

**UNDERGROUND STORAGE TANK SITE  
ASSESSMENT AND PETROLEUM  
CONTAMINATED SOIL REMOVAL ACTION  
117 ANTHES AVENUE  
LANGLEY, WASHINGTON**

*prepared for:*

Paul Samuelson  
PO Box 1212  
Langley, WA 98260

**April 30, 2015**



*soil | water | air  
compliance consulting*

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PO Box 1212  
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*prepared by:*

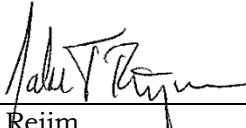
Whatcom Environmental Services  
228 East Champion Street #101  
Bellingham, Washington 98225

April 30, 2015

  
Harold Cashman  
Project Manager



HAROLD J. CASHMAN

  
Jake Reijm  
QA/QC Reviewer

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## 1.0 INTRODUCTION

Whatcom Environmental Services Inc. has completed the Site Assessment of an Underground Storage Tank (UST) closure and removal conducted at 117 Anthes Ave in Langley, Washington. The site location is shown on Figure 1.

Two abandoned gasoline USTs were located on the subject property at the approximate location shown on Figure 2. The property was formerly operated as an automobile fueling station and repair shop. The tanks were reportedly installed circa 1951 during construction of the fueling station. A photograph of the former fueling station is provided in Appendix A.

The tanks were decommissioned and removed from the ground by Ultra Tank Services on April 21, 2015. Whatcom Environmental Services personnel were onsite during tank removal activities to conduct a UST Site Assessment. Soil samples were collected in accordance with the Washington State Department of Ecology (Ecology) UST Site Assessment guidance standards (Ecology, 2003).

Field screening indicated that a release had occurred to shallow soil below the removed tanks. One soil sample was collected to confirm the release (identified as PCS-1). Soil sample analytical results indicated that a release of petroleum products occurred to soil in the floor of the excavation. The release was reported to Ecology (ERTS #656380).

A petroleum contaminated soil (PCS) removal action was conducted following removal of the tanks in an effort to remediate the site. Approximately 74 tons of soil were removed from the site for offsite treatment and disposal.

Clean confirmation soil samples were collected from the extent of the excavation to document the success of the PCS removal action. Soil sample analytical results indicated that the soil remaining at the site meets the Model Toxics Control Act (MTCA) Method A criteria.

This report was prepared by Whatcom Environmental Services Inc. and the information provided in the report supplements the completed UST Site Check/Site Assessment Checklist, included as Appendix B.

## 2.0 SITE SETTING

The UST Site Assessment was conducted at 117 Anthes Avenue, one block west of downtown Langley in Langley, Washington. The property tax parcel ID number is S7345-00-07009-0. The property is zoned by Island County as Commercial Retail. Surrounding land use is primarily commercial retail stores. The site location is shown on Figure 1.

The median elevation of the site is approximately 50 feet above mean sea level. The site topography is relatively flat. The property has one 1,200 sq. ft. commercial retail building which houses the Langley Whale Center. The remainder of the property is covered with a concrete patio.

Soils in the vicinity of the UST are described in the Soil Survey of Island County Area, Washington (USDA, 2013). Soils at the property area are the Indianola loamy sand complex which formed from glacial drift and outwash over dense glaciomarine deposits. The soils formed on 0 to 5 percent slopes. The complex is somewhat excessively drained with a high to very high capacity to transmit water. The average annual precipitation is 20 to 40 inches, the average annual temperature is 48 to 50°F, and the average frost-free period is 200 to 240 days.

The property is underlain by undifferentiated glacial deposits of the Fraser glaciation. The unit can consist of any and all types of glacial deposits. The unit indicates that the area does not have detailed field and map data, or there are differing interpretations of the Quaternary deposits (WSDNR, 2000).

The depth to water at the site appeared to be greater than 10 feet below ground surface, (the depth of the excavation). Groundwater was not encountered at the site, therefore no water samples were collected.

### **3.0 SELECTION OF CLEANUP STANDARDS**

The soil cleanup levels for the site were established for unrestricted land use in accordance with WAC 173-340-740. MTCA Method A cleanup levels are provided in WAC 173-340, Table 740-1. Cleanup levels for the subject property were developed using the standard Method A approach so that at the completion of the project the TPH concentrations remaining in soil at the site met the MTCA Method A unrestricted land use cleanup criteria.

## **4.0 TANK CLOSURE**

Mr. Jake Reijm of Whatcom Environmental Services observed the decommissioning and removal of the USTs. Mr. Reijm is a registered UST site assessor. Ultra Tank Services of Bellingham, WA provided the UST decommissioning services during the UST closure.

Two USTs were decommissioned and removed from the ground on April 21, 2015. The two 500 gallon tanks were previously used to store gasoline for a former fueling station which operated at the property. The tanks were located in the courtyard of the Langley Whale Center. A map showing the location of the removed tanks and other pertinent site features is provided as Figure 2.

Both USTs were single-walled, steel tanks measuring approximately 3.5 feet in diameter and 12 feet in length. The tanks were uncovered after removing approximately 2.5 feet of overburden. No cathodic protection system was observed during tank removal. No product piping was observed at the site. Upon inspection after being removed from the ground, the tanks were determined to be in poor condition with heavy corrosion and numerous holes were observed in each tank. Photographs of the tank removal are included in the Photographic Log.

During the tank removal and UST site assessment, soils surrounding the USTs were field screened for the presence of petroleum by conducting sheen tests and measuring organic vapors using a photoionization detector (PID). Evidence of petroleum contamination including visible petroleum sheens and elevated organic vapor readings were detected in the backfill soils adjacent to the tanks, indicating that a release had occurred from the tanks.

### **4.1 UST SITE ASSESSMENT SOIL SAMPLE COLLECTION AND ANALYSIS**

Two discrete soil samples were collected as part of this UST Site Assessment. One soil sample (*PCS-1*) was collected from beneath the western-most tank to confirm that a release had occurred. The second sample (*CS-1*) was collected approximately 3 feet below *PCS-1* to determine the depth of the clean floor below the petroleum impacted

soil. The soil sample descriptions including locations, depths of collection, and field screening results are included in Table 1. The soil sample locations are shown on Figure 2.

Soil samples were collected using EPA Method 5035A. Soil was placed in clean sample containers provided by the laboratory, stored with ice in a cooler, and shipped to ALS Laboratory Group in Everett, Washington. ALS is accredited by Ecology.

The soil samples were analyzed for gasoline range Total Petroleum Hydrocarbons (TPH) using Method NWTPH-Gx, Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX constituents) as well as Methyl Tertiary Butyl Ether (MTBE) using Method EPA 8021, and Lead using Method EPA 6020.

#### **4.2 UST SITE ASSESSMENT SOIL SAMPLE RESULTS**

Laboratory analytical results indicated that soil sample *PCS-1* contained gasoline range TPH at a concentration of 1,800 mg/kg, exceeding the MTCA Method A target cleanup level of 100 mg/kg. No petroleum constituents were detected in soil sample *CS-1*. A summary of soil sample laboratory analytical results is provided in Table 2. The original laboratory analytical data report is included in Appendix C.

