

**SUB-SLAB PETROLEUM CONTAMINATED SOIL
REMOVAL ACTION
315 NORTH SAMISH WAY
BELLINGHAM, WASHINGTON**

prepared for:

City of Bellingham
210 Lottie Street
Bellingham, Washington 98225

December 17, 2015



*soil | water | air
compliance consulting*

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City of Bellingham
210 Lottie St.
Bellingham, WA 98225

Prepared by

Whatcom Environmental Services
228 East Champion Street #101
Bellingham, Washington 98225

December 17, 2015


Harold Cashman
Project Manager



HAROLD J. CASHMAN


Thomas Davis
QA/QC Reviewer

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1.0 INTRODUCTION

A petroleum contaminated soil (PCS) removal action has been completed at 315 North Samish Way in Bellingham, Washington. The property was the site of the Aloha Motel and is shown on Figure 1.

During demolition of the southern motel building, a petroleum odor was identified emanating from soils contained within two of three building sub-slab foundation cells. The building foundation cells were backfilled with approximately 2 feet of sandy gravel. The shallow sandy backfill material in the northern cell and center cell was impacted gasoline range total petroleum hydrocarbons (TPH), ethylbenzene, and xylenes at concentrations that exceeded the Washington State Model Toxics Control Act (MTCA) Method A target cleanup levels (Ecology, 2013).

Approximately 61 tons of PCS located within the northern and center foundation cells was removed from the site on December 2, 2015. Field screening and clean confirmation soil sample analytical results showed that soil remaining at the site at the completion of the cleanup action met the MTCA Method A target cleanup levels.

2.0 SITE DESCRIPTION

The subject property is located at 315 N. Samish Way in Bellingham, Washington. The property is located in the northwest quarter of the southeast quarter of Section 31 in Township 38 North, Range 3 East. The property is approximately 1.5 acres in area and consists of two tax parcels (380331421256 and 380331425243). The property is zoned by the City of Bellingham as Commercial.

The property is owned by the City of Bellingham. The site is located approximately 1.20 miles east of Bellingham Bay, 0.90 miles south of Whatcom Creek, and 0.15 miles west of Interstate-5. The elevation of the site is approximately 215 feet above mean sea level. The property is generally level but does have a gentle slope towards the west/northeast. A site location map showing the surrounding area and topography is provided as Figure 1.

The eastern portion of the property is covered with grass and landscape vegetation. The middle portion of the site is covered with an asphalt parking lot. Two buildings were situated on the northwest and southwest edges of the subject property.

2.1 SITE GEOLOGY

The subject property is located in the northern portion of the Puget Sound Basin. The region is characterized by thick sequences of Pleistocene glacial advance outwash and meltwater deposits that settled on a basement of tectonically deformed sedimentary and ancient metamorphic bedrock. The glacial deposits have been reworked by more recent fluvial, lacustrine, and aeolian actions into the landforms present today.

Soils in the area of the subject property are described online through the Web Soil Survey (U.S. Department of Agriculture [USDA], 2014). The Soil Survey designates the soil as Chuckanut–Urban land complex, 5 to 20 percent slopes. The soil is composed of approximately 50 percent Chuckanut loam and 35 percent Urban Land. The Chuckanut soil is very deep and well drained. It formed in a mixture of volcanic ash and colluvium derived from glaciomarine deposits and sandstone. Permeability is moderate in the

Chuckanut loam. Available water capacity is very high. Urban land is designated where areas of pavement and human activity make the identification of soil types difficult.

The site is underlain by the Padden Member of the Chuckanut Formation (Lapen, 2000). The Padden Member consists of moderately well-sorted sandstone and conglomerate with some mudstone and minor coal seams. Easterbrook (1976) describes the surficial material at the site as outwash sand and gravels of the Sumas glacial Stade.

The material encountered in the foundation cells consisted of silty medium to coarse sand with gravel. The material appears to be fill derived from an unknown source. The material beneath the fill consisted of silty sand and likely represents reworked surface material disturbed during the historical development of the property.

2.2 SITE HYDROGEOLOGY

Soil encountered at the extent of the excavated area was firm and dry to moist. No groundwater was encountered in the foundation cells following the removal of the shallow PCS; therefore, no groundwater investigation was conducted as part of this remedial action.

3.0 SELECTION OF SOIL CLEANUP STANDARDS

The Model Toxics Control Act (MTCA) Method A target cleanup levels for soil were selected as screening levels for the site (Ecology, 2013). These levels have been established for unrestricted land use in accordance with WAC 173-340 and can be found in Table 740-1. The soil data collected during the investigation were compared to the applicable MTCA Method A cleanup levels.

The cleanup goals for the site were set such that at the completion of the project the TPH concentrations remaining in soil at the subject property met the MTCA Method A unrestricted land use cleanup criteria.

Samples collected from the site were analyzed for gasoline and diesel range total petroleum hydrocarbons (TPH) via Methods NWTPH-Gx and NWTPH-Dx, respectively; benzene, toluene, ethylbenzene, and total xylenes (BTEX constituents) and methyl tert-butyl ether (MTBE) via EPA Method 8021; arsenic, cadmium, chromium, and lead via EPA Method 6020, and mercury via EPA Method 7471; naphthalenes via EPA 8270 SIM, and 1,2-dichloroethane (ethylene dichloride/EDC) and 1,2-dibromoethane (ethylene dibromide/EDB) via EPA 8260.

4.0 PCS INVESTIGATION AND REMEDIAL ACTION

During demolition of the southern motel building, a petroleum odor was identified emanating from soils contained within two of three building foundation cells (identified as northern cell, center cell, and southern cell). The building foundation cells were defined by concrete walls and were backfilled with approximately 2 feet of sandy gravel. The soil in the foundation cells was field screened for indications of petroleum contamination by conducting head space analyses for organic vapors using a photoionization detector (PID) and by conducting sheen tests. The organic vapor headspace analyses were conducted using a MiniRAE Model 3000 PID equipped with a 10.6 eV lamp. The field screening results indicated that the shallow sandy backfill material in the northern cell and center cell was impacted by organic vapors and slight petroleum sheens. No organic vapors or petroleum sheens were detected in the southern cell. The contaminated soil was contained within the concrete walls of the two foundation cells located on the southwest side of the southern building's main foundation as seen on Figure 2. The source of the PCS is unknown.

