampling manifold which is connected to the gas-tight vacuum fitting or valve at the wellhead, and the downstream tubing and fittings are vacuum tested at or above 10 in. Hg. Purging and sampling are conducted only on SVS wells when the tubing and fittings hold the applied vacuum for 5 minutes per vacuum gauge reading. If the vacuum is not maintained, Aerotech field personnel will isolate the leak and reattach the fittings and tubing until the vacuum is held for 5 minutes. Purging is performed with the sampling manifold equipped with a vacuum gauge, flow regulator and a peristaltic pump. The flow regulator will be set to a rate of no more than 200 ml/min.

Prior to sampling, a helium leak test is performed at each SVS well, including a Summa™ canister and its fittings, to check for leaks in the SVS well annulus. To assess the potential for leaks in the SVS well annulus, a shroud is placed over the SVS well and Summa™ canister and the shroud was filled with a measured amount of helium (20%). Helium screening is performed in the field by pumping soil gas into a Tedlar bag and screening the contents of the Tedlar bag with a helium meter. Pumping is conducted at approximately the same rate of purging, at 100 to 200 ml/min. The concentration of helium in the sample divided by the concentration of helium in the shroud provides a measure of the proportion of the sample attributable to leakage. A sample that contains less than 5% Helium when collected while the shroud is 20% Helium is considered valid. Helium screening will also be performed using laboratory analysis of the contents of the Summa™ canister collected under the shroud.

After purging and the helium leak test, the Summa™ canister is opened and allowed to fill. Sampling is conducted at approximately the same rate of purging, at 100 to 200 ml/min. The canister vacuum readings at the beginning and end of sampling will be recorded. The soil vapor sample collection will end when the vacuum within the sample canister is approximately 5 in Hg. Aerotech field personnel will label the sample containers, store the samples at ambient temperature in laboratory-supplied containers, and initiate COC records.

Please feel free to contact the Aerotech Geologist, Mr. Simon Payne, at (206) 247-9155, or the Aerotech Principal Environmental Scientist/Field Sampling Coordinator, Mr. Nicholas Gerkin, at (206) 482-2287, if you have questions regarding the preceding methodology in this document.



Standard Operating Procedure Installation and Extraction of the Vapor Pin®

Updated September 9, 2016

Scope:

This standard operating procedure describes the installation and extraction of the VAPOR PIN® for use in sub-slab soil-gas sampling.

Purpose:

The purpose of this procedure is to assure good quality control in field operations and uniformity between field personnel in the use of the VAPOR PIN® for the collection of sub-slab soil-gas samples or pressure readings.

Equipment Needed:

- Assembled VAPOR PIN® [VAPOR PIN® and silicone sleeve(Figure 1)]; Because of sharp edges, gloves are recommended for sleeve installation;
- Hammer drill;
- 5/8-inch (16mm) diameter hammer bit (hole must be 5/8-inch (16mm) diameter to ensure seal. It is recommended that you use the drill guide). (Hilti™ TE-YX 5/8" x 22" (400 mm) #00206514 or equivalent);
- 1½-inch (38mm) diameter hammer bit (Hilti™ TE-YX 1½" x 23" #00293032 or equivalent) for flush mount applications;
- ¾-inch (19mm) diameter bottle brush;
- Wet/Dry vacuum with HEPA filter (optional);
- VAPOR PIN® installation/extraction tool;
- Dead blow hammer;
- VAPOR PIN® flush mount cover, if desired;
- VAPOR PIN® drilling guide, if desired;

- VAPOR PIN® protective cap; and
- VOC-free hole patching material (hydraulic cement) and putty knife or trowel for repairing the hole following the extraction of the VAPOR PIN®.



Figure 1. Assembled VAPOR PIN®

Installation Procedure:

- 1) Check for buried obstacles (pipes, electrical lines, etc.) prior to proceeding.
- 2) Set up wet/dry vacuum to collect drill cuttings.
- 3) If a flush mount installation is required, drill a 1½-inch (38mm) diameter hole at least 1¾-inches (45mm) into the slab. Use of a VAPOR PIN® drilling guide is recommended.
- 4) Drill a 5/8-inch (16mm) diameter hole through the slab and approximately 1-inch (25mm) into the underlying soil to form a void. Hole must be 5/8-inch (16mm) in diameter to ensure seal. It is recommended that you use the drill guide.

VAPOR PIN® protected under US Patent # 8,220,347 B2, US 9,291,531 B2 and other patents pending

- 5) Remove the drill bit, brush the hole with the bottle brush, and remove the loose cuttings with the vacuum.
- 6) Place the lower end of VAPOR PIN® assembly into the drilled hole. Place the small hole located in the handle of the installation/extraction tool over the vapor pin to protect the barb fitting, and tap the vapor pin into place using a dead blow hammer (Figure 2). Make sure the installation/extraction tool is aligned parallel to the vapor pin to avoid damaging the barb fitting.



Figure 2. Installing the VAPOR PIN®

During installation, the silicone sleeve will form a slight bulge between the slab and the VAPOR PIN® shoulder. Place the protective cap on VAPOR PIN® to prevent vapor loss prior to sampling (Figure 3).



Figure 3. Installed VAPOR PIN®

- 7) For flush mount installations, cover the vapor pin with a flush mount cover, using either the plastic cover or the optional stainless-steel Secure Cover (Figure 4).



Figure 4. Secure Cover Installed

- 8) Allow 20 minutes or more (consult applicable guidance for your situation) for the sub-slab soil-gas conditions to re-equilibrate prior to sampling.
- 9) Remove protective cap and connect sample tubing to the barb fitting of the VAPOR PIN®. This connection can be made using a short piece of Tygon™ tubing to join the VAPOR PIN® with the Nylaflo tubing (Figure 5). Put the

Nylaflow tubing as close to the VAPOR PIN® as possible to minimize contact between soil gas and Tygon™ tubing.



Figure 5. VAPOR PIN® sample connection

10) Conduct leak tests in accordance with applicable guidance. If the method of leak testing is not specified, an alternative can be the use of a water dam and vacuum pump, as described in SOP Leak Testing the VAPOR PIN® via Mechanical Means (Figure 6). For flush-mount installations, distilled water can be poured directly into the 1 1/2 inch (38mm) hole.



Figure 6. Water dam used for leak detection

11) Collect sub-slab soil gas sample or pressure reading. When finished, replace the protective cap and flush mount cover

until the next event. If the sampling is complete, extract the VAPOR PIN®.

Extraction Procedure:

- 1) Remove the protective cap, and thread the installation/extraction tool onto the barrel of the VAPOR PIN® (Figure 7). Turn the tool clockwise continuously, don't stop turning, the VAPOR PIN® will feed into the bottom of the installation/extraction tool and will extract from the hole like a wine cork, DO NOT PULL.
- 2) Fill the void with hydraulic cement and smooth with a trowel or putty knife.



Figure 7. Removing the VAPOR PIN®

- Prior to reuse, remove the silicone sleeve and protective cap and discard. Decontaminate the VAPOR PIN® in a hot water and Alconox® wash, then heat in an oven to a temperature of 265° F (130° C) for 15 to 30 minutes. For both steps, STAINLESS – ½ hour, BRASS 8 minutes
- 3) Replacement parts and supplies are available online.