## **5.0 PETROLEUM CONTAMINATED SOIL REMOVAL ACTION**

Based on the field screening observations and laboratory results of the UST Site Assessment soil samples, a PCS removal action was initiated at the site on April 23, 2015 and completed on April 28, 2015. Whatcom Environmental Services personnel were onsite during the PCS removal work to field screen excavated soil. The soil samples were field screened for indications of petroleum contamination by conducting head space analyses for organic vapors using a PID and by conducting sheen tests. The organic vapor headspace analyses were conducted using a Thermo Environmental Model 580B PID equipped with a 10.6 eV lamp.

The PCS removal work began at the western edge of the tank pit and progressed downwards to find the depth of the contamination. The contamination extended to approximately 9 feet bgs. PCS removal continued to the north and south. The PCS extended primarily to the south/southeast of the tank pit. Field screening analysis was used to guide the excavation of PCS from areas where organic vapor and sheen indications indicated the presence of petroleum contamination.

The excavation extent to the southeast was limited due to the presence of the building foundation. A sample was collected via hand auger approximately 2 feet under the building foundation to ensure no PCS was left under the foundation. The final excavation was approximately 14 feet long by 11 feet wide by an average of 9 feet deep. The excavation location is shown on Figure 2.

All excavated PCS was hauled offsite for treatment via thermal desorption and disposal at Cemex in Everett, Washington. Approximately 74 tons of soil were excavated and shipped to Cemex. Cemex is a licensed PCS treatment and disposal facility. The Cemex weight tickets documenting the treatment and disposal of the excavated PCS are provided in Appendix D.

## **5.1 FINAL EXCAVATION SOIL SAMPLE COLLECTION AND ANALYSIS**

When field screening results indicated that a particular sidewall or section of an excavation floor appeared to be no longer impacted by petroleum compounds, or when additional soil removal was not practical due to the proximity of the building foundation or property boundary, final excavation soil samples were collected for laboratory analyses. Seven soil samples were collected from the floor and sidewalls of the final excavation to document the effectiveness of the remedial action. The final excavation soil samples were identified as CS-2, CS-3, CS-4, CS-5, CS-6, CS-7, and CS-2 OE.

The soil samples were analyzed for gasoline range TPH using Method NWTPH-Gx, BTEX constituents and MTBE using Method EPA 8021, and Lead using Method EPA 6020.

## **5.2 FINAL EXCAVATION SOIL SAMPLE RESULTS**

Soil sample CS-2 contained benzene at a concentration of 0.036 mg/kg, which exceeded the MTCA Method A target cleanup level of 0.03 mg/kg. The location of sample CS-2 was over-excavated and a follow-up confirmation sample (CS-2 OE) was collected.

Soil sample CS-7 contained gasoline range TPH at a concentration of 6.5 mg/kg, which met the MTCA Method A target cleanup level of 100mg/kg.

The laboratory analytical results for soils samples CS-1, CS-2 OE, CS-3, CS-4, CS-5, and CS-6 did not contain detectable concentrations of gasoline range TPH, BTEX constituents, or MTBE. All soil samples contained background concentrations of lead which met the MTCA Method A target cleanup level of 250 mg/kg.

## **6.0 CONCLUSIONS**

Two underground storage tanks were decommissioned and removed from the ground on April 21, 2015 at 117 Anthes Avenue in Langley, Washington. The two USTs formerly contained gasoline. The tanks were decommissioned by Ultra Tank Services. A UST Site Assessment was conducted at the time the tanks were permanently closed and removed from the ground.

One UST Site Assessment soil sample was collected from the tank pit in accordance with the Washington State Department of Ecology UST Site Assessment guidance standards. Field screening and soil sample analytical results indicated that a release of petroleum products had occurred to soil.

A petroleum contaminated soil removal action was conducted following removal of the tanks in an effort to remediate the site. Approximately 74 tons of soil were removed from the site for offsite treatment and disposal.

Soil samples were collected to document the condition of soil left in place following the completion of the PCS removal action. Soil sample analytical results indicated that the soil remaining at the site meets the applicable MTCA Method A target cleanup levels.

Please use this report and the attached site location figures, UST Site Check/Site Assessment Checklist, and soil analytical data to document compliance with Underground Storage Tank requirements (WAC 173-360).

## **7.0 LIMITATIONS**

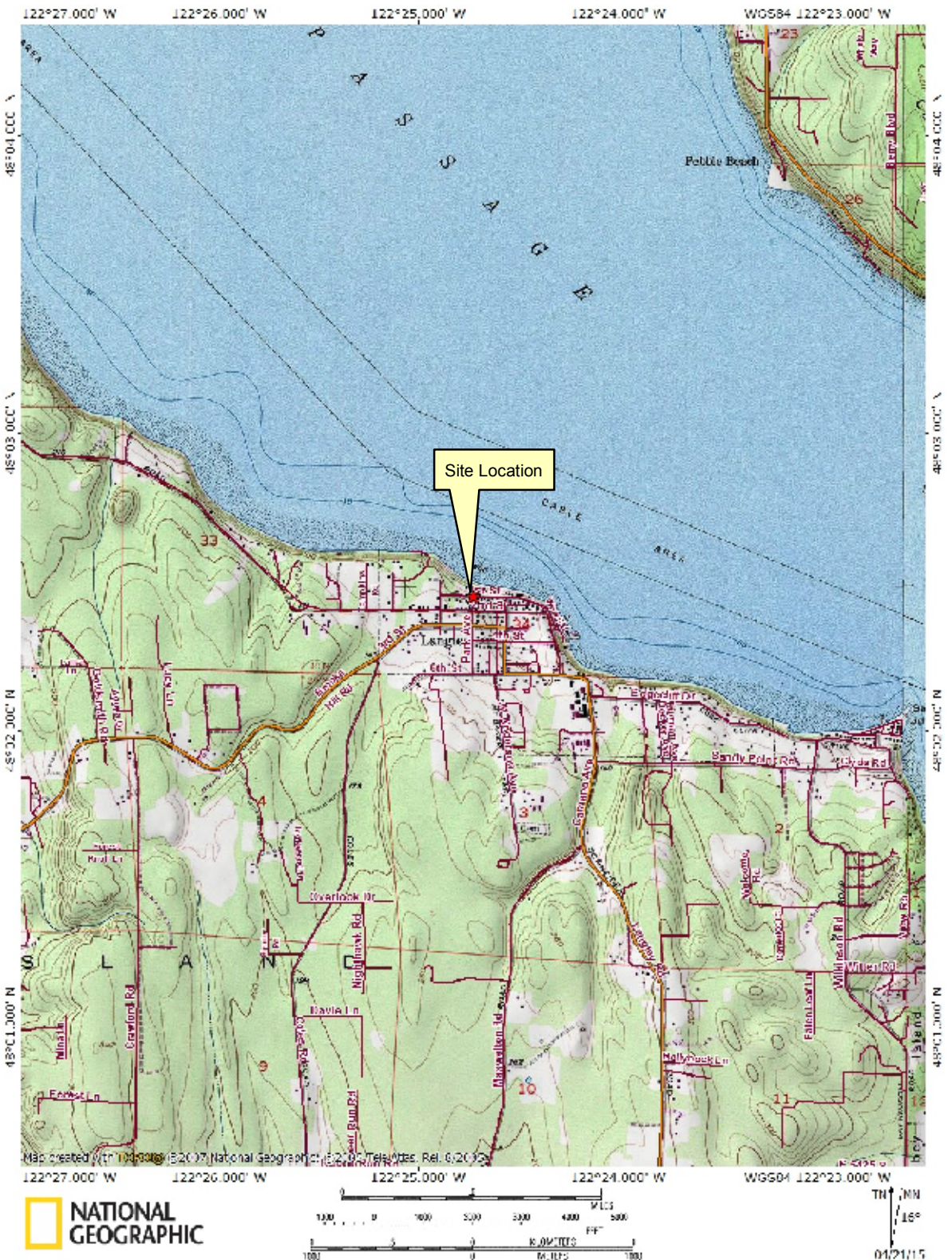
No site assessment can wholly eliminate uncertainty regarding the potential for contamination in connection with a property. The interpretation of soil and groundwater conditions is based on field observations and chemical analytical data collected from relatively widely spaced sampling locations at 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. Performance of this investigation by Whatcom Environmental is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental contamination in connection with the subject property. In addition, no warranty, express or implied is given regarding geotechnical or geologic hazards.