Soil samples were collected on November 13, 2015 to characterize the potential petroleum contamination (soil samples *PCS-1* and *PCS-2*). Soil sample *PCS-1* was collected from the area with the highest field screening indications in the center cell and soil sample *PCS-2* was collected from between the northern and center cells to determine if the contamination had migrated outside the concrete cell walls and contaminated soil below the level of the foundation walls.

Soil sample *PCS-1* laboratory analytical results indicated that the shallow fill material in the center cell was contaminated with gasoline range total petroleum hydrocarbons (TPH), ethylbenzene, and xylenes at concentrations that exceeded the MTCA Method A target cleanup levels. No diesel or oil-range TPH was detected. Soil sample *PCS-2* laboratory analytical results indicated that the soil located below the foundation walls between the northern cell and the center cell was not impacted by gasoline, diesel, or oil-range TPH and that the contamination had not migrated outside the concrete foundation walls. The soil sample locations are shown on Figure 2. The soil sample descriptions are included in Table 1 and the laboratory analytical data are summarized in Tables 2 and 3.

Further investigation was undertaken on November 20, 2015 when a test trench was excavated approximately 8 feet northeast of the foundation cells. The test trench location is shown on Figure 2. The trench was excavated to a depth of 4 feet below the surface of the parking lot level on the east side of the southern building. The trench began at the middle of the southern cell and terminated 50 feet to the northwest in the middle of the northern cell. Excavated soil was field screened for indications of PCS. No indication of PCS was observed. One soil sample, *PCS Trench 4ft*, was collected to confirm the absence of PCS east of the contaminated foundation cells.

The decision was made to remove the petroleum contaminated fill material contained in the two impacted cells and sample the cell floors to document the results of the remedial action.

The PCS removal action was completed on December 2, 2015. Whatcom Environmental Services personnel were onsite following the PCS removal work to field screen soil remaining in the northern and center cell floors and collect clean confirmational samples. Two clean confirmation soil samples were collected from the floors of the completed excavations to document the effectiveness of the remedial action. The clean confirmation soil samples were identified as *CS-1* and *CS-2*.

Laboratory analysis of the clean confirmation samples indicated that the PCS removal action was successful. Approximately 61 tons of PCS were hauled offsite for treatment via thermal desorption at Cemex in Everett, Washington. Cemex is a licensed PCS treatment and disposal facility. The Cemex Certificate of Disposal is provided in Appendix A.

5.0 SAMPLING AND ANALYSIS

Each soil sample was described in general accordance with ASTM D2487 and recorded in a field notebook. Soil sample descriptions, depths of collection, results of field screening, and sample dates are shown in Table 1.

5.1 SOIL SAMPLE COLLECTION PROCEDURES

All soil samples were collected as discrete samples using Method 5035A. The soil samples were collected using stainless steel sampling equipment. The tools were washed in accordance with good industry practices using Alconox detergent and rinsed with distilled water prior to sample collection. Each sample was placed in a clean sample container provided by the lab, stored in a cooler with ice, and shipped to ALS Laboratory Group in Everett, Washington. ALS is accredited by Ecology. Strict chain-of-custody and QA/QC protocols were followed for each sample.

5.2 SOIL SAMPLE ANALYTICAL RESULTS

Five discrete soil samples were collected to document the completeness of the PCS removal action. Three site characterization samples and two clean confirmation samples were collected. The site characterization and the clean confirmation soil sample locations are shown on Figure 2. Laboratory analytical data are summarized in Tables 2 and 3. The original soil sample laboratory analytical data reports are included in Appendix B.

PCS characterization samples indicated that the source of the contamination was gasoline range TPH and BTEX constituents. Diesel range TPH and metals were either not detected or detected at concentrations that did not exceed the MTCA Method A target cleanup levels.

All clean confirmation soil samples collected at the extent of the remedial excavations met the MTCA Method A target cleanup levels for gasoline and diesel range TPH, BTEX constituents, MTBE, naphthalenes, EDB, EDC, and metals (Tables 2 and 3).

6.0 CONCLUSIONS

A PCS removal action was conducted at the property located at 315 N. Samish Way in Bellingham, Washington. The site was defined by a gasoline range petroleum release to soil contained in two sub-slab foundation cells located beneath the demolished southern building. The site was contained within the property boundary.

The PCS removal action occurred on December 2, 2015. Approximately 61 tons of PCS were excavated and removed from the subject property for offsite treatment and disposal. Clean confirmation soil samples collected from the final extent of the remedial excavations met the MTCA Method A target cleanup levels for all analytical parameters.

The cleanup goals for the site were set such that at the completion of the project contaminant concentrations remaining in soil at the excavation location met the MTCA Method A unrestricted land use cleanup criteria. Based on the soil analytical data, in our opinion no further action is required at the site.

7.0 LIMITATIONS

No site investigation can wholly eliminate uncertainty regarding the potential for contamination in connection with a property. Documentation of the soil remediation by Whatcom Environmental Services is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental contamination in connection with the subject property.

The interpretation of subsurface soil and groundwater conditions is based on Whatcom Environmental's field observations and chemical analytical data collected from relatively widely spaced sampling locations at the site. It is possible that contamination exists beneath portions of the site that were not explored, sampled, or analyzed. No warranty, express or implied, is given regarding the presence of hidden or unidentified sources of contamination of the subject property. In addition, no warranty, express or implied is given regarding geotechnical or geologic hazards.

This environmental report is based on conditions that existed at the time the investigation was performed and samples collected. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the site, or by natural events such as floods, earthquakes, ground instability, or groundwater fluctuations.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted environmental practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

This report has been prepared for use by the City of Bellingham. Whatcom Environmental prepares a report for the client's exclusive use for a particular project and in accordance with generally accepted practices at the time of investigation. This report was prepared for exclusive use by the client and their authorized agents and may not be used, relied upon, or assigned to a third party without written consent from Whatcom Environmental Services. This report is not intended for use by others, and the information contained herein is not applicable to other sites. This report may be made available to regulatory agencies.