Appendix E

September – November 2020 Laboratory Reports



September 29, 2020

Mr. Nick Gerkin
Aerotech Environmental Consulting, Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

Dear Mr. Gerkin,

On September 25th, 28 samples were received by our laboratory and assigned our laboratory project number EV20090187. The project was identified as your 258603 Bob's Summit Chevron. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Glen Perry
Laboratory Manager



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-01
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 9:30:00 AM
CLIENT SAMPLE ID	B23 (3)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	69.3	09/26/2020	KLS
TFT	EPA-8021	74.2	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-02
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 9:35:00 AM
CLIENT SAMPLE ID	B23 (6)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	76.9	09/26/2020	KLS
TFT	EPA-8021	82.1	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting,
Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 9/29/2020
ALS JOB#: EV20090187
ALS SAMPLE#: EV20090187-03

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B24 (7)

DATE RECEIVED: 09/25/2020
COLLECTION DATE: 9/24/2020 10:00:00 AM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	70.9	09/26/2020	KLS
TFT	EPA-8021	80.3	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting,
Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 9/29/2020
ALS JOB#: EV20090187
ALS SAMPLE#: EV20090187-04

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B24 (11)

DATE RECEIVED: 09/25/2020
COLLECTION DATE: 9/24/2020 10:05:00 AM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	5.0	1	MG/KG	09/28/2020	KLS
Benzene	EPA-8021	0.89	0.030	1	MG/KG	09/28/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/28/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	61.4	09/28/2020	KLS
TFT	EPA-8021	63.6	09/28/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-05
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 10:30:00 AM
CLIENT SAMPLE ID	B25 (7)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	71.6	09/26/2020	KLS
TFT	EPA-8021	76.2	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting,
Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 9/29/2020
ALS JOB#: EV20090187
ALS SAMPLE#: EV20090187-06

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B25 (11)

DATE RECEIVED: 09/25/2020
COLLECTION DATE: 9/24/2020 10:35:00 AM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	71.2	09/26/2020	KLS
TFT	EPA-8021	80.3	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-07
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 10:40:00 AM
CLIENT SAMPLE ID	B25 (5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	76.8	09/26/2020	KLS
TFT	EPA-8021	86.7	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-08
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 10:55:00 AM
CLIENT SAMPLE ID	B26 (5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	69.2	09/26/2020	KLS
TFT	EPA-8021	73.3	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-09
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 11:00:00 AM
CLIENT SAMPLE ID	B26 (7)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	88.0	09/26/2020	KLS
TFT	EPA-8021	97.0	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-10
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 11:05:00 AM
CLIENT SAMPLE ID	B26 (11)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	5.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	62.2	09/26/2020	KLS
TFT	EPA-8021	71.1	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-11
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 11:25:00 AM
CLIENT SAMPLE ID	B27 (3)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	71.9	09/26/2020	KLS
TFT	EPA-8021	76.1	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-12
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 11:30:00 AM
CLIENT SAMPLE ID	B27 (7)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	71.1	09/26/2020	KLS
TFT	EPA-8021	73.6	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting,
Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 9/29/2020
ALS JOB#: EV20090187
ALS SAMPLE#: EV20090187-13

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B27 (11)

DATE RECEIVED: 09/25/2020
COLLECTION DATE: 9/24/2020 11:35:00 AM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	11	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	0.23	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	0.52	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	1.2	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	69.6	09/26/2020	KLS
TFT	EPA-8021	75.2	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered gasoline.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-14
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 11:50:00 AM
CLIENT SAMPLE ID	B28 (3)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	74.3	09/26/2020	KLS
TFT	EPA-8021	79.5	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-15
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 11:55:00 AM
CLIENT SAMPLE ID	B28 (5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	69.8	09/26/2020	KLS
TFT	EPA-8021	72.6	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting,
Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 9/29/2020
ALS JOB#: EV20090187
ALS SAMPLE#: EV20090187-16

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B28 (11)

DATE RECEIVED: 09/25/2020
COLLECTION DATE: 9/24/2020 12:00:00 PM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	74	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	0.37	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	0.25	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	9.2	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	65.9	09/26/2020	KLS
TFT	EPA-8021	75.5	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered gasoline.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-17
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 12:10:00 PM
CLIENT SAMPLE ID	B29 (3)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	71.0	09/26/2020	KLS
TFT	EPA-8021	78.6	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-18
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 12:15:00 PM
CLIENT SAMPLE ID	B29 (7)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	60.5	09/26/2020	KLS
TFT	EPA-8021	64.3	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-19
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 12:20:00 PM
CLIENT SAMPLE ID	B29 (11)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	60.7	09/26/2020	KLS
TFT	EPA-8021	63.2	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-20
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 12:40:00 PM
CLIENT SAMPLE ID	B30 (3)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/26/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/26/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/26/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/26/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	67.8	09/26/2020	KLS
TFT	EPA-8021	75.8	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-21
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 12:45:00 PM
CLIENT SAMPLE ID	B30 (7)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/28/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/28/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/28/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	81.9	09/28/2020	KLS
TFT	EPA-8021	75.5	09/28/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-22
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 12:50:00 PM
CLIENT SAMPLE ID	B30 (11)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.5	1	MG/KG	09/28/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/28/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/28/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	107	09/28/2020	KLS
TFT	EPA-8021	93.7	09/28/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-23
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 1:20:00 PM
CLIENT SAMPLE ID	B31 (3)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	4.0	1	MG/KG	09/28/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/28/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/28/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	123	09/28/2020	KLS
TFT	EPA-8021	99.5	09/28/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-24
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 1:25:00 PM
CLIENT SAMPLE ID	B31 (10)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/28/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/28/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/28/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	89.7	09/28/2020	KLS
TFT	EPA-8021	92.9	09/28/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-25
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 1:45:00 PM
CLIENT SAMPLE ID	B32 (3)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.1	1	MG/KG	09/28/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/28/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/28/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	101	09/28/2020	KLS
TFT	EPA-8021	81.0	09/28/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-26
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 1:50:00 PM
CLIENT SAMPLE ID	B32 (5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/28/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/28/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/28/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	92.8	09/28/2020	KLS
TFT	EPA-8021	99.8	09/28/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting,
Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 9/29/2020
ALS JOB#: EV20090187
ALS SAMPLE#: EV20090187-27

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B33 (3)

DATE RECEIVED: 09/25/2020
COLLECTION DATE: 9/24/2020 2:15:00 PM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/28/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/28/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/28/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	86.5	09/28/2020	KLS
TFT	EPA-8021	84.1	09/28/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
		ALS JOB#:	EV20090187
		ALS SAMPLE#:	EV20090187-28
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	09/25/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	9/24/2020 2:30:00 PM
CLIENT SAMPLE ID	B33 (8)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	09/28/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/28/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/28/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/28/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	97.7	09/28/2020	KLS
TFT	EPA-8021	89.5	09/28/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting, Inc.
 13925 Interurban Ave S., Suite 210
 Seattle, WA 98168

DATE: 9/29/2020
 ALS SDG#: EV20090187
 WDOE ACCREDITATION: C601

CLIENT CONTACT: Nick Gerkin
 CLIENT PROJECT: 258603 Bob's Summit Chevron

LABORATORY BLANK RESULTS

MBG-092520S - Batch 157848 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	MG/KG	3.0	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

MBG-092820S - Batch 157888 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	MG/KG	3.0	09/28/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-092520S - Batch 157848 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	MG/KG	0.030	09/26/2020	KLS
Toluene	EPA-8021	U	MG/KG	0.050	09/26/2020	KLS
Ethylbenzene	EPA-8021	U	MG/KG	0.050	09/26/2020	KLS
Xylenes	EPA-8021	U	MG/KG	0.20	09/26/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-092820S - Batch 157888 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	MG/KG	0.030	09/28/2020	KLS
Toluene	EPA-8021	U	MG/KG	0.050	09/28/2020	KLS
Ethylbenzene	EPA-8021	U	MG/KG	0.050	09/28/2020	KLS
Xylenes	EPA-8021	U	MG/KG	0.20	09/28/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	9/29/2020
CLIENT CONTACT:	Nick Gerkin	ALS SDG#:	EV20090187
CLIENT PROJECT:	258603 Bob's Summit Chevron	WDOE ACCREDITATION:	C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 157848 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
TPH-Volatile Range - BS	NWTPH-GX	80.3			66.5	122.7	09/26/2020	KLS
TPH-Volatile Range - BSD	NWTPH-GX	79.4	1		66.5	122.7	09/26/2020	KLS

ALS Test Batch ID: 157888 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
TPH-Volatile Range - BS	NWTPH-GX	103			66.5	122.7	09/28/2020	KLS
TPH-Volatile Range - BSD	NWTPH-GX	102	1		66.5	122.7	09/28/2020	KLS

ALS Test Batch ID: 157848 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Benzene - BS	EPA-8021	88.7			67.7	124	09/26/2020	KLS
Benzene - BSD	EPA-8021	92.0	4		67.7	124	09/26/2020	KLS
Toluene - BS	EPA-8021	80.8			71	123	09/26/2020	KLS
Toluene - BSD	EPA-8021	84.2	4		71	123	09/26/2020	KLS
Ethylbenzene - BS	EPA-8021	75.1			69.8	117	09/26/2020	KLS
Ethylbenzene - BSD	EPA-8021	78.8	5		69.8	117	09/26/2020	KLS
Xylenes - BS	EPA-8021	79.9			70	119	09/26/2020	KLS
Xylenes - BSD	EPA-8021	83.0	4		70	119	09/26/2020	KLS