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.

Whatcom Environmental Services has prepared this report for the exclusive use of Mr. Paul Samuelson, his authorized agents, and regulatory agencies. 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 its 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

- U.S. Department of Agriculture (USDA). 2013. Soil Survey of Island County Area, Washington. Soil Conservation Service.
- Washington State Department of Ecology. 1998. Underground Storage Tank Statute and Regulations Chapter 173-360 WAC. Publication No. 95-604.
- Washington State Department of Natural Resources (WADNR). 2012. Washington Interactive Geologic Map. URL: ([http://www.dnr.wa.gov/ResearchScience/Topics/GeosciencesData/Pages/geology\\_portal.aspx](http://www.dnr.wa.gov/ResearchScience/Topics/GeosciencesData/Pages/geology_portal.aspx)).
- Washington State Department of Ecology (Ecology). 2007. Model Toxics Control Act Cleanup Regulation Chapter 173-340 WAC. Publication No. 94-06.
- Washington State Department of Ecology. 2003. Guidance for Site Checks and Site Assessments for Underground Storage Tanks. Publication # 90-52.
- Washington State Department of Ecology. 2011. Guidance for Remediation of Petroleum Contaminated Sites. Publication No. 10-09-057.



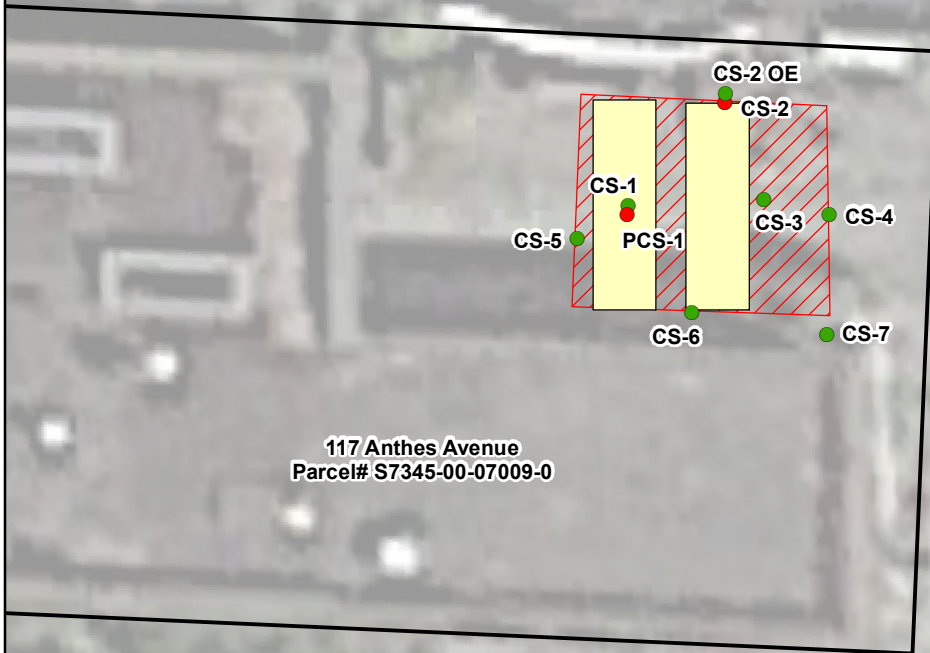
Prepared for:  
**Paul Samuelson**

Prepared by:  
**whatcom**  
 ENVIRONMENTAL

**Site Location Map**

117 Anthes Ave.  
 UST Site Assessment  
 4/21/15

**Figure 1**



117 Anthes Avenue  
Parcel# S7345-00-07009-0

Anthes Ave.

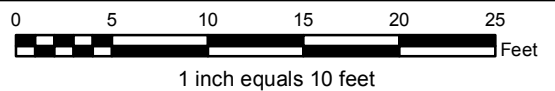
Second Street

**Soil Samples**

- Met MTCA Method A
- Exceeded MTCA Method A

- Tank Locations
- Excavation Extent
- Subject Property

All data are approximate and should be used for relative location reference only. 2014 Aerial Photograph (GoogleEarth).



Prepared for:  
  
**Paul Samuelson**

Prepared by:

**Subject Property Site Map**  
  
117 Anthes Ave  
UST Removal  
04/29/15

**Figure 2**

**Table 1. Soil Sample Descriptions - 117 Anthes Ave. UST Site Assessment**

Sample ID	Date	Location and Description	PID	Sheen
			(ppm)	Test*
<b>PCS-1</b>	4/21/15	Collected 5.3 feet bgs from the western section of the excavation floor after the tanks were removed. Sand with silt, brown, loose, moist.	700	HS
<b>CS-1</b>	4/21/15	Collected 8 feet bgs from directly below PCS-1 after overexcavating PCS in search of a clean floor. Sand with silt, brownish-gray, loose, moist.	8.5	VSS
<b>CS-2</b>	4/23/15	Collected 9.5 feet bgs from north wall of the excavation.  Sand, brown, loose, wet.	0	NS
<b>CS-3</b>	4/23/15	Collected 10.5 feet bgs from the eastern portion of the excavation floor. Sand, grayish brown, loose, wet.	2	VSS
<b>CS-4</b>	4/23/15	Collected 9 feet bgs from the east wall of the excavation. Sand with minor silts, gray, loose, wet.	9	NS
<b>CS-5</b>	4/23/15	Collected 6.5 feet bgs from the west wall of the excavation. Sand and silt, brown, loose, moist.	0	VSS
<b>CS-6</b>	4/24/15	Collected 8.5 feet bgs from the center of the south sidewall of the excavation. Sand, gray, loose, wet.	25	NS
<b>CS-7</b>	4/24/15	Collected with hand auger from 10 feet bgs, approximately 2 feet southeast of the southern excavation wall under the building. Sand, gray, loose, wet.	22	VSS
<b>CS-2 OE</b>	4/28/15	Collected 9.5 feet bgs, north of CS-2 following over-excavation of sample C-2 location. Sand, brown, loose, moist.	0	NS