8.0 REFERENCES

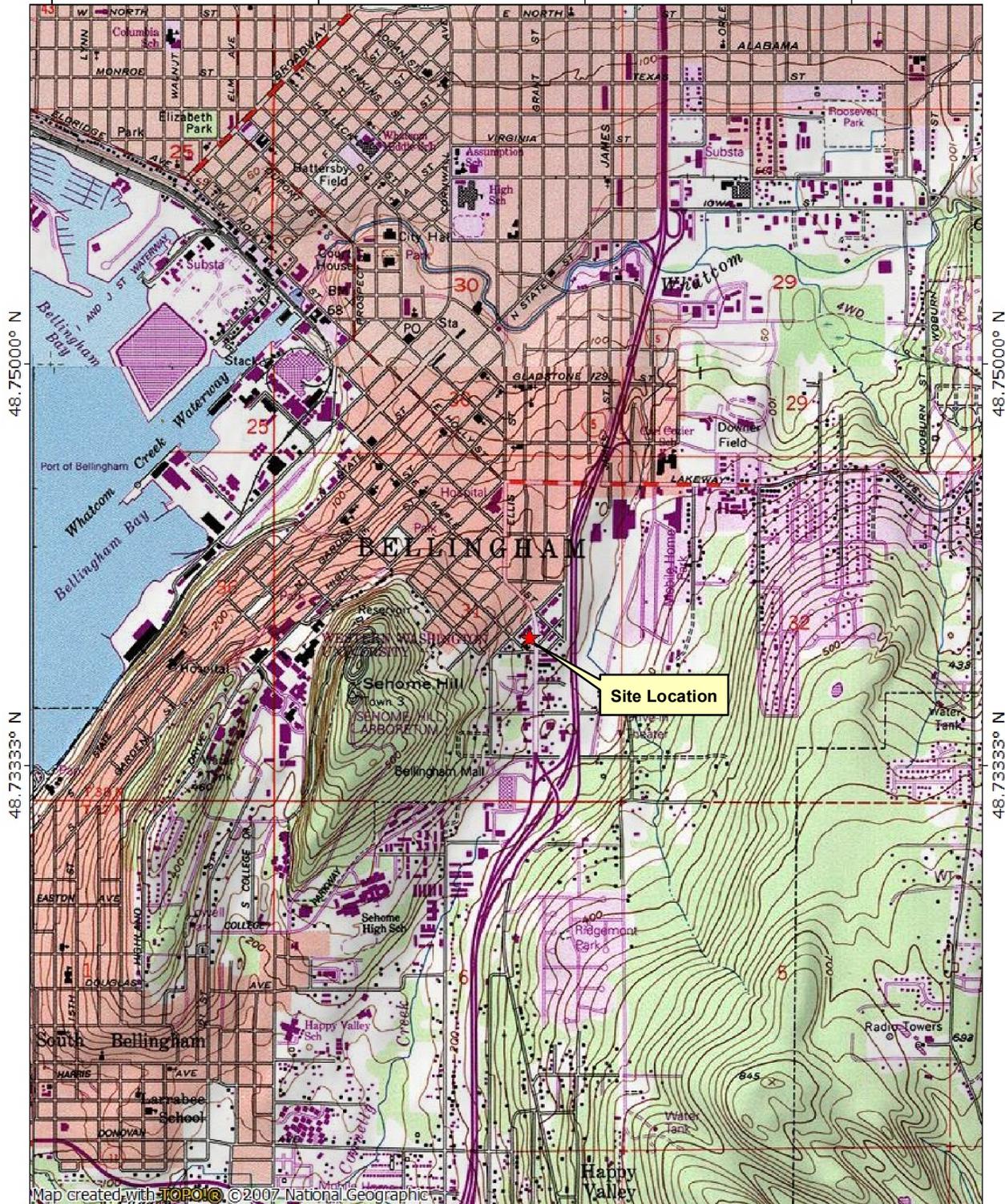
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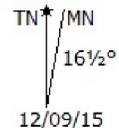
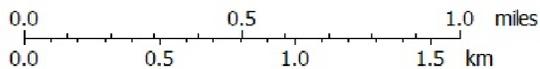
Washington State Department of Ecology (Ecology). 2013. Model Toxics Control Act Cleanup Regulation Chapter 173-340 WAC. Publication No. 94-06.

122.50000° W 122.48333° W 122.46667° W WGS84 122.45000° W



Map created with **TOPOLOG** ©2007 National Geographic

122.50000° W 122.48333° W 122.46667° W WGS84 122.45000° W



Prepared for:

City of Bellingham



Prepared by:



Site Location Map

Aloha Motel
Sub-slab PCS
12/09/2015

Figure 1

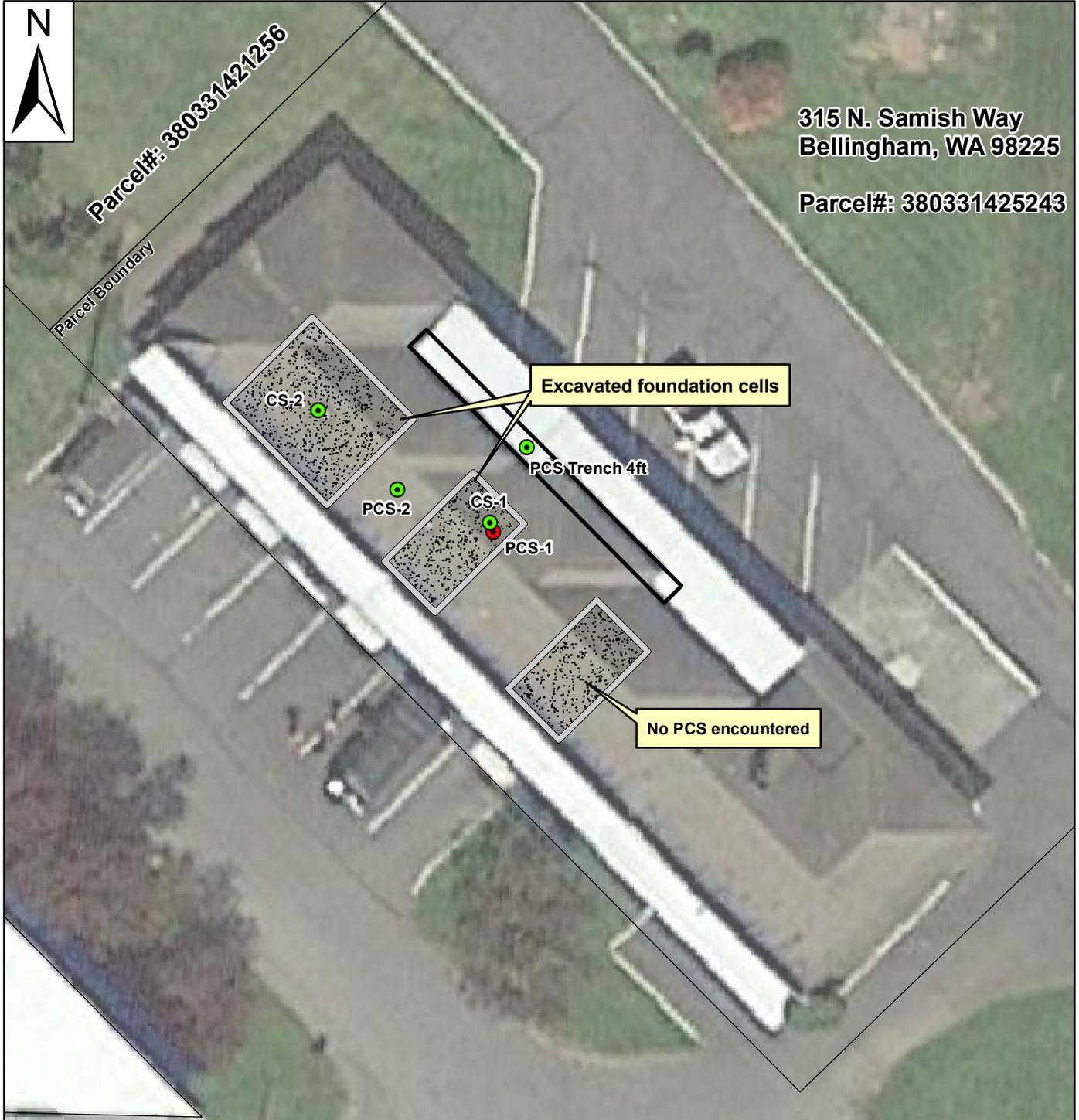


Parcel#: 380331421256

315 N. Samish Way
Bellingham, WA 98225

Parcel#: 380331425243

Parcel Boundary



Soil Sample Analytical Results

- Exceeded MTCA Method A
- Met MTCA Method A

 Filled Foundation Cells

 Test Trench

All data are approximate and should be used for relative location reference only.
2015 Aerial Photograph - GoogleEarth



Prepared for:

City of
Bellingham



Prepared by:



**Site Overview and
Soil Sample Location Map**

Aloha Motel
Sub-slab PCS
12/09/15

Figure 2

Table 1. Sub-Slab Soil Sample Descriptions - Aloha Motel Property, 315 N. Samish Way

Sample ID	Date	Soil Sample Description	PID (ppm)	Sheen Test*
PCS-1**	11/13/15	Collected from petroleum contaminated soil located within the middle foundation cell fill material at approximately 6 inches bgs. Coarse sand and gravel, gray, loose, wet (due to rainfall).	6,700	SS
PCS-2	11/13/15	Collected outside the filled foundation cells between the north and middle cells at approximately 2 feet bgs. Silty sand with gravel, brown, firm, moist.	39	NS
PCS Trench 4ft	11/20/15	Collected at 4 feet bgs from the trench excavated east of the filled foundation cells. Silty, gravelly fine sand, brown to tan, loose, moist.	2.7	NS
CS-1	12/02/15	Collected approximately 1 ft bgs from the floor of the middle foundation cell after PCS removal. Collected in the vicinity of PCS-1 sample location. Silty sand, dark brown, loose, dry to moist.	0	NS
CS-2	12/02/15	Collected approximately 1.5 ft bgs from the floor of the northern foundation cell after PCS removal. Silty sand, dark brown, loose, moist.	0	NS

* NS = No Sheen; VSS = Very Slight Sheen; SS = Slight Sheen; MS = Moderate Sheen; HS = Heavy Sheen

** Soil Sample PCS-1 was over-excavated on 12/2/15

Table 2. Sub-Slab Petroleum Analytical Data - Aloha Motel Property, 315 N. Samish Way

Sample ID	Date	NWTPH-Gx Volatile Range mg/kg	NWTPH-Dx Diesel Range mg/kg	NWTPH-Dx Oil Range mg/kg	EPA-8021 Benzene mg/kg	EPA-8021 Toluene mg/kg	EPA-8021 Ethylbenzene mg/kg	EPA-8021 Xylenes mg/kg	EPA-8021 MTBE mg/kg	EPA-8270 Naphthalene	EPA-8260 EDC mg/kg	EPA-8260 EDB mg/kg
MTCA Method A Cleanup Level		100/30*	2,000	2,000	0.03	7	6	9	0.1	5.0	--	0.005
PCS-1**	11/13/15	18,000	ND(<25)	ND(<50)	<i>ND(<15)</i>	<i>ND(<25)</i>	390	2,000	<i>ND(<50)</i>	NA	NA	NA
PCS-2	11/13/15	ND(<3)	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA	NA	NA
PCS Trench 4ft	11/20/15	ND(<3)	NA	NA	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA	NA	NA
CS-1	12/02/15	ND(<3)	NA	NA	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	ND(<0.02)	ND(<0.01)	ND(<0.005)
CS-2	12/02/15	ND(<3)	NA	NA	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA	NA	NA