ALS Test Batch ID: 157888 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Benzene - BS	EPA-8021	87.5			67.7	124	09/28/2020	KLS
Benzene - BSD	EPA-8021	87.7	0		67.7	124	09/28/2020	KLS
Toluene - BS	EPA-8021	91.2			71	123	09/28/2020	KLS
Toluene - BSD	EPA-8021	91.4	0		71	123	09/28/2020	KLS
Ethylbenzene - BS	EPA-8021	92.3			69.8	117	09/28/2020	KLS
Ethylbenzene - BSD	EPA-8021	92.7	0		69.8	117	09/28/2020	KLS
Xylenes - BS	EPA-8021	92.3			70	119	09/28/2020	KLS
Xylenes - BSD	EPA-8021	92.7	0		70	119	09/28/2020	KLS

CERTIFICATE OF ANALYSIS

APPROVED BY



Laboratory Manager



ALS Environmental
 8620 Holly Drive, Suite 100
 Everett, WA 98208
 Phone (425) 356-2600
 Fax (425) 356-2626
 http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only)

EV20090187

Date 9/24/20 Page 1 Of 3

PROJECT ID: 258603 Bob's Summit Chevron
 REPORT TO COMPANY: Aerotech Environmental Consulting
 PROJECT MANAGER: Mick Gestik
 ADDRESS: 14220 Interurban Ave South Ste 116
Tukwila, WA
 PHONE: 206 482 2287 P.O. #:
 E-MAIL: nicker@dirtydirts.justm@dirtydirts.us
 INVOICE TO COMPANY: Colony Insurance
 ATTENTION: Jeremy Payne
 ADDRESS:

ANALYSIS REQUESTED		OTHER (Specify)	
<input type="checkbox"/> BTEX by EPA 8260	<input checked="" type="checkbox"/>	<input type="checkbox"/> TCLP-Metals	<input type="checkbox"/>
<input type="checkbox"/> MTBE by EPA 8260	<input type="checkbox"/>	<input type="checkbox"/> VOA	<input type="checkbox"/>
<input type="checkbox"/> Volatile Organic Compounds by EPA 8260	<input type="checkbox"/>	<input type="checkbox"/> Semi-Vol	<input type="checkbox"/>
<input type="checkbox"/> Halogenated Volatiles by EPA 8260	<input type="checkbox"/>	<input type="checkbox"/> Pest	<input type="checkbox"/>
<input type="checkbox"/> EDB / EDC by EPA 8260 (water)	<input type="checkbox"/>	<input type="checkbox"/> Herbs	
<input type="checkbox"/> Volatile Organic Compounds by EPA 8260	<input type="checkbox"/>		
<input type="checkbox"/> EDB / EDC by EPA 8260 (soil)	<input type="checkbox"/>		
<input type="checkbox"/> Semivolatile Organic Compounds by EPA 8270	<input type="checkbox"/>		
<input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	<input type="checkbox"/>		
<input type="checkbox"/> PCB by EPA 8082	<input type="checkbox"/>		
<input type="checkbox"/> Pesticides by EPA 8081	<input type="checkbox"/>		
<input type="checkbox"/> Metals-MTCA-5	<input type="checkbox"/>		
<input type="checkbox"/> Metals-Other (Specify)			
<input type="checkbox"/> TAL			
<input type="checkbox"/> RCRA-8			
<input type="checkbox"/> Pri Pol			
<input type="checkbox"/> PCB by EPA 8082			
<input type="checkbox"/> Pesticides by EPA 8081			
<input type="checkbox"/> Metals-MTCA-5			
<input type="checkbox"/> Metals-Other (Specify)			
<input type="checkbox"/> TCLP-Metals			
<input type="checkbox"/> VOA			
<input type="checkbox"/> Semi-Vol			
<input type="checkbox"/> Pest			
<input type="checkbox"/> Herbs			

ANALYSIS REQUESTED	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA 8021	MTBE by EPA 8260	Halogenated Volatiles by EPA 8260	EDB / EDC by EPA 8260 (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082	Pesticides by EPA 8081	Metals-MTCA-5	Metals-Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
				X																	2	
				X																	1	
				X																	1	
				X																	1	
				X																	1	
				X																	1	
				X																	1	
				X																	1	
				X																	1	
				X																	1	

SAMPLE I.D.	DATE	TIME	TYPE	LAB#
1. B23 (3)	9/24/20	0930	S	1
2. B23 (6)		935		2
3. B24 (7)		1000		3
4. B24 (11)		1005		4
5. B25 (7)		1030		5
6. B25 (11)		1035		6
7. B25 (5)		1040		7
8. B26 (5)		1055		8
9. B26 (7)		1100		9
10. B26 (11)		1105		10

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Chris Tech Aerotech 9/25/20 14:40
 Received By: Allen Perry ALS 9/25/20 14:40
 2. Relinquished By: _____
 Received By: _____

TURNAROUND REQUESTED in Business Days*
 OTHER: _____

Organic, Metals & Inorganic Analysis
 Specify: _____
 10 Standard
 5 3 2 1
 SAME DAY
 Fuels & Hydrocarbon Analysis
 5 1
 SAME DAY

*Turnaround request less than standard may incur Rush Charges



ALS Environmental
 8620 Holly Drive, Suite 100
 Everett, WA 98208
 Phone (425) 356-2600
 Fax (425) 356-2626
 http://www.alsglobal.com

Chain of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only)

EV20090187

Date 9/24/20 Page 2 Of 3

PROJECT ID: 258603 Bob's Summit Chevron
 REPORT TO COMPANY: AeroTech Environmental Consulting
 PROJECT MANAGER: 14220 Interurban Ave S, Ste 116
 ADDRESS: Tukwila, WA
 PHONE: 206 487 2287 P.O. #:
 E-MAIL: niked@indydirect.us; justin@indydirect.us
 INVOICE TO COMPANY: Cabony Insurance
 ATTENTION: Jeremy Payne
 ADDRESS:

ANALYSIS REQUESTED	OTHER (Specify)		RECEIVED IN GOOD CONDITION?
	NUMBER OF CONTAINERS		
NWTPH-HCID			
NWTPH-DX			
NWTPH-GX			
BTEX by EPA 8021			
MTBE by EPA 8021			
MTBE by EPA 8260			
Halogenated Volatiles by EPA 8260			
Volatile Organic Compounds by EPA 8260			
EDB / EDC by EPA 8260 SIM (water)			
EDB / EDC by EPA 8260 (soil)			
Semivolatile Organic Compounds by EPA 8270			
Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM			
PCB by EPA 8082			
Pesticides by EPA 8081			
Metals-MTCA-5			
RCRA-8			
Pt Pol			
TAL			
Metals Other (Specify)			
TCLP-Metals			
VOA			
Semi-Vol			
Pest			
Herbs			

SAMPLE I.D.	DATE	TIME	TYPE	LAB#
1. B27 (3)	09/24/20	1125	S	11
2. B27 (7)		1130		12
3. B27 (11)		1135		13
4. B28 (3)		1150		14
5. B28 (5)		1155		15
6. B28 (11)		1200		16
7. B29 (3)		1210		17
8. B29 (7)		1215		18
9. B29 (11)		1220		19
10. B30 (3)		1240		20

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):
 1. Relinquished By: Janet Z. Arotech 9/25/20 14:40
 Received By: Shirley Berg ALS 9/25/20 14:40
 2. Relinquished By: _____
 Received By: _____

TURNAROUND REQUESTED IN BUSINESS DAYS*
 OTHER:
 Specify: _____
 10 Standard 5 Standard
 Organic, Metals & Inorganic Analysis
 1 2 3 4 5
 SAME DAY
 Fuels & Hydrocarbon Analysis
 1 2 3 4 5
 SAME DAY
 Standard

*Turnaround request less than standard may incur Rush Charges



October 6, 2020

Mr. Nick Gerkin
Aerotech Environmental Consulting, Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

Dear Mr. Gerkin,

On October 2nd, 7 samples were received by our laboratory and assigned our laboratory project number EV20100015. The project was identified as your 258603 Bob's Summit Chevron. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Glen Perry
Laboratory Manager