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

All samples collected using EPA Method 5035A

**Table 2. Soil Sample Analytical Results - 117 Anthes Ave. UST Site Assessment**

Sample ID	Date	NWTPH-Gx Volatile 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-6020 Lead mg/kg
<b>MTCA Method A Cleanup Levels:</b>		30/100*	0.03	7	6	9	0.1	250
<b>PCS-1</b>	4/21/2015	<b>1,800</b>	<i>ND(&lt;1.5)</i>	ND(<2.5)	<b>6.4</b>	<i>ND(&lt;10)</i>	<i>ND(&lt;5)</i>	7.6
<b>CS-1</b>	4/21/2015	ND(<3.0)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	8.7
<b>CS-2**</b>	4/23/2015	ND(<3.0)	<b>0.036</b>	ND(<0.05)	ND(<0.05)	ND(<0.2)	NA	2.2
<b>CS-3</b>	4/23/2015	ND(<3.0)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	NA	2.1
<b>CS-4</b>	4/23/2015	ND(<3.0)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	NA	1.7
<b>CS-5</b>	4/23/2015	ND(<3.0)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	NA	8.2
<b>CS-6</b>	4/24/2015	ND(<3.0)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	3.1
<b>CS-7</b>	4/24/2015	6.5	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	2.4
<b>CS-2 OE</b>	4/28/2015	ND(<3.0)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	NA	NA

\* Cleanup level dependent on BTEX concentration

\*\* Soil sample location over-excavated due to benzene detection

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

**Bold**- indicates that the sample exceeded the applicable cleanup level

*Italics*- indicates that the sample detection limit was raised above the applicable cleanup level due to dilution



**Photo 1.** A view looking north at the removal of the eastern tank from the tank pit.



**Photo 2.** A view of the eastern tank showing the quarter sized holes as well as corrosion along the bottom of the tank.



**Photo 3.** A view to the south of the bottom of the western tank along its southern end. Note the corrosion and several holes.



**Photo 4.** A close up view showing the poor condition of the bottom of the western tank's northern end.

Prepared for:

Paul Samuelson

Prepared by:

**nwhatcom**  
ENVIRONMENTAL

117 Anthes Ave  
UST Site Assessment

04/30/2015

**Photograph Log**

## **APPENDIX A**

Historical Site Photograph



**Photograph 1.** Photo date unknown. Photo provider states that the gas station was a Union gas station constructed in 1951/1952 next to the auto body shop that was constructed in 1950.

Prepared for:

Paul Samuelson

Prepared by:



**Historical Site  
Photograph**

117 Anthes Ave UST Closure

## **APPENDIX B**

UST Site Check/Site Assessment Checklist



# UNDERGROUND STORAGE TANK Site Check/Site Assessment Checklist

FOR OFFICE USE ONLY
Site #: _____
Facility Site ID #: _____

## INSTRUCTIONS

When a release has not been confirmed and reported, this Site Check/Site Assessment Checklist must be completed and signed by a person certified by ICC or a Washington registered professional engineer who is competent, by means of examination, experience, or education, to perform site assessments. **The results of the site check or site assessment must be included with this checklist.** This form must be submitted to Ecology at the address shown below within 30 days after completion of the site check/site assessment.

**SITE INFORMATION:** Include the Ecology site ID number if the tanks are registered with Ecology. This number may be found on the tank owner's invoice or tank permit.

**TANK INFORMATION:** Please list all tanks for which the site check or site assessment is being conducted. Use the owner's tank ID numbers if available, and indicate tank capacity and substance stored.

**REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT:** Please check the appropriate item.

**CHECKLIST:** Please initial each item in the appropriate box.

**SITE ASSESSOR INFORMATION:** This information must be signed by the registered site assessor who is responsible for conducting the site check/site assessment.

Underground Storage Tank Section  
Department of Ecology  
PO Box 47655  
Olympia WA 98504-7655

## SITE INFORMATION

Site ID Number (Available from Ecology if the tanks are registered): N/A

Site/Business Name: Langely Whale Center

Site Address: 117 Anthes Ave Telephone: ( ) \_\_\_\_\_

Langley Washington 98260

City Street State Zip Code

## TANK INFORMATION

Tank ID No.	Tank Capacity	Substance Stored
<u>Tank #1</u>	<u>500 gallon</u>	<u>Unleaded Gasoline</u>
<u>Tank #2</u>	<u>500 gallon</u>	<u>Unleaded Gasoline</u>

## REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT

Check one:

Investigate suspected release due to on-site environmental contamination.

Investigate suspected release due to off-site environmental contamination.

Extend temporary closure of UST system for more than 12 months.

UST system undergoing change-in-service.

UST system permanently closed with tank removed.

Abandoned tank containing product.

Required by Ecology or delegated agency for UST system closed before 12/22/88.

Other (describe): \_\_\_\_\_

**CHECKLIST**

Each item of the following checklist shall be initialed by the person registered with the Department of Ecology whose signature appears below.

	YES	NO
1. The location of the UST site is shown on a vicinity map.	JR	
2. A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in site assessment guidance)	JR	
3. A summary of UST system data is provided. (see Section 3.1.)	JR	
4. The soils characteristics at the UST site are described. (see Section 5.2)	JR	
5. Is there any apparent groundwater in the tank excavation?		JR
6. A brief description of the surrounding land use is provided. (see Section 3.1)	JR	
7. Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses.	JR	
8. A sketch or sketches showing the following items is provided:		
- location and ID number for all field samples collected	JR	
- groundwater samples distinguished from soil samples (if applicable)	N/A	
- samples collected from stockpiled excavated soil	N/A	
- tank and piping locations and limits of excavation pit	JR	
- adjacent structures and streets	JR	
- approximate locations of any on-site and nearby utilities	JR	
9. If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4)	JR	
10. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method and detection limit for that method.	JR	
11. Any factors that may have compromised the quality of the data or validity of the results are described.	JR	
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred.	JR	

**SITE ASSESSOR INFORMATION**

Jake Rejin (#8220552) Person registered with Ecology      Whatcom Environmental Services Firm Affiliated with  
 Business Address: 228 E. Champion St. #101 Telephone: (360) 752-9571  
Bellingham City      Washington State      98225 Zip Code

I hereby certify that I have been in responsible charge of performing the site check/site assessment described above. Persons submitting false information are subject to penalties under Chapter 173.360 WAC.