* - Cleanup level dependent on BTEX concentrations

** Soil Sample PCS-1 was over-excavated on 12/2/15

BOLD - indicates that the concentration in the sample exceeds the MTCA Method A target cleanup levels

ND - indicates analyte was not detected at level above reporting limit (shown in parentheses)

Italics - indicates the laboratory reporting limit was raised above the MTCA A cleanup level due to dilution

NA - indicates that the sample was Not Analyzed for the specified analyte

Table 3. Sub-Slab Metals Analytical Data - Aloha Motel Property, 315 N. Samish Way

Sample ID	Date	EPA-6020 Arsenic mg/kg	EPA-6020 Cadmium mg/kg	EPA-6020 Chromium mg/kg	EPA-6020 Lead mg/kg	EPA-8021 Mercury mg/kg
MTCA Method A Cleanup Level		20	2	2,000	250	2
PCS-1	11/13/15	2.9	ND(<0.5)	34	4.4	ND(<0.02)
PCS-2	11/13/15	3.6	ND(<0.5)	32	160	0.033
PCS Trench 4ft	11/20/15	NA	NA	NA	NA	NA
CS-1	12/02/15	NA	NA	NA	NA	NA
CS-2	12/02/15	NA	NA	NA	NA	NA

ND - indicates analyte was not detected at level above reporting limit (shown in parentheses)

NA - indicates that the sample was Not Analyzed for the specified analyte

APPENDIX A

Cemex Certificate of Disposal



Release of Liability/Certificate of Disposal

Cowden Inc, and their client; are released from liability for the petroleum contaminated soil from the following site:

**Aloha Motel Site,
315 Samish Way
Bellingham WA.**

and transported to:

**CEMEX Soil Remediation Facility
6300 Glenwood Ave.
Everett WA 98203**

On **12/02/2015**

A total of 61.60 tons of petroleum-contaminated soil were transported to the above facility. The material was disposed of in the following manner:

**Thermal Desorption and Landfill for
Reclamation**

Disposal of the contaminated debris was performed in accordance with all applicable federal, state, and local laws and regulations.

Signed:

Date: December 16, 2015

A handwritten signature in cursive script that reads "Larry W. Baker".

Larry W. Baker
CEMEX USA.
Operations Manager
Soil Remediation Division

APPENDIX B

Original Laboratory Analytical Data Reports



November 17, 2015

Mr. Harold Cashman
Whatcom Environmental Svcs., Inc.
228 E. Champion St., Suite 101
Bellingham, WA 98225

Dear Mr. Cashman,

On November 16th, 2 samples were received by our laboratory and assigned our laboratory project number EV15110104. The project was identified as your COB: Aloha Motel UST. 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:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	11/17/2015
CLIENT CONTACT:	Harold Cashman	ALS JOB#:	EV15110104
CLIENT PROJECT:	COB: Aloha Motel UST	ALS SAMPLE#:	EV15110104-01
CLIENT SAMPLE ID	PCS-1	DATE RECEIVED:	11/16/2015
		COLLECTION DATE:	11/13/2015 11:00:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	18000	1500	500	MG/KG	11/16/2015	PAB
Methyl T-Butyl Ether	EPA-8021	U	50	500	MG/KG	11/16/2015	PAB
Benzene	EPA-8021	U	15	500	MG/KG	11/16/2015	PAB
Toluene	EPA-8021	U	25	500	MG/KG	11/16/2015	PAB
Ethylbenzene	EPA-8021	390	25	500	MG/KG	11/16/2015	PAB
Xylenes	EPA-8021	2000	100	500	MG/KG	11/16/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	11/16/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	11/16/2015	EBS
Mercury	EPA-7471	U	0.020	1	MG/KG	11/17/2015	RAL
Arsenic	EPA-6020	2.9	1.0	5	MG/KG	11/16/2015	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	11/16/2015	RAL
Chromium	EPA-6020	34	0.50	5	MG/KG	11/16/2015	RAL
Lead	EPA-6020	4.4	0.50	5	MG/KG	11/16/2015	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 500X Dilution	NWTPH-GX	575 GS2	11/16/2015	PAB
TFT 500X Dilution	EPA-8021	725 GS2	11/16/2015	PAB
C25	NWTPH-DX	120	11/16/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
 GS2 - Surrogate outside of control limits due to dilution.
 Chromatogram indicates that it is likely that sample contains highly weathered gasoline.



CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	11/17/2015
CLIENT CONTACT:	Harold Cashman	ALS JOB#:	EV15110104
CLIENT PROJECT:	COB: Aloha Motel UST	ALS SAMPLE#:	EV15110104-02
CLIENT SAMPLE ID	PCS-2	DATE RECEIVED:	11/16/2015
		COLLECTION DATE:	11/13/2015 11:15:00 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	11/16/2015	PAB
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	11/16/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	11/16/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	11/16/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	11/16/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	11/16/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	11/16/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	11/16/2015	EBS
Mercury	EPA-7471	0.033	0.020	1	MG/KG	11/17/2015	RAL
Arsenic	EPA-6020	3.6	1.0	5	MG/KG	11/16/2015	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	11/16/2015	RAL
Chromium	EPA-6020	32	0.50	5	MG/KG	11/16/2015	RAL
Lead	EPA-6020	160	0.50	5	MG/KG	11/16/2015	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	99.4	11/16/2015	PAB
TFT	EPA-8021	96.5	11/16/2015	PAB
C25	NWTPH-DX	127	11/16/2015	EBS

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



CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc. DATE: 11/17/2015
 228 E. Champion St., Suite 101 ALS SDG#: EV15110104
 Bellingham, WA 98225 WDOE ACCREDITATION: C601

CLIENT CONTACT: Harold Cashman
 CLIENT PROJECT: COB: Aloha Motel UST

LABORATORY BLANK RESULTS

MBG-111215S - Batch 98915 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U		MG/KG	3.0	11/12/2015	DLC

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

MB-111215S - Batch 98915 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Methyl T-Butyl Ether	EPA-8021	U		MG/KG	0.10	11/12/2015	DLC
Benzene	EPA-8021	U		MG/KG	0.030	11/12/2015	DLC
Toluene	EPA-8021	U		MG/KG	0.050	11/12/2015	DLC
Ethylbenzene	EPA-8021	U		MG/KG	0.050	11/12/2015	DLC
Xylenes	EPA-8021	U		MG/KG	0.20	11/12/2015	DLC

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

MB-111215S - Batch 98912 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U		MG/KG	25	11/12/2015	EBS
TPH-Oil Range	NWTPH-DX	U		MG/KG	50	11/12/2015	EBS

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

MBLK-11172015 - Batch R264977 - Soil by EPA-7471

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Mercury	EPA-7471	U		MG/KG	0.020	11/17/2015	RAL

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

MB-111615S - Batch 98982 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U		MG/KG	0.20	11/16/2015	RAL
Cadmium	EPA-6020	U		MG/KG	0.10	11/16/2015	RAL
Chromium	EPA-6020	U		MG/KG	0.10	11/16/2015	RAL
Lead	EPA-6020	U		MG/KG	0.10	11/16/2015	RAL

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



CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	11/17/2015
CLIENT CONTACT:	Harold Cashman	ALS SDG#:	EV15110104
CLIENT PROJECT:	COB: Aloha Motel UST	WDOE ACCREDITATION:	C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 98915 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	101			11/12/2015	DLC
TPH-Volatile Range - BSD	NWTPH-GX	102	1		11/12/2015	DLC

ALS Test Batch ID: 98915 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Methyl T-Butyl Ether - BS	EPA-8021	110			11/12/2015	DLC
Methyl T-Butyl Ether - BSD	EPA-8021	108	2		11/12/2015	DLC
Benzene - BS	EPA-8021	93.7			11/12/2015	DLC
Benzene - BSD	EPA-8021	94.1	0		11/12/2015	DLC
Toluene - BS	EPA-8021	96.1			11/12/2015	DLC
Toluene - BSD	EPA-8021	96.8	1		11/12/2015	DLC
Ethylbenzene - BS	EPA-8021	98.7			11/12/2015	DLC
Ethylbenzene - BSD	EPA-8021	99.7	1		11/12/2015	DLC
Xylenes - BS	EPA-8021	103			11/12/2015	DLC
Xylenes - BSD	EPA-8021	103	0		11/12/2015	DLC

ALS Test Batch ID: 98912 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	97.5			11/12/2015	EBS
TPH-Diesel Range - BSD	NWTPH-DX	97.5	0		11/12/2015	EBS

ALS Test Batch ID: R264977 - Soil by EPA-7471

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Mercury - BS	EPA-7471	104			11/17/2015	RAL
Mercury - BSD	EPA-7471	101	3		11/17/2015	RAL

ALS Test Batch ID: 98982 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	101			11/16/2015	RAL
Arsenic - BSD	EPA-6020	104	3		11/16/2015	RAL
Cadmium - BS	EPA-6020	103			11/16/2015	RAL
Cadmium - BSD	EPA-6020	104	0		11/16/2015	RAL
Chromium - BS	EPA-6020	105			11/16/2015	RAL
Chromium - BSD	EPA-6020	105	0		11/16/2015	RAL
Lead - BS	EPA-6020	106			11/16/2015	RAL



CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc. DATE: 11/17/2015
228 E. Champion St., Suite 101 ALS SDG#: EV15110104
Bellingham, WA 98225 WDOE ACCREDITATION: C601
CLIENT CONTACT: Harold Cashman
CLIENT PROJECT: COB: Aloha Motel UST

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Lead - BSD	EPA-6020	106	0		11/16/2015	RAL

APPROVED BY

Laboratory Director



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)

EV15110104

Date 11/13/15 Page 1 Of 1

PROJECT ID: <u>COB: Aloha Motel UST</u>					ANALYSIS REQUESTED												OTHER (Specify)		
REPORT TO COMPANY: <u>Whatcom Environmental Services</u>					NWTPH-HCID NWTPH-DX NWTPH-GX BTEX by EPA-8021 MTBE by EPA-8021 <input checked="" type="checkbox"/> 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 <input type="checkbox"/> PCB <input type="checkbox"/> Pesticides <input type="checkbox"/> by EPA 8081/8082 Metals-MTCA-5 <input checked="" type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/> Metals Other (Specify) TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/>														
PROJECT MANAGER: <u>Harold Cashman</u>																			
ADDRESS: <u>228 E. Champion St #101</u> <u>Bellingham, WA 98225</u>																			
PHONE: <u>360-752-9571</u> FAX: <u>360-752-9573</u>																			
P.O. #: _____ E-MAIL: <u>hycashman@whatcom...</u>																			
INVOICE TO COMPANY: _____																			
ATTENTION: <u>SAME AS ABOVE</u>																			
ADDRESS: _____																			
SAMPLE I.D.	DATE	TIME	TYPE	LAB#													NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?	
1. <u>PCS-1</u>	<u>11/13/15</u>	<u>11:00</u>	<u>SOIL</u>	<u>1</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>	<u>2</u>	
2. <u>PCS-2</u>	<u>11/13/15</u>	<u>11:15</u>	<u>SOIL</u>	<u>2</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>	<u>2</u>	
3.																			
4.																			
5.																			
6.																			
7.																			
8.																			
9.																			
10.																			

SPECIAL INSTRUCTIONS VOAs filled via 5035

SIGNATURES (Name, Company, Date, Time):
 1. Relinquished By: [Signature], WES, 11/13/15, 12:30 PM
 Received By: _____
 2. Relinquished By: [Signature]
 Received By: Shawn Robson ALS 11/16/15 10:15am

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

*Turnaround request less than standard may incur Rush Charges



November 25, 2015

Mr. Thom Davis
Whatcom Environmental Svcs., Inc.
228 E. Champion St., Suite 101
Bellingham, WA 98225

Dear Mr. Davis,

On November 23rd, 1 sample was received by our laboratory and assigned our laboratory project number EV15110163. The project was identified as your Aloha Motel PCS. 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:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	11/25/2015
CLIENT CONTACT:	Thom Davis	ALS JOB#:	EV15110163
CLIENT PROJECT:	Aloha Motel PCS	ALS SAMPLE#:	EV15110163-01
CLIENT SAMPLE ID:	PCS Trench 4ft	DATE RECEIVED:	11/23/2015
		COLLECTION DATE:	11/20/2015 1:15:00 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	11/24/2015	PAB
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	11/24/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	11/24/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	11/24/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	11/24/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	11/24/2015	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	77.7	11/24/2015	PAB
TFT	EPA-8021	77.1	11/24/2015	PAB

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



CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	11/25/2015
CLIENT CONTACT:	Thom Davis	ALS SDG#:	EV15110163
CLIENT PROJECT:	Aloha Motel PCS	WDOE ACCREDITATION:	C601

LABORATORY BLANK RESULTS

MBG-112015S - Batch 99167 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U		MG/KG	3.0	11/20/2015	PAB

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

MB-112015S - Batch 99167 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Methyl T-Butyl Ether	EPA-8021	U		MG/KG	0.10	11/20/2015	PAB
Benzene	EPA-8021	U		MG/KG	0.030	11/20/2015	PAB
Toluene	EPA-8021	U		MG/KG	0.050	11/20/2015	PAB
Ethylbenzene	EPA-8021	U		MG/KG	0.050	11/20/2015	PAB
Xylenes	EPA-8021	U		MG/KG	0.20	11/20/2015	PAB

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



CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc.
228 E. Champion St., Suite 101
Bellingham, WA 98225

DATE: 11/25/2015
ALS SDG#: EV15110163
WDOE ACCREDITATION: C601

CLIENT CONTACT: Thom Davis
CLIENT PROJECT: Aloha Motel PCS

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 99167 - Soil by NWTPH-GX

Table with 6 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, ANALYSIS DATE, ANALYSIS BY. Rows include TPH-Volatile Range - BS and TPH-Volatile Range - BSD.

ALS Test Batch ID: 99167 - Soil by EPA-8021

Table with 6 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, ANALYSIS DATE, ANALYSIS BY. Rows include Methyl T-Butyl Ether - BS, Benzene - BS, Toluene - BS, Ethylbenzene - BS, and Xylenes - BS.

APPROVED BY

Handwritten signature of Paul Bagum

Laboratory Director



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)

EV15110163

Date 11/20/15 Page 1 Of 1

PROJECT ID: <u>Aloha Motel PCS</u>					ANALYSIS REQUESTED												OTHER (Specify)					
REPORT TO COMPANY: <u>Whetcom Env. Sols.</u>					NWTPH-HCID NWTPH-DX NWTPH-GX BTEX by EPA-8021 MTBE by EPA-8021 <input checked="" type="checkbox"/> 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 <input type="checkbox"/> PCB <input type="checkbox"/> Pesticides <input type="checkbox"/> by EPA 8081/8082 Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/> Metals Other (Specify) TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/>																	
PROJECT MANAGER: <u>Them</u>																						
ADDRESS: <u>228 E. Champion #101</u>																						
<u>B'ham, WA 98225</u>																						
PHONE: <u>752-9571</u> FAX: <u>752-9573</u>																						
P.O. #: _____ E-MAIL: <u>thaus@whetcom</u>																						
INVOICE TO COMPANY: _____																						
ATTENTION: _____																						
ADDRESS: <u>Same ↑</u>																						
SAMPLE I.D.	DATE	TIME	TYPE	LAB#		NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 <input checked="" type="checkbox"/> 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 <input type="checkbox"/>	PCB <input type="checkbox"/> Pesticides <input type="checkbox"/> by EPA 8081/8082	Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/>	Metals Other (Specify)	TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/>	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. <u>PCS Trench 4ft</u>	<u>11/20/15</u>	<u>1315</u>	<u>Soil</u>	<u>1</u>					<u>XXX</u>													
2.																						
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [Signature] WES 11/20/15 @ 1500
 Received By: [Signature], ALS, 11/23/15, 10:40am
 2. Relinquished By: _____
 Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis

Standard 10 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis

Standard 5 3 1 SAME DAY

OTHER:

Specify: _____

*Turnaround request less than standard may incur Rush Charges



December 8, 2015

Mr. Harold Cashman
Whatcom Environmental Svcs., Inc.
228 E. Champion St., Suite 101
Bellingham, WA 98225

Dear Mr. Cashman,

On December 3rd, 2 samples were received by our laboratory and assigned our laboratory project number EV15120037. The project was identified as your COB: Aloha Motel UST. 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:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	12/8/2015
CLIENT CONTACT:	Harold Cashman	ALS JOB#:	EV15120037
CLIENT PROJECT:	COB: Aloha Motel UST	ALS SAMPLE#:	EV15120037-01
CLIENT SAMPLE ID:	CS-1	DATE RECEIVED:	12/03/2015
		COLLECTION DATE:	12/2/2015 1:00:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	12/03/2015	PAB
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	12/03/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	12/03/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	12/03/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	12/03/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	12/03/2015	PAB
1,2-Dichloroethane	EPA-8260	U	10	1	UG/KG	12/04/2015	DLC
1,2-Dibromoethane	EPA-8260	U	5.0	1	UG/KG	12/04/2015	DLC
Naphthalene	EPA-8270 SIM	U	20	1	UG/KG	12/07/2015	GAP
2-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	12/07/2015	GAP
1-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	12/07/2015	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	103	12/03/2015	PAB
TFT	EPA-8021	100	12/03/2015	PAB
1,2-Dichloroethane-d4	EPA-8260	91.2	12/04/2015	DLC
Terphenyl-d14	EPA-8270 SIM	86.2	12/07/2015	GAP

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



CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	12/8/2015
CLIENT CONTACT:	Harold Cashman	ALS JOB#:	EV15120037
CLIENT PROJECT:	COB: Aloha Motel UST	ALS SAMPLE#:	EV15120037-02
CLIENT SAMPLE ID	CS-2	DATE RECEIVED:	12/03/2015
		COLLECTION DATE:	12/2/2015 1:45:00 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	12/03/2015	PAB
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	12/03/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	12/03/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	12/03/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	12/03/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	12/03/2015	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	111	12/03/2015	PAB
TFT	EPA-8021	107	12/03/2015	PAB

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



CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc. DATE: 12/8/2015
 228 E. Champion St., Suite 101 ALS SDG#: EV15120037
 Bellingham, WA 98225 WDOE ACCREDITATION: C601

CLIENT CONTACT: Harold Cashman
 CLIENT PROJECT: COB: Aloha Motel UST

LABORATORY BLANK RESULTS

MBG-120215S - Batch 99478 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	MG/KG	3.0	12/02/2015	PAB

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

MB-120215S - Batch 99478 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Methyl T-Butyl Ether	EPA-8021	U	MG/KG	0.10	12/02/2015	PAB
Benzene	EPA-8021	U	MG/KG	0.030	12/02/2015	PAB
Toluene	EPA-8021	U	MG/KG	0.050	12/02/2015	PAB
Ethylbenzene	EPA-8021	U	MG/KG	0.050	12/02/2015	PAB
Xylenes	EPA-8021	U	MG/KG	0.20	12/02/2015	PAB

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

MB-120115S - Batch 99446 - Soil by EPA-8260

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene	EPA-8260	U	UG/KG	10	12/01/2015	DLC
1,2-Dichloroethane	EPA-8260	U	UG/KG	10	12/01/2015	DLC
Toluene	EPA-8260	U	UG/KG	10	12/01/2015	DLC
1,2-Dibromoethane	EPA-8260	U	UG/KG	5.0	12/01/2015	DLC

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

MB-113015S - Batch 99432 - Soil by EPA-8270 SIM

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	UG/KG	20	11/30/2015	GAP
2-Methylnaphthalene	EPA-8270 SIM	U	UG/KG	20	11/30/2015	GAP
1-Methylnaphthalene	EPA-8270 SIM	U	UG/KG	20	11/30/2015	GAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	UG/KG	20	11/30/2015	GAP

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



CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	12/8/2015
CLIENT CONTACT:	Harold Cashman	ALS SDG#:	EV15120037
CLIENT PROJECT:	COB: Aloha Motel UST	WDOE ACCREDITATION:	C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 99478 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	90.2			12/02/2015	PAB
TPH-Volatile Range - BSD	NWTPH-GX	92.1	2		12/02/2015	PAB

ALS Test Batch ID: 99478 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Methyl T-Butyl Ether - BS	EPA-8021	101			12/02/2015	PAB
Methyl T-Butyl Ether - BSD	EPA-8021	101	0		12/02/2015	PAB
Benzene - BS	EPA-8021	89.7			12/02/2015	PAB
Benzene - BSD	EPA-8021	89.4	0		12/02/2015	PAB
Toluene - BS	EPA-8021	92.2			12/02/2015	PAB
Toluene - BSD	EPA-8021	90.8	1		12/02/2015	PAB
Ethylbenzene - BS	EPA-8021	92.2			12/02/2015	PAB
Ethylbenzene - BSD	EPA-8021	91.4	1		12/02/2015	PAB
Xylenes - BS	EPA-8021	94.5			12/02/2015	PAB
Xylenes - BSD	EPA-8021	94.1	0		12/02/2015	PAB

ALS Test Batch ID: 99446 - Soil by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene - BS	EPA-8260	101			12/01/2015	DLC
1,1-Dichloroethene - BSD	EPA-8260	104	3		12/01/2015	DLC
Toluene - BS	EPA-8260	109			12/01/2015	DLC
Toluene - BSD	EPA-8260	108	1		12/01/2015	DLC

ALS Test Batch ID: 99432 - Soil by EPA-8270 SIM

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Naphthalene - BS	EPA-8270 SIM	85.8			11/30/2015	GAP
Naphthalene - BSD	EPA-8270 SIM	76.0	12		11/30/2015	GAP
Benzo[G,H,I]Perylene - BS	EPA-8270 SIM	83.9			11/30/2015	GAP
Benzo[G,H,I]Perylene - BSD	EPA-8270 SIM	68.2	21		11/30/2015	GAP

APPROVED BY

Laboratory Director



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)

EVIS120037

Date 12/2/15 Page 1 Of 1

PROJECT ID: COB: Aloha Motel UST					ANALYSIS REQUESTED										OTHER (Specify)							
REPORT TO COMPANY: Whatcom Environmental Services					NWTPH-HCID NWTPH-DX NWTPH-GX BTEX by EPA-8021 MTBE by EPA-8021 <input checked="" type="checkbox"/> EPA-8260 <input type="checkbox"/> 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 <input type="checkbox"/> PCB <input type="checkbox"/> Pesticides <input type="checkbox"/> by EPA 8081/8082 Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/> Metals Other (Specify) TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/> Napthalenes	NUMBER OF CONTAINERS RECEIVED IN GOOD CONDITION?																
PROJECT MANAGER: Harold Cashman																						
ADDRESS: 228 E. Champion St #101 Bellingham, WA 98225																						
PHONE: 360-752-9574 FAX: 360-752-9573																						
P.O. #: E-MAIL: hycashman@whatcom.com																						
INVOICE TO COMPANY:																						
ATTENTION: SAME AS ABOVE																						
ADDRESS:																						
SAMPLE I.D.	DATE	TIME	TYPE	LAB#																		
1. CS-1	12/2/15	1:00	Soil	1					X	X	X											
2. CS-2	12/2/15	1:45	Soil	2			X	X	X												2	
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

SPECIAL INSTRUCTIONS: VOA's filled via SO35. Extra volume collected for breakage.

SIGNATURES (Name, Company, Date, Time):
 1. Relinquished By: [Signature] WES, 12/2/15, 2:40PM
 Received By: [Signature] ALS 12/3/15 2:45
 2. Relinquished By: _____
 Received By: _____

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

*Turnaround request less than standard may incur Rush Charges