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	10/6/2020
		ALS JOB#:	EV20100015
		ALS SAMPLE#:	EV20100015-01
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	10/02/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	10/1/2020 9:25:00 AM
CLIENT SAMPLE ID	B34 (11)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	9.6	3.0	1	MG/KG	10/05/2020	KLS
Benzene	EPA-8021	0.10	0.030	1	MG/KG	10/05/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	10/05/2020	KLS
Ethylbenzene	EPA-8021	U	0.075	1	MG/KG	10/05/2020	KLS
Xylenes	EPA-8021	1.5	0.20	1	MG/KG	10/05/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	97.1	10/05/2020	KLS
TFT	EPA-8021	83.4	10/05/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered gasoline.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	10/6/2020
		ALS JOB#:	EV20100015
		ALS SAMPLE#:	EV20100015-02
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	10/02/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	10/1/2020 9:35:00 AM
CLIENT SAMPLE ID	B34 (15)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	3.6	3.0	1	MG/KG	10/05/2020	KLS
Benzene	EPA-8021	0.055	0.030	1	MG/KG	10/05/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	10/05/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	10/05/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	10/05/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	111	10/05/2020	KLS
TFT	EPA-8021	79.6	10/05/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting,
Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 10/6/2020
ALS JOB#: EV20100015
ALS SAMPLE#: EV20100015-03

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B35 (11)

DATE RECEIVED: 10/02/2020
COLLECTION DATE: 10/1/2020 11:35:00 AM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	46	3.0	1	MG/KG	10/05/2020	KLS
Benzene	EPA-8021	0.27	0.030	1	MG/KG	10/05/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	10/05/2020	KLS
Ethylbenzene	EPA-8021	0.093	0.050	1	MG/KG	10/05/2020	KLS
Xylenes	EPA-8021	6.0	0.20	1	MG/KG	10/05/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	212 SUR12	10/05/2020	KLS
TFT	EPA-8021	160 SUR12	10/05/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.
SUR12 -Surrogate recoveries were outside of the control limits due to matrix interference.
Chromatogram indicates that it is likely that sample contains weathered gasoline.



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting,
Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 10/6/2020
ALS JOB#: EV20100015
ALS SAMPLE#: EV20100015-04

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B35 (15)

DATE RECEIVED: 10/02/2020
COLLECTION DATE: 10/1/2020 11:45:00 AM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	10/05/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	10/05/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	10/05/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	10/05/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	10/05/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	101	10/05/2020	KLS
TFT	EPA-8021	88.6	10/05/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	10/6/2020
		ALS JOB#:	EV20100015
		ALS SAMPLE#:	EV20100015-05
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	10/02/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	10/1/2020 1:40:00 PM
CLIENT SAMPLE ID	B36 (11)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	4.5	1	MG/KG	10/05/2020	KLS
Benzene	EPA-8021	U	0.050	1	MG/KG	10/05/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	10/05/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	10/05/2020	KLS
Xylenes	EPA-8021	0.49	0.20	1	MG/KG	10/05/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	89.8	10/05/2020	KLS
TFT	EPA-8021	77.2	10/05/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	10/6/2020
		ALS JOB#:	EV20100015
		ALS SAMPLE#:	EV20100015-06
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	10/02/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	10/1/2020 1:45:00 PM
CLIENT SAMPLE ID	B36 (15)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	10/05/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	10/05/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	10/05/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	10/05/2020	KLS
Xylenes	EPA-8021	0.22	0.20	1	MG/KG	10/05/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	88.9	10/05/2020	KLS
TFT	EPA-8021	81.4	10/05/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	10/6/2020
		ALS JOB#:	EV20100015
		ALS SAMPLE#:	EV20100015-07
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	10/02/2020
CLIENT PROJECT:	258603 Bob's Summit Chevron	COLLECTION DATE:	10/1/2020 3:35:00 PM
CLIENT SAMPLE ID	B37 (11)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	10/05/2020	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	10/05/2020	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	10/05/2020	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	10/05/2020	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	10/05/2020	KLS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	120	10/05/2020	KLS
TFT	EPA-8021	88.8	10/05/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting,
 Inc.
 13925 Interurban Ave S., Suite 210
 Seattle, WA 98168

CLIENT CONTACT: Nick Gerkin
 CLIENT PROJECT: 258603 Bob's Summit Chevron

DATE: 10/6/2020
 ALS SDG#: EV20100015
 WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MBG-100520S - Batch 158108 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	MG/KG	3.0	10/05/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-100520S - Batch 158108 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	MG/KG	0.030	10/05/2020	KLS
Toluene	EPA-8021	U	MG/KG	0.050	10/05/2020	KLS
Ethylbenzene	EPA-8021	U	MG/KG	0.050	10/05/2020	KLS
Xylenes	EPA-8021	U	MG/KG	0.20	10/05/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting,
 Inc.
 13925 Interurban Ave S., Suite 210
 Seattle, WA 98168

CLIENT CONTACT: Nick Gerkin
 CLIENT PROJECT: 258603 Bob's Summit Chevron

DATE: 10/6/2020
 ALS SDG#: EV20100015
 WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 158108 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
TPH-Volatile Range - BS	NWTPH-GX	105			66.5	122.7	10/05/2020	KLS
TPH-Volatile Range - BSD	NWTPH-GX	112	6		66.5	122.7	10/05/2020	KLS

ALS Test Batch ID: 158108 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Benzene - BS	EPA-8021	80.9			67.7	124	10/05/2020	KLS
Benzene - BSD	EPA-8021	82.8	2		67.7	124	10/05/2020	KLS
Toluene - BS	EPA-8021	82.5			71	123	10/05/2020	KLS
Toluene - BSD	EPA-8021	84.7	3		71	123	10/05/2020	KLS
Ethylbenzene - BS	EPA-8021	83.4			69.8	117	10/05/2020	KLS
Ethylbenzene - BSD	EPA-8021	85.6	3		69.8	117	10/05/2020	KLS
Xylenes - BS	EPA-8021	83.5			70	119	10/05/2020	KLS
Xylenes - BSD	EPA-8021	85.7	3		70	119	10/05/2020	KLS

APPROVED BY

Laboratory Manager



ALS Environmental
8620 Holly Drive, Suite 100
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Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only)

EV20100015

Date 10/01/20 Page 1 Of 1

PROJECT ID: REPORT TO COMPANY: PROJECT MANAGER: ADDRESS: PHONE: E-MAIL: INVOICE TO COMPANY: ATTENTION: ADDRESS:	ANALYSIS REQUESTED				OTHER (Specify)																												
	SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID - No Sr	NWTPH-DX - No Sr	NWTPH-GX	BTEX by EPA 8021	MTBE by EPA 8260	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082	Pesticides by EPA 8081	Metals-MTCA-5	RCRA-8	Pb Pol	TAL	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?			
1. B334 (11)	10/01/20	0925	Soil	1		X	X	X	X																								
2. B334 (15)	1	0935		2		X	X	X	X																								
3. B335 (11)	1	1135		3		X	X	X	X																								
4. B335 (15)	1	1145		4		X	X	X	X																								
5. B336 (11)	1	1340		5		X	X	X	X																								
6. B336 (15)	1	1345		6		X	X	X	X																								
7. B337 (11)	1	1535	↓	7		X	X	X	X																								
8.																																	
9.																																	
10.																																	

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):
 1. Relinquished By: Shawn Robison Aerotech 10/02/20 12:10
 Received By: Shawn Robison Aer 10/2/20 12/10
 2. Relinquished By: _____
 Received By: _____

TURNAROUND REQUESTED in Business Days*
 OTHER:
 Organic, Metals & Inorganic Analysis
 10 5 3 2 1
 SAME DAY
 Fuels & Hydrocarbon Analysis
 5 3 1
 SAME DAY
 Specify: _____

*Turnaround request less than standard may incur Rush Charges



October 12, 2020

Mr. Nick Gerkin
Aerotech Environmental Consulting, Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

Dear Mr. Gerkin,

On October 7th, 7 samples were received by our laboratory and assigned our laboratory project number EV20100039. The project was identified as your 258603 Bob's Summit Chevron. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting, Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 10/12/2020
ALS JOB#: EV20100039
ALS SAMPLE#: EV20100039-01

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B24 (11)

DATE RECEIVED: 10/07/2020
COLLECTION DATE: 9/24/2020 10:05:00 AM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	5.8	0.10	1	MG/KG	10/09/2020	RAL



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting, Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 10/12/2020
ALS JOB#: EV20100039
ALS SAMPLE#: EV20100039-02

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B27 (11)

DATE RECEIVED: 10/07/2020
COLLECTION DATE: 9/24/2020 11:35:00 AM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	4.6	0.10	1	MG/KG	10/09/2020	RAL



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting, Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 10/12/2020
ALS JOB#: EV20100039
ALS SAMPLE#: EV20100039-03

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B28 (11)

DATE RECEIVED: 10/07/2020
COLLECTION DATE: 9/24/2020 12:00:00 PM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	6.0	0.10	1	MG/KG	10/09/2020	RAL



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting, Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 10/12/2020
ALS JOB#: EV20100039
ALS SAMPLE#: EV20100039-04

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B34 (11)

DATE RECEIVED: 10/07/2020
COLLECTION DATE: 10/1/2020 9:25:00 AM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	10	0.10	1	MG/KG	10/09/2020	RAL



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting, Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 10/12/2020
ALS JOB#: EV20100039
ALS SAMPLE#: EV20100039-05

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B34 (15)

DATE RECEIVED: 10/07/2020
COLLECTION DATE: 10/1/2020 9:35:00 AM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	4.6	0.10	1	MG/KG	10/09/2020	RAL



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting, Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 10/12/2020
ALS JOB#: EV20100039
ALS SAMPLE#: EV20100039-06

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B35 (11)

DATE RECEIVED: 10/07/2020
COLLECTION DATE: 10/1/2020 11:35:00 AM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	3.5	0.10	1	MG/KG	10/09/2020	RAL



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting, Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

DATE: 10/12/2020
ALS JOB#: EV20100039
ALS SAMPLE#: EV20100039-07

CLIENT CONTACT: Nick Gerkin
CLIENT PROJECT: 258603 Bob's Summit Chevron
CLIENT SAMPLE ID: B36 (11)

DATE RECEIVED: 10/07/2020
COLLECTION DATE: 10/1/2020 1:40:00 PM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	16	0.10	1	MG/KG	10/09/2020	RAL

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE: 10/12/2020	ALS SDG#: EV20100039
		WDOE ACCREDITATION: C601	
CLIENT CONTACT:	Nick Gerkin		
CLIENT PROJECT:	258603 Bob's Summit Chevron		

LABORATORY BLANK RESULTS

MB-100820S - Batch 158313 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	U	MG/KG	0.10	10/09/2020	RAL

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168

DATE: 10/12/2020 ALS SDG#: EV20100039 WDOE ACCREDITATION: C601

CLIENT CONTACT: Nick Gerkin CLIENT PROJECT: 258603 Bob's Summit Chevron

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 158313 - Soil by EPA-6020

Table with 8 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, LIMITS (MIN, MAX), ANALYSIS DATE, ANALYSIS BY. Rows include Lead - BS and Lead - BSD.

APPROVED BY

Handwritten signature of Paul Bagum

Laboratory Director



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Everett, WA 98208
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Chain Of Custody/ Laboratory Analysis Request EV20100039

ALS Job# (Laboratory Use Only)

~~EV20090187~~

Date 9/24/20 Page 1 Of 3

PROJECT ID: 258603 Bob's Summit Chevron
REPORT TO COMPANY: Aerotech Environmental Consulting
PROJECT MANAGER: Nick Gerkin
ADDRESS: 14720 Interurban Ave South Ste 116 Tukwila, WA
PHONE: 206 432 2287 P.O. #:
E-MAIL: nick@dirtydirtus.justincorbydirts.us
INVOICE TO COMPANY: Colony Insurance
ATTENTION: Jeremy Payne
ADDRESS:

ANALYSIS REQUESTED	OTHER (Specify)	RECEIVED IN GOOD CONDITION?
NWTPH-CID		
NWTPH-DX		
NWTPH-CV		
BTEX by EPA 8260		
MTBE by EPA 8260		
MTBE by EPA 8021		
Halogenated Volatiles by EPA 8260		
Volatile Organic Compounds by EPA 8260		
EDB / EDC by EPA 8260 SIM (water)		
EDB / EDC by EPA 8260 (soil)		
Semivolatile Organic Compounds by EPA 8270		
Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM		
PCB by EPA 8082		
Pesticides by EPA 8081		
Metals-MTCA-5		
RCRA-8		
Pri Pol		
TAL		
Metals Other (Specify)		
TCLP-Metals		
VOA		
Semi-Vol		
Pest		
Herbs		

SAMPLE I.D.	DATE	TIME	TYPE	LAB#
1. B23 (3)	9/24/20	0930	S	1
2. B23 (6)	9/24/20	935	S	2
3. B24 (7)	9/24/20	1000	S	3
4. B24 (11)	9/24/20	1005	S	4
5. B25 (7)	9/24/20	1030	S	5
6. B25 (11)	9/24/20	1035	S	6
7. B25 (5)	9/24/20	1040	S	7
8. B26 (5)	9/24/20	1055	S	8
9. B26 (7)	9/24/20	1100	S	9
10. B26 (11)	9/24/20	1105	S	10

SPECIAL INSTRUCTIONS Added 10/9/20 per Nick on std TAT.

SIGNATURES (Name, Company, Date, Time):

- Relinquished By: Shane Tech Aerotech 9/25/20 1440
Received By: Allen Perry ALS 9/25/20 14:40
- Relinquished By: _____
Received By: _____

TURNAROUND REQUESTED IN BUSINESS DAYS*

- Organic, Metals & Inorganic Analysis
- 1 SAME DAY
2 1
3 2
4 3
5 5
- Fuels & Hydrocarbon Analysis
- 1 SAME DAY
2 1
3 2
4 3
5 5
- OTHER: _____
Specify: _____

*Turnaround request less than standard may incur Rush Charges



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8620 Holly Drive, Suite 100
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http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

EV 20100039

ALS Job# EV20100015

Date 10/01/20 Page 3 Of 3

PROJECT ID:	REPORT TO COMPANY:	PROJECT MANAGER:	ADDRESS:	PHONE:	E-MAIL:	INVOICE TO COMPANY:	ATTENTION:	ADDRESS:	SAMPLE I.D.	DATE	TIME	TYPE	LAB#	ANALYSIS REQUESTED										OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?								
258603	Bob's Summit Chevron	Nick Gerkin	14220 Interurban Ave S, Ste 116 Tukwila WA	206 482 2287 P.O.#:	Nicks@dirtydirt.us	Colony Insurance	Jeremy Payne			10/01/20	0925	Soil	4	<input checked="" type="checkbox"/> MTBE by EPA 8021	<input checked="" type="checkbox"/> Halogenated Volatiles by EPA 8260	<input checked="" type="checkbox"/> Volatile Organic Compounds by EPA 8260	<input checked="" type="checkbox"/> EDB / EDC by EPA 8260 SIM (water)	<input checked="" type="checkbox"/> EDB / EDC by EPA 8260 (soil)	<input checked="" type="checkbox"/> Semivolatile Organic Compounds by EPA 8270	<input checked="" type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	<input checked="" type="checkbox"/> PCB by EPA 8082	<input checked="" type="checkbox"/> Pesticides by EPA 8081	<input checked="" type="checkbox"/> Metals-MTCA-5	<input checked="" type="checkbox"/> RCRA-8	<input checked="" type="checkbox"/> Pt Pol	<input checked="" type="checkbox"/> TAL	<input checked="" type="checkbox"/> Metals Other (Specify) Pb	<input checked="" type="checkbox"/> TCLP-Metals	<input checked="" type="checkbox"/> VOA	<input checked="" type="checkbox"/> Semi-Vol	<input checked="" type="checkbox"/> Pest	<input checked="" type="checkbox"/> Herbs		
1. B34 (11)														MTBE by EPA 8021	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082	Pesticides by EPA 8081	Metals-MTCA-5	RCRA-8	Pt Pol	TAL	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs		
2. B34 (15)														MTBE by EPA 8021	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082	Pesticides by EPA 8081	Metals-MTCA-5	RCRA-8	Pt Pol	TAL	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs		
3. B35 (11)														MTBE by EPA 8021	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082	Pesticides by EPA 8081	Metals-MTCA-5	RCRA-8	Pt Pol	TAL	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs		
4. B35 (15)														MTBE by EPA 8021	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082	Pesticides by EPA 8081	Metals-MTCA-5	RCRA-8	Pt Pol	TAL	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs		
5. B36 (11)														MTBE by EPA 8021	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082	Pesticides by EPA 8081	Metals-MTCA-5	RCRA-8	Pt Pol	TAL	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs		
6. B36 (15)														MTBE by EPA 8021	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082	Pesticides by EPA 8081	Metals-MTCA-5	RCRA-8	Pt Pol	TAL	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs		
7. B37 (11)														MTBE by EPA 8021	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082	Pesticides by EPA 8081	Metals-MTCA-5	RCRA-8	Pt Pol	TAL	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs		
8.														MTBE by EPA 8021	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082	Pesticides by EPA 8081	Metals-MTCA-5	RCRA-8	Pt Pol	TAL	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs		
9.														MTBE by EPA 8021	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082	Pesticides by EPA 8081	Metals-MTCA-5	RCRA-8	Pt Pol	TAL	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs		
10.														MTBE by EPA 8021	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082	Pesticides by EPA 8081	Metals-MTCA-5	RCRA-8	Pt Pol	TAL	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs		

SPECIAL INSTRUCTIONS Added 10/7/20 per Nick

SIGNATURES (Name, Company, Date, Time):
 1. Relinquished By: Shawn Acrotech 10/02/20 12:10
 Received By: Shawn Robins Acc 10/2/20 12/10
 2. Relinquished By: _____
 Received By: _____

TURNAROUND REQUESTED in Business Days*
 OTHER:
 Organic, Metals & Inorganic Analysis
 1
 2
 3
 4
 5
 Fuels & Hydrocarbon Analysis
 1
 2
 3
 4
 5

*Turnaround times less than standard may incur Rich Charge



November 12, 2020

Mr. Nick Gerkin
Aerotech Environmental Consulting, Inc.
13925 Interurban Ave S., Suite 210
Seattle, WA 98168

Dear Mr. Gerkin,

On November 9th, 16 samples were received by our laboratory and assigned our laboratory project number EV20110037. The project was identified as your Bob's Summit Deli Chevron / Colony 258603. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Glen Perry
Laboratory Manager



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-01
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/6/2020 1:50:00 PM
CLIENT SAMPLE ID	W-MW1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/10/2020	KLS
Benzene	EPA-8021	U	1.0	1	UG/L	11/10/2020	KLS
Toluene	EPA-8021	U	1.0	1	UG/L	11/10/2020	KLS
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/10/2020	KLS
Xylenes	EPA-8021	U	3.0	1	UG/L	11/10/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	81.2	11/10/2020	KLS
TFT	EPA-8021	75.6	11/10/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-02
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/9/2020 11:55:00 AM
CLIENT SAMPLE ID	W-MW2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	3600	500	10	UG/L	11/11/2020	KLS
Benzene	EPA-8021	100	10	10	UG/L	11/11/2020	KLS
Toluene	EPA-8021	U	10	10	UG/L	11/11/2020	KLS
Ethylbenzene	EPA-8021	67	10	10	UG/L	11/11/2020	KLS
Xylenes	EPA-8021	59	30	10	UG/L	11/11/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	94.8	11/11/2020	KLS
TFT 10X Dilution	EPA-8021	86.5	11/11/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered gasoline.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-03
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/6/2020 1:25:00 PM
CLIENT SAMPLE ID	W-MW3	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/10/2020	KLS
Benzene	EPA-8021	U	1.0	1	UG/L	11/10/2020	KLS
Toluene	EPA-8021	U	1.0	1	UG/L	11/10/2020	KLS
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/10/2020	KLS
Xylenes	EPA-8021	U	3.0	1	UG/L	11/10/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	84.5	11/10/2020	KLS
TFT	EPA-8021	77.6	11/10/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-04
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/9/2020 12:30:00 PM
CLIENT SAMPLE ID	W-MW4	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	3600	500	10	UG/L	11/11/2020	KLS
Benzene	EPA-8021	23	1.0	1	UG/L	11/10/2020	KLS
Toluene	EPA-8021	3.6	1.0	1	UG/L	11/10/2020	KLS
Ethylbenzene	EPA-8021	46	1.0	1	UG/L	11/10/2020	KLS
Xylenes	EPA-8021	170	3.0	1	UG/L	11/10/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	100	11/11/2020	KLS
TFT	EPA-8021	136	11/10/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered gasoline.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-05
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/9/2020 10:00:00 AM
CLIENT SAMPLE ID	W-MW5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/11/2020	KLS
Benzene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Toluene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Xylenes	EPA-8021	U	3.0	1	UG/L	11/11/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	92.2	11/11/2020	KLS
TFT	EPA-8021	86.7	11/11/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-06
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/9/2020 1:00:00 PM
CLIENT SAMPLE ID	W-MW6	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	21000	5000	100	UG/L	11/11/2020	KLS
Benzene	EPA-8021	320	100	100	UG/L	11/11/2020	KLS
Toluene	EPA-8021	110	100	100	UG/L	11/11/2020	KLS
Ethylbenzene	EPA-8021	1100	100	100	UG/L	11/11/2020	KLS
Xylenes	EPA-8021	2000	300	100	UG/L	11/11/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 100X Dilution	NWTPH-GX	89.0	11/11/2020	KLS
TFT 100X Dilution	EPA-8021	83.4	11/11/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered gasoline.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-07
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/6/2020 12:00:00 PM
CLIENT SAMPLE ID	W-MW7	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/11/2020	KLS
Benzene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Toluene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Xylenes	EPA-8021	U	3.0	1	UG/L	11/11/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	90.8	11/11/2020	KLS
TFT	EPA-8021	81.1	11/11/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-08
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/6/2020 12:25:00 PM
CLIENT SAMPLE ID	W-MW8	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	110	50	1	UG/L	11/11/2020	KLS
Benzene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Toluene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Xylenes	EPA-8021	U	3.0	1	UG/L	11/11/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	92.6	11/11/2020	KLS
TFT	EPA-8021	86.6	11/11/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-09
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/6/2020 12:50:00 PM
CLIENT SAMPLE ID	W-MW9	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	90	50	1	UG/L	11/11/2020	KLS
Benzene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Toluene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Xylenes	EPA-8021	U	3.0	1	UG/L	11/11/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	87.4	11/11/2020	KLS
TFT	EPA-8021	81.9	11/11/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
CLIENT CONTACT:	Nick Gerkin	ALS JOB#:	EV20110037
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	ALS SAMPLE#:	EV20110037-10
CLIENT SAMPLE ID	W-MW10	DATE RECEIVED:	11/09/2020
		COLLECTION DATE:	11/6/2020 2:30:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/11/2020	KLS
Benzene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Toluene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Xylenes	EPA-8021	U	3.0	1	UG/L	11/11/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	83.9	11/11/2020	KLS
TFT	EPA-8021	77.9	11/11/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-11
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/6/2020 3:55:00 PM
CLIENT SAMPLE ID	W-MW11	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/10/2020	KLS
Benzene	EPA-8021	U	1.0	1	UG/L	11/10/2020	KLS
Toluene	EPA-8021	U	1.0	1	UG/L	11/10/2020	KLS
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/10/2020	KLS
Xylenes	EPA-8021	U	3.0	1	UG/L	11/10/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	78.7	11/10/2020	KLS
TFT	EPA-8021	75.3	11/10/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-12
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/6/2020 3:25:00 PM
CLIENT SAMPLE ID	W-MW12	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/10/2020	KLS
Benzene	EPA-8021	U	1.0	1	UG/L	11/10/2020	KLS
Toluene	EPA-8021	U	1.0	1	UG/L	11/10/2020	KLS
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/10/2020	KLS
Xylenes	EPA-8021	U	3.0	1	UG/L	11/10/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	80.5	11/10/2020	KLS
TFT	EPA-8021	75.1	11/10/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-13
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/9/2020 10:30:00 AM
CLIENT SAMPLE ID	W-MW13	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	110	50	1	UG/L	11/11/2020	KLS
Benzene	EPA-8021	6.5	1.0	1	UG/L	11/11/2020	KLS
Toluene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Ethylbenzene	EPA-8021	1.5	1.0	1	UG/L	11/11/2020	KLS
Xylenes	EPA-8021	3.2	3.0	1	UG/L	11/11/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	86.1	11/11/2020	KLS
TFT	EPA-8021	78.8	11/11/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered gasoline.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-14
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/9/2020 11:00:00 AM
CLIENT SAMPLE ID	W-MW14	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	390	50	1	UG/L	11/11/2020	KLS
Benzene	EPA-8021	7.3	1.0	1	UG/L	11/11/2020	KLS
Toluene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Xylenes	EPA-8021	37	3.0	1	UG/L	11/11/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	93.6	11/11/2020	KLS
TFT	EPA-8021	86.3	11/11/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered gasoline.

CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-15
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/9/2020 11:25:00 AM
CLIENT SAMPLE ID	W-MW15	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	2100	500	10	UG/L	11/11/2020	KLS
Benzene	EPA-8021	36	1.0	1	UG/L	11/11/2020	KLS
Toluene	EPA-8021	1.5	1.0	1	UG/L	11/11/2020	KLS
Ethylbenzene	EPA-8021	65	1.0	1	UG/L	11/11/2020	KLS
Xylenes	EPA-8021	12	3.0	1	UG/L	11/11/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	90.8	11/11/2020	KLS
TFT	EPA-8021	98.7	11/11/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered gasoline.



CERTIFICATE OF ANALYSIS

CLIENT:	Aerotech Environmental Consulting, Inc. 13925 Interurban Ave S., Suite 210 Seattle, WA 98168	DATE:	11/12/2020
		ALS JOB#:	EV20110037
		ALS SAMPLE#:	EV20110037-16
CLIENT CONTACT:	Nick Gerkin	DATE RECEIVED:	11/09/2020
CLIENT PROJECT:	Bob's Summit Deli Chevron / Colony 258603	COLLECTION DATE:	11/6/2020 3:00:00 PM
CLIENT SAMPLE ID	W-MW16	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/11/2020	KLS
Benzene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Toluene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/11/2020	KLS
Xylenes	EPA-8021	U	3.0	1	UG/L	11/11/2020	KLS
Lead	EPA-200.8	U	1.0	1	UG/L	11/11/2020	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	81.0	11/11/2020	KLS
TFT	EPA-8021	75.1	11/11/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting,
 Inc.
 13925 Interurban Ave S., Suite 210
 Seattle, WA 98168

CLIENT CONTACT: Nick Gerkin
 CLIENT PROJECT: Bob's Summit Deli Chevron / Colony
 258603

DATE: 11/12/2020
 ALS SDG#: EV20110037
 WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MBG-111020W - Batch 159425 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	UG/L	50	11/10/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-111020W - Batch 159425 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	UG/L	1.0	11/10/2020	KLS
Toluene	EPA-8021	U	UG/L	1.0	11/10/2020	KLS
Ethylbenzene	EPA-8021	U	UG/L	1.0	11/10/2020	KLS
Xylenes	EPA-8021	U	UG/L	3.0	11/10/2020	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-111120W - Batch 159504 - Water by EPA-200.8

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-200.8	U	UG/L	1.0	11/11/2020	RAL

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Aerotech Environmental Consulting,
 Inc.
 13925 Interurban Ave S., Suite 210
 Seattle, WA 98168

CLIENT CONTACT: Nick Gerkin
 CLIENT PROJECT: Bob's Summit Deli Chevron / Colony
 258603

DATE: 11/12/2020
 ALS SDG#: EV20110037
 WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 159425 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
TPH-Volatile Range - BS	NWTPH-GX	94.2			66.5	122.7	11/10/2020	KLS
TPH-Volatile Range - BSD	NWTPH-GX	94.6	0		66.5	122.7	11/10/2020	KLS

ALS Test Batch ID: 159425 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Benzene - BS	EPA-8021	95.1			83	120	11/11/2020	KLS
Benzene - BSD	EPA-8021	94.8	0		83	120	11/11/2020	KLS
Toluene - BS	EPA-8021	93.6			85	115	11/11/2020	KLS
Toluene - BSD	EPA-8021	93.3	0		85	115	11/11/2020	KLS
Ethylbenzene - BS	EPA-8021	91.5			85	113	11/11/2020	KLS
Ethylbenzene - BSD	EPA-8021	91.9	0		85	113	11/11/2020	KLS
Xylenes - BS	EPA-8021	92.7			85	116	11/11/2020	KLS
Xylenes - BSD	EPA-8021	92.7	0		85	116	11/11/2020	KLS

ALS Test Batch ID: 159504 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Lead - BS	EPA-200.8	96.7			87.5	107	11/11/2020	RAL
Lead - BSD	EPA-200.8	97.4	1		87.5	107	11/11/2020	RAL

APPROVED BY

Laboratory Manager



ALS Environmental
 8620 Holly Drive, Suite 100
 Everett, WA 98208
 Phone (425) 356-2600
 Fax (425) 356-2626
 http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only)

EV20110037

Date 11/9 Page 2 Of 2

PROJECT ID: Bobs Summit Cherron/Cobny 258603			
REPORT TO COMPANY: Aerotech			
PROJECT MANAGER: Nick Gerks			
ADDRESS: 43925 14420 Interurban Aves St 116 Tukwila WA 98168			
PHONE: 206 482 2287 P.O. #:			
E-MAIL: nicole@dirtydnt.us			
INVOICE TO COMPANY: Colony Insurance / CO Vertex			
ATTENTION: Tom Demers			
ADDRESS:			
SAMPLE I.D.	DATE	TIME	LAB#
1. W-MW11	11/6	1555	11
2. W-MW12	11/6	1525	12
3. W-MW13	11/9	1030	13
4. W-MW14	11/9	1100	14
5. W-MW15	11/9	1125	15
6. W-MW16	11/6	1500	16
7.			
8.			
9.			
10.			

ANALYSIS REQUESTED		OTHER (Specify)	
<input type="checkbox"/> NMTPH-HCID	<input checked="" type="checkbox"/> NMTPH-DX	<input type="checkbox"/> Halogenated Volatiles by EPA 8260	<input type="checkbox"/> Volatile Organic Compounds by EPA 8260
<input type="checkbox"/> NMTPH-GX	<input checked="" type="checkbox"/> BTEX by EPA 8021	<input type="checkbox"/> MTBE by EPA 8021	<input type="checkbox"/> EDB / EDC by EPA 8260 (water)
<input type="checkbox"/> BTEX by EPA 8260	<input type="checkbox"/> MTBE by EPA 8260	<input type="checkbox"/> EDB / EDC by EPA 8260 (soil)	<input type="checkbox"/> Semivolatile Organic Compounds by EPA 8270
<input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	<input type="checkbox"/> PCB by EPA 8082	<input type="checkbox"/> Pesticides by EPA 8081	<input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM
<input type="checkbox"/> Metals-MTCA-5	<input type="checkbox"/> RCRA-8	<input type="checkbox"/> Pht Pol	<input type="checkbox"/> TAL
<input checked="" type="checkbox"/> Metals Other (Specify) <u>total lead 6020</u>	<input type="checkbox"/> TCLP-Metals	<input type="checkbox"/> VOA	<input type="checkbox"/> Semi-Vol
<input type="checkbox"/> Herbs	<input type="checkbox"/> Pest	<input type="checkbox"/> Herbs	<input type="checkbox"/> Herbs
RECEIVED IN GOOD CONDITION?	NUMBER OF CONTAINERS	3	

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):
 1. Relinquished By: Shirley HVT, Aerotech, 11/9/20, 1505
 Received By: Shirley HVT ALS 11/09/20 1505
 2. Relinquished By: _____
 Received By: _____

TURNAROUND REQUESTED in Business Days*
 OTHER:
 Specify: _____

Organic, Metals & Inorganic Analysis
 1 SAME DAY
 2
 3
 5 Standard

Fuels & Hydrocarbon Analysis
 1 SAME DAY
 3
 1 Standard

*Turnaround request less than standard may incur Rush Charges

Appendix F

Snoqualmie Pass Utility District Well Logs

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.



UNIQUE WELL I.D. NUMBER ABR040
X Y Z 1 2 3

WELL TAGGING FORM

Date of Field Visit 7/20/94 By M. C. Toole

ADDITIONAL WELL IDENTIFIERS

Department of Health System ID Number 81048F Source Number SO 2

USGS Site Identification _____

RECORD VERIFICATION

- Well Report available (please attach)
- Well Report not available
- Verification inconclusive

WELL OWNERSHIP, IF DIFFERENT FROM WELL REPORT

Name Snogualmie Pass Utility District

Street address 68902 SE Snogualmie Pass Summit Rd.

City Snogualmie Pass State WA 98068

LOCATION OF WELL, IF DIFFERENT FROM WELL REPORT

Well Address _____

City _____ County _____

T. _____ N. R. _____ W M Sec. _____ 1/4 of the _____ 1/4

Latitude _____ ° _____ ' _____ "

Longitude _____ ° _____ ' _____ "

- GPS (raw data)
- GPS (corrected)
- Topographic Map
- Survey
- Computer generated
- Other _____

Elevation at land surface 2995 . feet/meters (circle one)

- Digital Altimeter
- Topographic Map
- Other topo

Additional information, if available:

- Location marked on topographic map (please attach)
- Location marked on air photo (please attach)

Water Right # G 1-24446 C Priority Date 2-2-84

Circle one: Application Permit Certificate Claim Exempt

WELL CHARACTERISTICS

Physical Description of Well (size of casing, type of well, housing, etc.): Concrete block well house, pit less adapter at wellhead outside of building.

Location of Well Identification Tag: Well piping in well house

Was Supplemental Tag needed for ease of identifying well?

- NO
- YES

If yes, where was tag placed? _____

Scale 1:24,000 (1"=2,000')

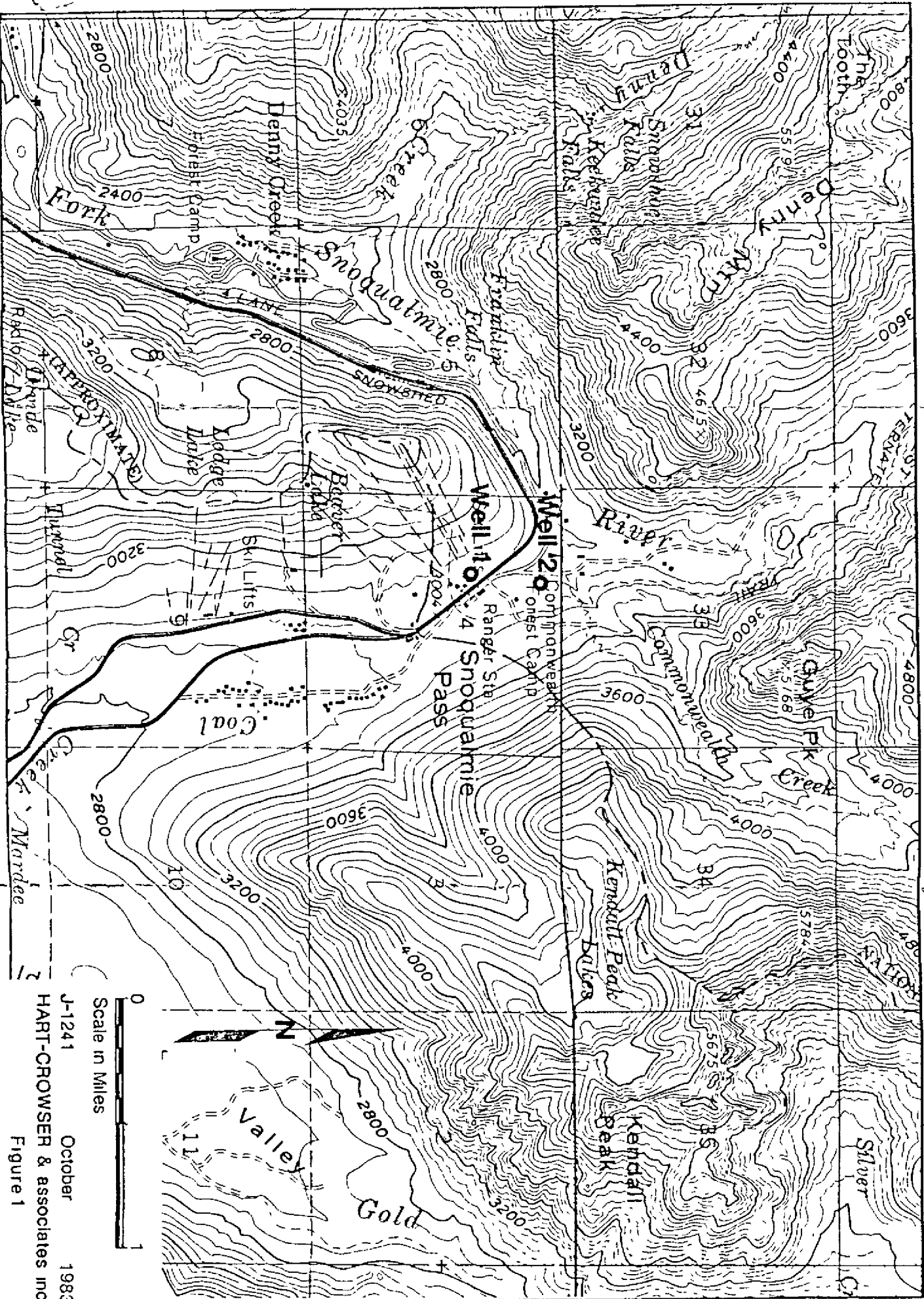
D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Indicate the location of the well within the Section by drawing a dot at that point.

SECTION 4

COMMENTS: _____

Well Location Map



The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

J-1241
HART-CROWSER & associates inc.
October 1983
Figure 1

Appendix G

Terrestrial Ecological Evaluation



Voluntary Cleanup Program

Washington State Department of Ecology Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation>.

Step 1: IDENTIFY HAZARDOUS WASTE SITE

Please identify below the hazardous waste site for which you are documenting an evaluation.

Facility/Site Name: Summit Deli & Chevron

Facility/Site Address: 521 WA 906, Snoqualmie Pass, Washington 98068

Facility/Site No: 47987894

VCP Project No.: Entry into PTAP currently pending

Step 2: IDENTIFY EVALUATOR

Please identify below the person who conducted the evaluation and their contact information.

Name: Simon Payne

Title: Project Geologist

Organization: Aerotech Environmental Consulting, Inc.

Mailing address: 13925 Interurban Ave S

City: Seattle

State: WA

Zip code: 98168

Phone: (206) 257-4211

Fax:

E-mail: simon@dirtydirt.us

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

- Yes *If you answered "YES," then answer **Question 2**.*
- No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? Check all that apply. Then skip to **Step 4** of this form.

Point of Compliance: WAC 173-340-7491(1)(a)

- All soil contamination is, or will be,* at least 15 feet below the surface.
- All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

- All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

- There is less than 0.25 acres of contiguous# undeveloped± land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.
- For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous# undeveloped± land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

- Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

± "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

"Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

- Yes *If you answered "YES," then answer **Question 2** below.*
- No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

- Yes *If you answered "YES," then answer **Question 3** below.*
- No *If you answered "NO," then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

- Yes *If you answered "YES," then answer **Question 4** below.*
- No *If you answered "NO," then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

- Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*
- Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? Check all that apply. Then skip to **Step 4** of this form.

Exposure Analysis: WAC 173-340-7492(2)(a)

- Area of soil contamination at the Site is not more than 350 square feet.
- Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

- No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

- No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. See WAC 173-340-7493(1)(c).

1. Was there a problem? See WAC 173-340-7493(2).

- Yes *If you answered “YES,” then answer **Question 2** below.*
- No *If you answered “NO,” then identify the reason here and then skip to **Question 5** below:*
- No issues were identified during the problem formulation step.
 - While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? See WAC 173-340-7493(3).

- Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?

Check all that apply. See WAC 173-340-7493(3).

- Literature surveys.
- Soil bioassays.
- Wildlife exposure model.
- Biomarkers.
- Site-specific field studies.
- Weight of evidence.
- Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

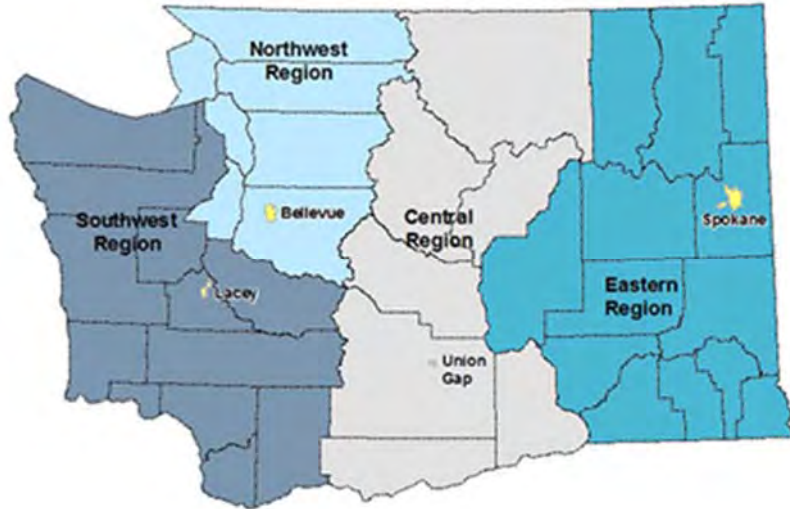
- Confirmed there was no problem.
- Confirmed there was a problem and established site-specific cleanup levels.

5. Have you already obtained Ecology’s approval of both your problem formulation and problem resolution steps?

- Yes If so, please identify the Ecology staff who approved those steps:
- No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.



Northwest Region: Attn: VCP Coordinator 3190 160 th Ave. SE Bellevue, WA 98008-5452	Central Region: Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	Eastern Region: Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call 877-833-6341.