4/21/15 Date      [Signature] Signature of Person Registered with Ecology

## **APPENDIX C**

Original Laboratory Analytical Data



April 22, 2015

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

Dear Mr. Cashman,

On April 21st, 2 samples were received by our laboratory and assigned our laboratory project number EV15040099. The project was identified as your 117 Anthies Ave. Site Assessment. 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

CLIENT CONTACT: Harold Cashman  
 CLIENT PROJECT: 117 Anthies Ave. Site Assessment  
 CLIENT SAMPLE ID: PCS-1

DATE: 4/22/2015  
 ALS JOB#: EV15040099  
 ALS SAMPLE#: EV15040099-01  
 DATE RECEIVED: 04/21/2015  
 COLLECTION DATE: 4/21/2015 9:15:00 AM  
 WDOE ACCREDITATION: C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	1800	150	50	MG/KG	04/21/2015	PAB
Methyl T-Butyl Ether	EPA-8021	U	5.0	50	MG/KG	04/21/2015	PAB
Benzene	EPA-8021	U	1.5	50	MG/KG	04/21/2015	PAB
Toluene	EPA-8021	U	2.5	50	MG/KG	04/21/2015	PAB
Ethylbenzene	EPA-8021	6.4	2.5	50	MG/KG	04/21/2015	PAB
Xylenes	EPA-8021	U	10	50	MG/KG	04/21/2015	PAB
Lead	EPA-6020	7.6	0.50	5	MG/KG	04/22/2015	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 50X Dilution	NWTPH-GX	353 GS2	04/21/2015	PAB
TFT 50X Dilution	EPA-8021	436 GS2	04/21/2015	PAB

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:	4/22/2015
CLIENT CONTACT:	Harold Cashman	ALS JOB#:	EV15040099
CLIENT PROJECT:	117 Anthies Ave. Site Assessment	ALS SAMPLE#:	EV15040099-02
CLIENT SAMPLE ID	CS-1	DATE RECEIVED:	04/21/2015
		COLLECTION DATE:	4/21/2015 9:30:00 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	04/21/2015	PAB
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/21/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/21/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/21/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/21/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/21/2015	PAB
Lead	EPA-6020	<b>8.7</b>	0.50	5	MG/KG	04/22/2015	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	<b>110</b>	04/21/2015	PAB
TFT	EPA-8021	<b>106</b>	04/21/2015	PAB

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



**CERTIFICATE OF ANALYSIS**

CLIENT: Whatcom Environmental Svcs., Inc. DATE: 4/22/2015  
 228 E. Champion St., Suite 101 ALS SDG#: EV15040099  
 Bellingham, WA 98225 WDOE ACCREDITATION: C601

CLIENT CONTACT: Harold Cashman  
 CLIENT PROJECT: 117 Anthies Ave. Site Assessment

**LABORATORY BLANK RESULTS**

**MBG-042015S2 - Batch 92598 - Soil by NWTPH-GX**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/20/2015	PAB

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

**MB-042015S2 - Batch 92598 - Soil by EPA-8021**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/20/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/20/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/20/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/20/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/20/2015	PAB

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

**MB-042215S - Batch 92653 - Soil by EPA-6020**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	U	0.10	1	MG/KG	04/22/2015	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: 4/22/2015
ALS SDG#: EV15040099
WDOE ACCREDITATION: C601

CLIENT CONTACT: Harold Cashman
CLIENT PROJECT: 117 Anthies Ave. Site Assessment

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 92598 - Soil by NWTPH-GX

Table with 7 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: 92598 - Soil by EPA-8021

Table with 7 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.

ALS Test Batch ID: 92653 - Soil by EPA-6020

Table with 7 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, ANALYSIS DATE, ANALYSIS BY. Rows include Lead - BS and Lead - BSD.

APPROVED BY

Handwritten signature of Paul Bagum

Laboratory Director





April 24, 2015

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

Dear Mr. Cashman,

On April 23rd, 4 samples were received by our laboratory and assigned our laboratory project number EV15040127. The project was identified as your 117 Anthes Ave UST Site Assessment. 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:	4/24/2015
CLIENT CONTACT:	Harold Cashman	ALS JOB#:	EV15040127
CLIENT PROJECT:	117 Anthes Ave UST Site Assessment	ALS SAMPLE#:	EV15040127-01
CLIENT SAMPLE ID:	CS-2	DATE RECEIVED:	04/23/2015
		COLLECTION DATE:	4/23/2015 10:15:00 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	04/23/2015	PAB
Benzene	EPA-8021	0.036	0.030	1	MG/KG	04/23/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/23/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/23/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/23/2015	PAB
Lead	EPA-6020	2.2	0.50	5	MG/KG	04/23/2015	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	104	04/23/2015	PAB
TFT	EPA-8021	104	04/23/2015	PAB

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



**CERTIFICATE OF ANALYSIS**

<b>CLIENT:</b>	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	<b>DATE:</b>	4/24/2015
<b>CLIENT CONTACT:</b>	Harold Cashman	<b>ALS JOB#:</b>	EV15040127
<b>CLIENT PROJECT:</b>	117 Anthes Ave UST Site Assessment	<b>ALS SAMPLE#:</b>	EV15040127-02
<b>CLIENT SAMPLE ID</b>	CS-3	<b>DATE RECEIVED:</b>	04/23/2015
		<b>COLLECTION DATE:</b>	4/23/2015 10:30:00 AM
		<b>WDOE ACCREDITATION:</b>	C601

**SAMPLE DATA RESULTS**

<b>ANALYTE</b>	<b>METHOD</b>	<b>RESULTS</b>	<b>REPORTING LIMITS</b>	<b>DILUTION FACTOR</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/23/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/23/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/23/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/23/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/23/2015	PAB
Lead	EPA-6020	2.1	0.50	5	MG/KG	04/23/2015	RAL

<b>SURROGATE</b>	<b>METHOD</b>	<b>%REC</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TFT	NWTPH-GX	97.3	04/23/2015	PAB
TFT	EPA-8021	96.1	04/23/2015	PAB

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



**CERTIFICATE OF ANALYSIS**

<b>CLIENT:</b>	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	<b>DATE:</b>	4/24/2015
<b>CLIENT CONTACT:</b>	Harold Cashman	<b>ALS JOB#:</b>	EV15040127
<b>CLIENT PROJECT:</b>	117 Anthes Ave UST Site Assessment	<b>ALS SAMPLE#:</b>	EV15040127-03
<b>CLIENT SAMPLE ID</b>	CS-4	<b>DATE RECEIVED:</b>	04/23/2015
		<b>COLLECTION DATE:</b>	4/23/2015 10:45:00 AM
		<b>WDOE ACCREDITATION:</b>	C601

**SAMPLE DATA RESULTS**

<b>ANALYTE</b>	<b>METHOD</b>	<b>RESULTS</b>	<b>REPORTING LIMITS</b>	<b>DILUTION FACTOR</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/23/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/23/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/23/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/23/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/23/2015	PAB
Lead	EPA-6020	1.7	0.50	5	MG/KG	04/23/2015	RAL

<b>SURROGATE</b>	<b>METHOD</b>	<b>%REC</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TFT	NWTPH-GX	93.7	04/23/2015	PAB
TFT	EPA-8021	94.9	04/23/2015	PAB

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



**CERTIFICATE OF ANALYSIS**

<b>CLIENT:</b>	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	<b>DATE:</b>	4/24/2015
<b>CLIENT CONTACT:</b>	Harold Cashman	<b>ALS JOB#:</b>	EV15040127
<b>CLIENT PROJECT:</b>	117 Anthes Ave UST Site Assessment	<b>ALS SAMPLE#:</b>	EV15040127-04
<b>CLIENT SAMPLE ID</b>	CS-5	<b>DATE RECEIVED:</b>	04/23/2015
		<b>COLLECTION DATE:</b>	4/23/2015 11:00:00 AM
		<b>WDOE ACCREDITATION:</b>	C601

**SAMPLE DATA RESULTS**

<b>ANALYTE</b>	<b>METHOD</b>	<b>RESULTS</b>	<b>REPORTING LIMITS</b>	<b>DILUTION FACTOR</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/23/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/23/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/23/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/23/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/23/2015	PAB
Lead	EPA-6020	<b>8.2</b>	0.50	5	MG/KG	04/23/2015	RAL

<b>SURROGATE</b>	<b>METHOD</b>	<b>%REC</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TFT	NWTPH-GX	<b>111</b>	04/23/2015	PAB
TFT	EPA-8021	<b>110</b>	04/23/2015	PAB

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



**CERTIFICATE OF ANALYSIS**

CLIENT: Whatcom Environmental Svcs., Inc. DATE: 4/24/2015  
 228 E. Champion St., Suite 101 ALS SDG#: EV15040127  
 Bellingham, WA 98225 WDOE ACCREDITATION: C601

CLIENT CONTACT: Harold Cashman  
 CLIENT PROJECT: 117 Anthes Ave UST Site Assessment

**LABORATORY BLANK RESULTS**

**MBG-042315S2 - Batch 92741 - Soil by NWTPH-GX**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/23/2015	PAB

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

**MB-042315S2 - Batch 92741 - Soil by EPA-8021**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	04/23/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/23/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/23/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/23/2015	PAB

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

**MB-042315S - Batch 92715 - Soil by EPA-6020**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	U	0.10	1	MG/KG	04/23/2015	RAL

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



**CERTIFICATE OF ANALYSIS**

CLIENT: Whatcom Environmental Svcs., Inc. DATE: 4/24/2015  
 228 E. Champion St., Suite 101 ALS SDG#: EV15040127  
 Bellingham, WA 98225 WDOE ACCREDITATION: C601

CLIENT CONTACT: Harold Cashman  
 CLIENT PROJECT: 117 Anthes Ave UST Site Assessment

**LABORATORY CONTROL SAMPLE RESULTS**

**ALS Test Batch ID: 92741 - Soil by NWTPH-GX**

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	93.1			04/23/2015	PAB
TPH-Volatile Range - BSD	NWTPH-GX	91.4	2		04/23/2015	PAB

**ALS Test Batch ID: 92741 - Soil by EPA-8021**

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	95.6			04/23/2015	PAB
Benzene - BSD	EPA-8021	96.4	1		04/23/2015	PAB
Toluene - BS	EPA-8021	96.2			04/23/2015	PAB
Toluene - BSD	EPA-8021	96.8	1		04/23/2015	PAB
Ethylbenzene - BS	EPA-8021	95.9			04/23/2015	PAB
Ethylbenzene - BSD	EPA-8021	96.6	1		04/23/2015	PAB
Xylenes - BS	EPA-8021	95.1			04/23/2015	PAB
Xylenes - BSD	EPA-8021	95.6	1		04/23/2015	PAB

**ALS Test Batch ID: 92715 - Soil by EPA-6020**

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Lead - BS	EPA-6020	103			04/23/2015	RAL
Lead - BSD	EPA-6020	102	1		04/23/2015	RAL

APPROVED BY

Laboratory Director





April 27, 2015

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

Dear Mr. Cashman,

On April 24th, 2 samples were received by our laboratory and assigned our laboratory project number EV15040130. The project was identified as your 117 Anthes Ave UST Site Assessment. 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**

<b>CLIENT:</b>	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	<b>DATE:</b>	4/27/2015
<b>CLIENT CONTACT:</b>	Harold Cashman	<b>ALS JOB#:</b>	EV15040130
<b>CLIENT PROJECT:</b>	117 Anthes Ave UST Site Assessment	<b>ALS SAMPLE#:</b>	EV15040130-01
<b>CLIENT SAMPLE ID</b>	CS-6	<b>DATE RECEIVED:</b>	04/24/2015
		<b>COLLECTION DATE:</b>	4/24/2015 10:00:00 AM
		<b>WDOE ACCREDITATION:</b>	C601

**SAMPLE DATA RESULTS**

<b>ANALYTE</b>	<b>METHOD</b>	<b>RESULTS</b>	<b>REPORTING LIMITS</b>	<b>DILUTION FACTOR</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/24/2015	PAB
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/24/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/24/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/24/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/24/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/24/2015	PAB
Lead	EPA-6020	3.1	0.50	5	MG/KG	04/27/2015	RAL

<b>SURROGATE</b>	<b>METHOD</b>	<b>%REC</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TFT	NWTPH-GX	107	04/24/2015	PAB
TFT	EPA-8021	98.4	04/24/2015	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:	4/27/2015
CLIENT CONTACT:	Harold Cashman	ALS JOB#:	EV15040130
CLIENT PROJECT:	117 Anthes Ave UST Site Assessment	ALS SAMPLE#:	EV15040130-02
CLIENT SAMPLE ID	CS-7	DATE RECEIVED:	04/24/2015
		COLLECTION DATE:	4/24/2015 10:15:00 AM
		WDOE ACCREDITATION:	C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	6.5	3.0	1	MG/KG	04/24/2015	PAB
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/24/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/24/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/24/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/24/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/24/2015	PAB
Lead	EPA-6020	2.4	0.50	5	MG/KG	04/27/2015	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	108	04/24/2015	PAB
TFT	EPA-8021	106	04/24/2015	PAB

U - Analyte analyzed for but not detected at level above reporting limit.  
 Chromatogram indicates that it is likely that sample contains highly weathered gasoline.  
 Gasoline range product results biased high due to semivolatile range product overlap.



**CERTIFICATE OF ANALYSIS**

**CLIENT:** Whatcom Environmental Svcs., Inc. **DATE:** 4/27/2015  
 228 E. Champion St., Suite 101 **ALS SDG#:** EV15040130  
 Bellingham, WA 98225 **WDOE ACCREDITATION:** C601  
**CLIENT CONTACT:** Harold Cashman  
**CLIENT PROJECT:** 117 Anthes Ave UST Site Assessment

**LABORATORY BLANK RESULTS**

**MBG-042015S2 - Batch 92598 - Soil by NWTPH-GX**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/20/2015	PAB

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

**MB-042015S2 - Batch 92598 - Soil by EPA-8021**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/20/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/20/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/20/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/20/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/20/2015	PAB

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

**MB-042715S - Batch 92822 - Soil by EPA-6020**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	U	0.10	1	MG/KG	04/27/2015	RAL

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



CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc. DATE: 4/27/2015
228 E. Champion St., Suite 101 ALS SDG#: EV15040130
Bellingham, WA 98225 WDOE ACCREDITATION: C601
CLIENT CONTACT: Harold Cashman
CLIENT PROJECT: 117 Anthes Ave UST Site Assessment

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 92598 - Soil by NWTPH-GX

Table with 7 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: 92598 - Soil by EPA-8021

Table with 7 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.

ALS Test Batch ID: 92822 - Soil by EPA-6020

Table with 7 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, ANALYSIS DATE, ANALYSIS BY. Rows include Lead - BS and Lead - BSD.

APPROVED BY

Handwritten signature of Paul Bagum

Laboratory Director





April 29, 2015

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

Dear Mr. Cashman,

On April 28th, 1 sample was received by our laboratory and assigned our laboratory project number EV15040137. The project was identified as your 117 Anthes Ave UST Site Assessment. 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. DATE: 4/29/2015  
228 E. Champion St., Suite 101 ALS JOB#: EV15040137  
Bellingham, WA 98225 ALS SAMPLE#: EV15040137-01  
CLIENT CONTACT: Harold Cashman DATE RECEIVED: 04/28/2015  
CLIENT PROJECT: 117 Anthes Ave UST Site Assessment COLLECTION DATE: 4/28/2015 8:30:00 AM  
CLIENT SAMPLE ID CS-2 OE 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	04/28/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/28/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/28/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/28/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/28/2015	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	108	04/28/2015	PAB
TFT	EPA-8021	110	04/28/2015	PAB

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



**CERTIFICATE OF ANALYSIS**

**CLIENT:** Whatcom Environmental Svcs., Inc. **DATE:** 4/29/2015  
 228 E. Champion St., Suite 101 **ALS SDG#:** EV15040137  
 Bellingham, WA 98225 **WDOE ACCREDITATION:** C601  
**CLIENT CONTACT:** Harold Cashman  
**CLIENT PROJECT:** 117 Anthes Ave UST Site Assessment

**LABORATORY BLANK RESULTS**

**MBG-042315S2 - Batch 92741 - Soil by NWTPH-GX**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/23/2015	PAB

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

**MB-042315S2 - Batch 92741 - Soil by EPA-8021**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	04/23/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/23/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/23/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/23/2015	PAB

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



CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc. DATE: 4/29/2015
228 E. Champion St., Suite 101 ALS SDG#: EV15040137
Bellingham, WA 98225 WDOE ACCREDITATION: C601
CLIENT CONTACT: Harold Cashman
CLIENT PROJECT: 117 Anthes Ave UST Site Assessment

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 92741 - Soil by NWTPH-GX

Table with 7 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: 92741 - Soil by EPA-8021

Table with 7 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, ANALYSIS DATE, ANALYSIS BY. Rows include Benzene - BS, Benzene - BSD, Toluene - BS, Toluene - BSD, Ethylbenzene - BS, Ethylbenzene - BSD, Xylenes - BS, and Xylenes - BSD.

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)

**EX15040137**

Date 4/28/15 Page 1 Of 1

PROJECT INFORMATION				ANALYSIS REQUESTED												OTHER (Specify)																			
PROJECT ID:	REPORT TO:	COMPANY:	PROJECT MANAGER:	ADDRESS:	PHONE:	P.O. #:	INVOICE TO COMPANY:	ATTENTION:	ADDRESS:	NMTPH-HCID	NMTPH-DX	NMTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethyl Benzene / Ethyl Chloride by EPA 8260 (water)	Ethyl Benzene / Ethyl Chloride by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM	PCB Pesticides by EPA 8081/8082	Metals-MTCA-5	Metals-Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?					
117	Antkos Ave	U.S. Site Assessment	Whitcomb Environmental Services	228 E. Champion St #101 Bellingham, WA 98225	360-752-7571			SAME AS ABOVE					X																				1		
2.																																			
3.																																			
4.																																			
5.																																			
6.																																			
7.																																			
8.																																			
9.																																			
10.																																			

SPECIAL INSTRUCTIONS: VOA faked via 5035

SIGNATURES (Name, Company, Date, Time):  
 1. Relinquished By: John Ryan, WES, 4/28/15, 10 AM  
 Received By: Shawn Robinson, Arc, 4/28/15, 10 am  
 2. Relinquished By: \_\_\_\_\_  
 Received By: \_\_\_\_\_

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

\*Turnaround request less than standard may incur Rush Charges

**APPENDIX D**

Cemex Weight Tickets



Weighted At: Soil Remediation 1876079172

6300 Glenwood Ave  
CEMEX Everett, WA 98213

Location: 1876

Order: Dispatch: ODate: 04/23/2015  
Ship To: 3042112 - ULTRA TANK SERVICE INC  
117 ANTHES AVE LANGLEY  
117 ANTHES AVE LANGLEY  
BELLINGHAM, WA 98226-7724

Instruct:

Job #: PER LEO PO: PER LEO  
Product: 1192508 - CLASS 3 SOIL DUMPED BY TON  
Carrier: -  
Vehicle: 2252289 - 44KT,4K TRUCKING  
Tractor / Trailer1 / Trailer 2 - / -

Qty: 28.44 ton --- DRIVER ON AT TARE & GROSS ---

Weighmaster:	lb	ton	tne
CEMEX	Gross: 96,680	48.34	43.85
Deputy Weighmaster:	Tare: 39,800	19.90	18.05
Ashley Cordova	Net: 56,880	28.44	25.80

Scale: 1 \* Manual Predetermined Tare

In: Today Loads: 1  
Out: 11:09 am Today Qty: 28.44 ton  
0.00

CEMEX'S STANDARD TERMS AND CONDITIONS INCORPORATED HEREIN.

0.00

Signature of Receiving Agent

Driver:

METRIC CONVERSION FORMULA: POUNDS DIVIDED BY 2204.623, ROUNDED TO 2 DECIMALS  
SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



Weighted At: Soil Remediation 1876079173

6300 Glenwood Ave  
CEMEX Everett, WA 98213

Location: 1876

Order: Dispatch: ODate: 04/23/2015  
Ship To: 3042112 - ULTRA TANK SERVICE INC  
5314 EAST 18TH AVE BELLINGHAM  
5314 EAST 18TH AVE BELLINGHAM  
BELLINGHAM, WA 98226-7724

Instruct: white ford 450

Job #: PER DOUG PO: PER DOUG  
Product: 1373906 - CLASS 3 VAC WASTE DUMPED BY TON  
Carrier: -  
Vehicle: 2298654 - 1876-9, EVERETT SOIL GENERIC  
Tractor / Trailer1 / Trailer 2 - / -

Qty: 6.32 ton --- DRIVER ON AT TARE & GROSS ---

Weighmaster:	lb	ton	tne
CEMEX	Gross: 22,460	11.23	10.19
Deputy Weighmaster:	Tare: 9,820	4.91	4.45
Elizabeth M. Arnold	Net: 12,640	6.32	5.73

Scale: 1

In: 11:38 am Today Loads: 1  
Out: 11:56 am Today Qty: -6.32 ton  
0.00

CEMEX'S STANDARD TERMS AND CONDITIONS INCORPORATED HEREIN.

0.00

Signature of Receiving Agent

Driver:

METRIC CONVERSION FORMULA: POUNDS DIVIDED BY 2204.623, ROUNDED TO 2 DECIMALS  
SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



1876079180

Weighted At: Soil Remediation  
6300 Glenwood Ave  
CEMEX Everett, WA 98213

Location: 1876

Order: Dispatch: ODate: 04/23/2015  
Ship To: 3042112 - ULTRA TANK SERVICE INC  
117 ANTHES AVE LANGLEY  
117 ANTHES AVE LANGLEY  
BELLINGHAM, WA 98226-7724

Instruct:

Job #: PER LEO PO: PER LEO  
Product: 1192508 - CLASS 3 SOIL DUMPED BY TON  
Carrier: -  
Vehicle: 2252289 - 44KT,4K TRUCKING  
Tractor / Trailer1 / Trailer 2 - / -

Qty: 23.19 ton --- DRIVER ON AT TARE & GROSS ---

Weighmaster:	lb	ton	tne
CEMEX	Gross: 86,180	43.09	39.09
Deputy Weighmaster:	Tare: 39,800	19.90	18.05
Elizabeth M. Arnold	Net: 46,380	23.19	21.04

Scale: 1 \* Manual Predetermined Tare  
In: 3:12 pm Today Loads: 2  
Out: Today Qty: 51.63 ton  
0.00

CEMEX'S STANDARD TERMS AND CONDITIONS INCORPORATED HEREIN.

0.00

Signature of Receiving Agent

Driver:

METRIC CONVERSION FORMULA: POUNDS DIVIDED BY 2204.623, ROUNDED TO 2 DECIMALS  
SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



Weighted At: Soil Remediation  
 6300 Glenwood Ave  
**CEMEX** Everett, WA 98213

1876079191

Location: 1876

Order: **Dispatch:** **Date:** 04/24/2015  
 Ship To: 3042112 - ULTRA TANK SERVICE INC  
 117 ANTHES AVE LANGLEY  
 117 ANTHES AVE LANGLEY  
 BELLINGHAM, WA 98226-7724

Instruct:

Job #: PER LEO PO: PER LEO  
 Product: 1192508 - CLASS 3 SOIL DUMPED BY TON  
 Carrier: -  
 Vehicle: 2252289 - 44KT,4K TRUCKING  
 Tractor / Trailer1 / Trailer 2 -/-

Qty: 9.06 ton --- DRIVER ON AT TARE & GROSS ---  
 Weighmaster: lb ton tne  
 CEMEX Gross: 57,920 28.96 26.27  
 Deputy Weighmaster: Tare: 39,800 19.90 18.05  
 Elizabeth M. Arnold Net: 18,120 9.06 8.22  
 Scale: 1 \* Manual Weight  
 In: 1:28 pm Today Loads: 1  
 Out: 11:08 am Today Qty: 9.06 ton  
 0.00

CEMEX'S STANDARD TERMS AND  
 CONDITIONS INCORPORATED HEREIN.

0.00

Signature of Receiving Agent

Driver:

METRIC CONVERSION FORMULA: POUNDS DIVIDED BY 2204.623, ROUNDED TO 2 DECIMALS  
 SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



Weighted At: Soil Remediation  
 6300 Glenwood Ave  
**CEMEX** Everett, WA 98213

1876079193

Location: 1876

Order: **Dispatch:** **Date:** 04/24/2015  
 Ship To: 3042112 - ULTRA TANK SERVICE INC  
 117 ANTHES AVE LANGLEY  
 117 ANTHES AVE LANGLEY  
 BELLINGHAM, WA 98226-7724

Instruct:

Job #: LANGLEY PO: LANGLEY  
 Product: 1192508 - CLASS 3 SOIL DUMPED BY TON  
 Carrier: -  
 Vehicle: 2034263 - 1876-1, EVERETT SOIL GENERIC  
 Tractor / Trailer1 / Trailer 2 -/- WHITE FORD 450 -/-

Qty: 5.21 ton --- DRIVER ON AT TARE & GROSS ---  
 Weighmaster: lb ton tne  
 CEMEX Gross: 20,200 10.10 9.16  
 Deputy Weighmaster: Tare: 9,780 4.89 4.44  
 Elizabeth M. Arnold Net: 10,420 5.21 4.73  
 Scale: 1  
 In: 10:56 am Today Loads: 2  
 Out: 11:26 am Today Qty: 3.85 ton  
 0.00

CEMEX'S STANDARD TERMS AND  
 CONDITIONS INCORPORATED HEREIN.

0.00

Signature of Receiving Agent

Driver:

METRIC CONVERSION FORMULA: POUNDS DIVIDED BY 2204.623, ROUNDED TO 2 DECIMALS  
 SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



Weighted At: Soil Remediation  
 6300 Glenwood Ave  
**CEMEX** Everett, WA 98213

1876079226

Location: 1876

Order: **Dispatch:** **Date:** 04/28/2015  
 Ship To: 3042112 - ULTRA TANK SERVICE INC  
 117 ANTHES WAY LANGLEY  
 117 ANTHES WAY LANGLEY  
 BELLINGHAM, WA 98226-7724

Instruct: WHITE PICKUP TRUCK

Job #: LANGLEY PO: LANGLEY  
 Product: 1192508 - CLASS 3 SOIL DUMPED BY TON  
 Carrier: -  
 Vehicle: 2298655 - 1876-10, EVERETT SOIL GENERIC  
 Tractor / Trailer1 / Trailer 2 -/-

Qty: 1.84 ton --- DRIVER ON AT TARE & GROSS ---  
 Weighmaster: lb ton tne  
 CEMEX Gross: 13,540 6.77 6.14  
 Deputy Weighmaster: Tare: 9,860 4.93 4.47  
 Ashley Cordova Net: 3,680 1.84 1.67  
 Scale: 2  
 In: 10:01 am Today Loads: 1  
 Out: 10:19 am Today Qty: 1.84 ton  
 0.00

CEMEX'S STANDARD TERMS AND  
 CONDITIONS INCORPORATED HEREIN.

0.00

Signature of Receiving Agent

Driver:

METRIC CONVERSION FORMULA: POUNDS DIVIDED BY 2204.623, ROUNDED TO 2 DECIMALS  
 SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION