

soil | water | air compliance consulting

228 East Champion Street, Suite 101 Bellingham, WA 98225 **tel** 360.752.9571 | **fax** 360.752.9573 www.whatcomenvironmental.com

May 27, 2016

Point Roberts Marina 713 Simundson Dr. Point Roberts, WA 98281

RE: Underground Storage Tank Site Assessment at Closure: Point Roberts Marina, 713 Simundson Dr. Point Roberts, Washington 98281

Whatcom Environmental Services Inc. has completed the Site Assessment of an Underground Storage Tank (UST) system closure/replacement conducted at the Point Roberts Marina located at 713 Simundson Dr., Point Roberts, Washington. The site location is shown on Figure 1.

Two UST's (one 15,000-gallon gasoline tank, and one 15,000-gallon diesel tank) were located on the subject property at the location shown on Figure 2. The tanks were decommissioned and removed from the ground by Ultra Tank Services on April 14, 2016. 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 and adjacent to the gasoline tank. 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 southern portion of the excavation. The release was reported to Ecology (ERTS #664451).

This report has been prepared by Whatcom Environmental Services and the information provided herein supplements the completed UST Site Check/Site Assessment Checklist, included in Appendix A.

Site Setting

The two UST's were in active service at the Point Roberts Marina Resort located at 713 Simundson Dr. in Point Roberts, Washington. The UST's serviced the fuel dock at the marina. The subject property is bounded to the north and south by open fields, to the west by Simundson Dr., and by the marina to the east. The site location is shown on Figure 1.

The median elevation of the site is approximately 15 feet above mean sea level. The site topography is generally flat. The property is covered by an asphalt parking lot; grassy fields; a multi-tenant building with retail shops, restaurants, and offices; and a canopy for boat storage.

The removed UST's consisted of one 15,000-gallon gasoline storage tank, and one 15,000-gallon diesel storage tank. The tanks were situated to the northwest of the building. Fiberglass product lines ran from the tanks to the sump located adjacent to the fuel dock access ramp. A map showing the location of the two removed tanks and other pertinent site features is provided as Figure 2.

Soils in the vicinity of the UST are described in the Soil Survey of Whatcom County Area, Washington (USDA, 2013). Soils at the property are the Whitehorn silt loams. The soils formed on 0 to 2 percent slopes. The average annual precipitation is 30 to 40 inches, the average annual temperature is 48 to 52°F, and the average frost-free period is 160 to 200 days. The Whitehorn soil is poorly drained. It formed in a mixture of loess, volcanic ash, and glaciofluvial deposits over glaciomarine deposits. Permeability in the Whitehorn soil is moderately low, to moderately high.

The depth to water at the site appeared to be approximately 12 feet below ground surface, and influenced by the tidal fluctuation of the nearby bay.

Tank Closure

Mr. Jake Reijm of Whatcom Environmental Services observed the removal of the USTs from the subject property on April 14, 2016. Mr. Reijm is a registered underground storage tank site assessor. Ultra Tank Services provided the tank decommissioning services during the UST removal.

The two tanks were located in a single excavation located northeast of the building. The tanks were overlain by asphalt and approximately 2 feet of sand overburden

2

and were bedded in native silty loam. The tanks were protected by a cathodic protection system observed around the perimeter of the tank pit. The product lines were single-wall fiberglass and the product was delivered to the dispensers at the fueling dock located to the east in the marina using a pressurized system. Product lines were removed and replaced between the tank pit and the fuel sump located adjacent to the fuel dock access ramp. A total of 47 feet of product piping were removed and replaced as part of the UST system replacement.

During the UST removal and site assessment, soils surrounding the UST system were field screened for the presence of petroleum. Field screening included conducting water sheen tests and measuring organic vapors using a photoionization detector (PID).

The southern UST, Tank #1, was a 15,000-gallon, singe-walled, steel tank measuring approximately 10 feet in diameter and 26 feet in length. The tank was used to store unleaded gasoline fuel. Upon inspection after being removed from the ground, the tank appeared intact with no holes, significant pitting or corrosion.

During the removal of Tank #1, soil sample *PCS-1* was collected at approximately 8 feet below ground surface (bgs), at the depth of greatest indication of contamination, along the center of the southern side of the tank.

The northern UST, Tank #2, was a 15,000-gallon, single-walled, steel tank measuring approximately 10 feet in diameter and 26 feet in length. The tank was used to store diesel fuel. Upon inspection after being removed from the ground, the tank appeared intact with no holes, significant pitting or corrosion.

Product piping was removed following the completion of the petroleum contaminated soil (PCS) removal activities on 5/19/16. A separate report will be submitted to Ecology which will describe the PCS removal action. A total of 47 feet of product lines were replaced as part of the UST system replacement. Per UST guidelines, 1 soil sample (*SS-9*) was collected from beneath a group of unions located approximately halfway between the tank pit and the fuel sump.

Soil Sample Analytical Results

Three discrete soil samples were collected as part of this UST Site Assessment (identified as *PCS-1*, *Stockpile-1*, *and SS-9*). *PCS-1* was collected from the sidewall adjacent to the removed gasoline tank, *Stockpile-1* was collected to document the condition of the

soils stockpiled onsite during the tank removal, and SS-9 was collected from below the removed product lines. The soil sample descriptions including location, depth of collection, and field screening results are included in Table 1. Soil sample locations are shown on Figure 2.

The soil samples were evaluated in the field for organic vapors using a photoionization detector (PID) and for petroleum products using sheen tests. Immediately after the soil samples were described, a portion of the sample was sheen tested and the remainder of the sample was placed in a labeled re-sealable bag. The PID was inserted into the re-sealable bag in order to evaluate the presence of organic vapors, and a headspace organic vapor detection in parts per million (ppm) was recorded in the field notebook. Sheen tests were recorded as: NS – no sheen, VSS – very slight sheen, SS – slight sheen, MS – moderate sheen, and HS – heavy sheen.

The 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 TPH using method NWTPH-Gx; diesel and lube-oil range TPH using method NWTPH-Dx; benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl t-butyl ether (MTBE) using EPA method 8021, and lead using EPA method 6020. The soil screening levels for the site were established for unrestricted land use in accordance with the Model Toxics Control Act (MTCA) WAC 173-340. MTCA Method A target cleanup levels are provided in WAC 173-340, Table 740-1.

Laboratory analytical results indicated that the sample collected to confirm the release (sample PCS-1) contained gasoline range TPH and BTEX constituents at concentrations which exceeded the MTCA Method A target cleanup levels. A summary of soil sample laboratory analytical results is provided in Table 2. The original laboratory analytical data report is included in Appendix B.

Conclusions

Two USTs were decommissioned and removed from the ground on April 14, 2016, at the Point Roberts Marina located at 713 Simundson Dr., Point Roberts Washington.

A UST Site Assessment was completed when the tanks were removed from the ground. Whatcom Environmental personnel field screened excavated soil and observed field evidence indicating that a release of petroleum products had occurred from the UST system. Laboratory analytical results confirmed the release of gasoline to soil at the site.

The contaminated tank pit backfill material will be excavated and removed from the site for bioremediation in remediation cells at the marina property located across the street to the northeast of the subject property. A PCS Removal Action report will follow this report when remediation activities are complete.

Limitations

No site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this work by Whatcom Environmental is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions. No warranty, express or implied, is given regarding the presence of hidden or unidentified sources of contamination.

Whatcom Environmental Services has prepared this report for the exclusive use of the Point Roberts Marina, their authorized agents, and regulatory agencies. This report is not intended for use by others and the information contained herein is not applicable to other sites.

Please use this letter 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).

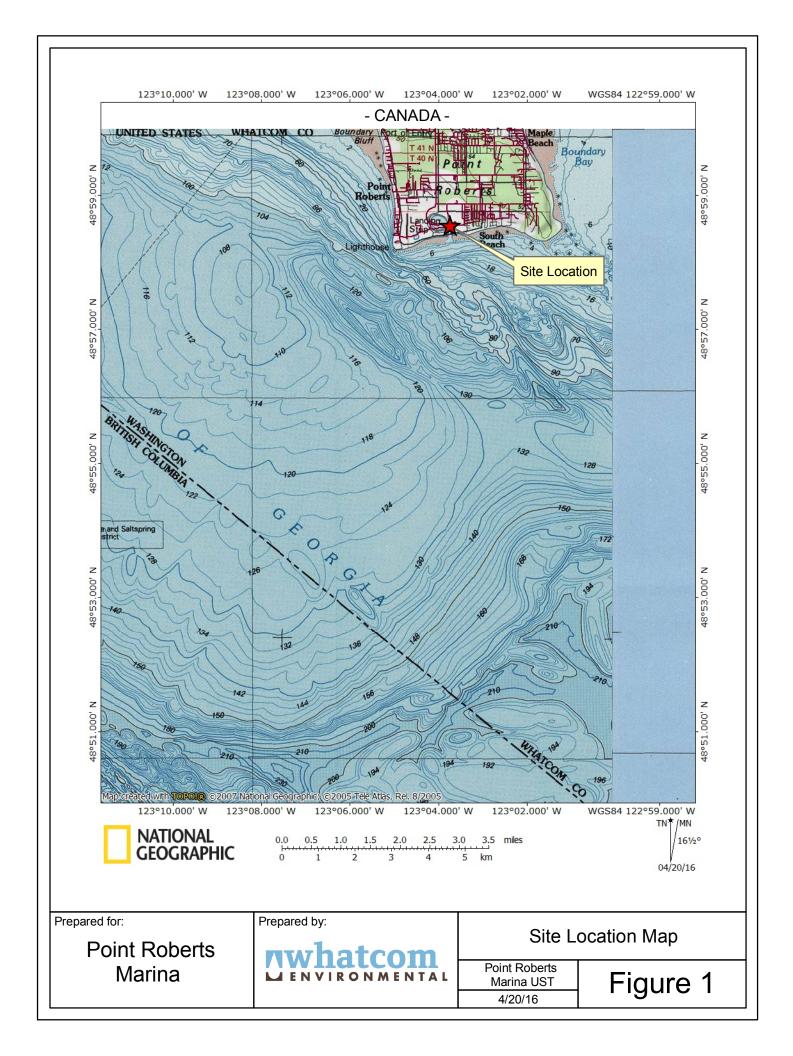
Sincerely,

Jake Reijm Whatcom Environmental Services WA UST Site Assessor #8220552

Wash Harold Cashmar Whatcom Environmenta Senior Project Manage HAROLD J. CASHMAN

References

- United States Department of Agriculture (USDA). December 2013. Soil Survey Whatcom County Area, Washington. Soil Conservation Service.
- United States Department of Agriculture (USDA) Soil Survey Staff, Natural Resources Conservation Service, Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed [04/18/2016].
- Washington State Department of Ecology (Ecology). 1998. Underground Storage Tank Statute and Regulations Chapter 173-360 WAC. Publication No. 95-604.
- Washington State Department of Ecology (Ecology). 2007. Model Toxics Control Act Cleanup Regulation Chapter 173-340 WAC. Publication No. 94-06. November 2007.
- Washington State Department of Ecology (Ecology). 2003. Guidance for Site Checks and Site Assessments for Underground Storage Tanks. Publication # 90-52.





Sample ID	Date	Location and Description		Sheen
			(ppm)	Test*
PCS-1	4/14/16	Collected at 8 feet bgs from the southern section of the excavation sidewall at the center of the gasoline tank as the tanks were removed.	1700	HS
		Sand, dark brown to black, loose, wet.		
Stockpile-1	4/19/16	Collected from onsite stockpile of soils removed during the UST removal. Sand with silt, gray, loose, moist.	803	HS
SS-9	5/19/16	Collected from below removed section of product piping running from the tank pit to the sump located at the fuel dock access ramp at 3 feet bgs. Sand with minor gravel, brown, loose, moist to dry.	0.7	NS

Table 1. Soil Sample Descriptions - Point Roberts Marina UST Site Assessment

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

Soil samples SS-1 through SS-8 were collected as part of the PCS removal action, and are included in a separate report.

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-6020 Lead mg/kg
MTCA Method Cleanup Leve		30/100*	2,000	2,000	0.03	7	6	9	0.1	250
PCS-1	4/14/2016	9,300	1,600	ND(<100)	ND(<6.0)	ND(<10.0)	92	620	ND(<20.0)	4.2
Stockpile-1	4/19/2016	2,800	1,200	ND(<100)	ND(<1.5)	ND(<2.5)	4.2	ND(<10)	ND(<5)	6.1
SS-9	5/19/2016	ND(<3.0)	120	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.10)	2

Table 2. Soil Sample Analytical Results - Point Roberts Marina UST Site Assessment

* Cleanup level dependent on BTEX concentration

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 aplicable cleanup level due to dilution

APPENDIX A

UST Site Check/Site Assessment Checklist



SITE CHECK/SITE ASSESSMENT CHECKLIST County: _____

This checklist certifies that site check or site assessment activities were performed in accordance with Chapter 173-360 WAC. Instructions are found on the last page.

	I. UST F	ACILITY	II. OWNER/OPER/	ATOR INFORMAT	rion			
Fa	cility Compliance Tag #:		Owner/Operator Name: Poi	Owner/Operator Name: Point Roberts Marina				
US	T ID #: 8248		Business Name:					
Sit	^{e Name:} Point Roberts	Marina	Address: 713 Simundso	n Dr.				
Sit	e Address: 713 Simunds	son Dr.	City: Point Roberts	State: WA	Zip: 98281			
Cit	y: Point Roberts		Phone: 360-945-2255					
Ph	one: 360-945-2255		Email:		<u> </u>			
			SITE ASSESSOR					
	vice Provider Name: Jake	· · · · · · · · · · · · · · · · · · ·	Company Name: Whatcom					
Ce	l Phone: 360-708-2840 Email:	jreljm@whatcomenvironmental.com	Address: 228 E. Champ	ion St. #101				
Cei	tification #: 8220552	Exp. Date: 1/5/18	City: Bellingham	State: WA	Zip: 98225			
		IV. TANK IN	FORMATION					
	Tank ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE ASSESSMENT				
	1	15,000 Gallon	Unleaded Gasoline	4/14	/16			
	2	15,000 Gallon	Diesel	4/14/16				
				· · · · · · · · · · · · · · · · · · ·				
	V. Reas	SON FOR CONDUCTING SITE	CHECK/SITE ASSESSMENT (chec	kone)				
\checkmark	Release investigation follow	wing permanent UST system	closure (i.e. tank removal or clo	osure-in-place).				
	Release investigation follow	wing a failed tank and/or line	e tightness test.					
	Release investigation follow	wing discovery of contaminat	ted soil and/or groundwater.					
	Release investigation direct	ted by Ecology to determine	if the UST system is the source	of offsite impac	ts.			
	UST system is undergoing a gasoline) to storing a non-r	ı "change-in-service", which egulated substance (e.g. wat	is changing from storing a regul ter).	ated substance	(e.g.			
	Directed by Ecology for UST	r system permanently closed	or abandoned before 12/22/19	988.				
	Other (describe):							

VI. CHECKLIST	4.2	
The site assessor must check each of the following items and include it in the report. Sections referenced below can be found in the Ecology publication Guidance for Site Checks and Site Assessments for Underground Storage Tanks.		
	YES	NO
		<u> </u>
6. A brief description of the surrounding land use is provided. (Section 3.1)		
7. The name and address of the laboratory used to perform analyses is provided. The methods used to collect and analyze the samples, including the number and types of samples collected, are also documented in the report. The data from the laboratory is appended to the report.		
8. The following items are provided in one or more sketches:		
Location and ID number for all field samples collected	7	
If applicable, groundwater samples are distinguished from soil samples	\square	
Location of samples collected from stockpiled excavated soil		\square
Tank and piping locations and limits of excavation pit	√	
Adjacent structures and streets	\square	
Approximate locations of any on-site and nearby utilities		Ø
9. If sampling procedures are different from those specified in the guidance, has justification for using these alternative sampling procedures been provided? (Section 3.4)	7	
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. Any sample exceeding MTCA Method A cleanup standards are highlighted or bolded.	7	
11. Any factors that may have compromised the quality of the data or validity of the results are described.	√	
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred. The requirements for reporting confirmed releases can be found in WAC 173-360-372.	7	
VII. REQUIRED SIGNATURES		
Signature acknowledges the Site Check or Site Assessment complies with UST regulations WAC 173-360-360 through -39	5.	
Jake Reijm ////////////////////////////////////	6	
Print or Type Name Signature of Certified Sile Assessor Date		

APPENDIX B

Original Laboratory Analytical Data Report



April 15, 2016

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

Dear Mr. Cashman,

On April 15th, 1 sample was received by our laboratory and assigned our laboratory project number EV16040095. The project was identified as your Point Roberts Marina 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

 Page 1

 ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208
 PHONE 425-356-2600
 FAX 425-356-2626

 ALS Group USA, Corp dba ALS Environmental

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CLIENT:	Whatcom Environr 228 E. Champion S			DATE: 4/15/2016 ALS JOB#: EV16040095					
	Bellingham, WA 98			ALS SAMPLE#:	EV16040095-01				
CLIENT CONTACT:	Harold Cashman	Harold Cashman		ATE RECEIVED:	04/15/2	016			
CLIENT PROJECT:	Point Roberts Mari	Point Roberts Marina UST Site		LECTION DATE:	4/14/20	16 9:15:00 A	Μ		
	Assessment								
CLIENT SAMPLE ID	PCS-1		WDOE A	CCREDITATION:	C601				
		SAMPLE D	ATA RESULTS						
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A DATE	ANALYSIS BY		
TPH-Volatile Range	NWTPH-GX	9300	600	200	MG/KG	04/15/2016	PAB		
Methyl T-Butyl Ether	EPA-8021	U	20	200	MG/KG	04/15/2016	PAB		
Benzene	EPA-8021	U	6.0	200	MG/KG	04/15/2016	PAB		
Toluene	EPA-8021	U	10	200	MG/KG	04/15/2016	PAB		
Ethylbenzene	EPA-8021	92	10	200	MG/KG	04/15/2016	PAB		
Xylenes	EPA-8021	620	40	200	MG/KG	04/15/2016	PAB		
TPH-Diesel Range	NWTPH-DX	1600	50	2	MG/KG	04/15/2016	EBS		
TPH-Oil Range	NWTPH-DX	U	100	2	MG/KG	04/15/2016	EBS		
Lead	EPA-6020	4.2	0.50	5	MG/KG	04/15/2016	RAL		
SURROGATE	METHOD	%REC				ANALYSIS A DATE	ANALYSIS BY		
TFT 200X Dilution	NWTPH-GX	1370 GS2				04/15/2016	PAB		
TFT 200X Dilution	EPA-8021	1350 GS2				04/15/2016	PAB		
C25 2X Dilution	NWTPH-DX	90.9				04/15/2016	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 and weathered diesel.

Diesel range product results biased high due to gasoline range product overlap.

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CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101	DATE: ALS SDG#:	4/15/2016 EV16040095
	Bellingham, WA 98225	WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	Point Roberts Marina UST Site Assessment		

U

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RESULTS

U

U

LABORATORY BLANK RESULTS

MBG-041116S - Batch 103179 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	MG/KG	3.0	04/11/2016	PAB
U - Analyte analyzed for but MB-041116S - Batch 1	t not detected at level above rep 03179 - Soil by EPA-	0				
ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Methyl T-Butyl Ether	EPA-8021	U	MG/KG	0.10	04/11/2016	PAB
Benzene	EPA-8021	U	MG/KG	0.030	04/11/2016	PAB

MG/KG

MG/KG

MG/KG

UNITS

MG/KG

MG/KG

U - Analyte analyzed for but not detected at level above reporting limit. MB-041416S - Batch 103303 - Soil by NWTPH-DX

EPA-8021

EPA-8021

EPA-8021

METHOD

NWTPH-DX

NWTPH-DX

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

MB-041516S - Batch 103347 - Soil by EPA-6020

Toluene

Xylenes

ANALYTE

TPH-Diesel Range

TPH-Oil Range

Ethylbenzene

				REPORTING	ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS	UNITS	LIMITS	DATE	BY
Lead	EPA-6020	U	MG/KG	0.10	04/15/2016	RAL

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

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Page 3

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RIGHT SOLUTIONS RIGHT PARTNER

FAX 425-356-2626

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REPORTING

LIMITS

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04/11/2016

04/11/2016

04/11/2016

ANALYSIS

DATE

04/14/2016

04/14/2016

PAB

PAB

PAB

ANALYSIS

ΒY

EBS

EBS



CLIENT:	Whatcom Environmental Svcs., Inc.	DATE:	4/15/2016
	228 E. Champion St., Suite 101	ALS SDG#:	EV16040095
	Bellingham, WA 98225	WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	Point Roberts Marina UST Site Assessment		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 103179 - Soil by NWTPH-GX

	· ,				LIN	IITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	MIN	MAX	DATE	
TPH-Volatile Range - BS	NWTPH-GX	91.6			66.5	122.7	04/11/2016	PAB
TPH-Volatile Range - BSD	NWTPH-GX	94.3	3		66.5	122.7	04/11/2016	PAB

ALS Test Batch ID: 103179 - Soil by EPA-8021

	· · · · · · , - · · · ·	•		LIM	ITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN	MAX	DATE	
Methyl T-Butyl Ether - BS	EPA-8021	94.5		66	116	04/11/2016	PAB
Methyl T-Butyl Ether - BSD	EPA-8021	94.1	0	66	116	04/11/2016	PAB
Benzene - BS	EPA-8021	92.7		67.7	124	04/11/2016	PAB
Benzene - BSD	EPA-8021	93.4	1	67.7	124	04/11/2016	PAB
Toluene - BS	EPA-8021	97.8		71	123	04/11/2016	PAB
Toluene - BSD	EPA-8021	97.8	0	71	123	04/11/2016	PAB
Ethylbenzene - BS	EPA-8021	100		69.8	117	04/11/2016	PAB
Ethylbenzene - BSD	EPA-8021	99.9	0	69.8	117	04/11/2016	PAB
Xylenes - BS	EPA-8021	98.0		70	119	04/11/2016	PAB
Xylenes - BSD	EPA-8021	98.3	0	70	119	04/11/2016	PAB

ALS Test Batch ID: 103303 - Soil by NWTPH-DX

				LIMITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN MAX	DATE	
TPH-Diesel Range - BS	NWTPH-DX	93.7		75.5 122.1	04/14/2016	EBS
TPH-Diesel Range - BSD	NWTPH-DX	103	9	75.5 122.1	04/14/2016	EBS

ALS Test Batch ID: 103347 - Soil by EPA-6020

	-			LIMITS		ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN	MAX	DATE	
Lead - BS	EPA-6020	104		80	120	04/15/2016	RAL
Lead - BSD	EPA-6020	106	2	80	120	04/15/2016	RAL

APPROVED BY

Laboratory Director

Page 4

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 PHONE 425-356-2600 FAX 425-356-2626 ALS Group USA, Corp dba ALS Environmental

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ALS Job# (Laboratory Use Only)	specify)	RECEIVED IN GOOD CONDITION?							TURNAROUND REQUESTED in Business Days* janic Analysis OTHER: 1 [sseedify:	Turnaround request less than standard may incur Rush Charges
Als Environmental Als Environmental B620 Holly Drive, Suite 100 Chain Of Custody/ Everett, WA 98208 Phone (425) 356-2600 Fax (425) 356-2620 Fax (425) 356-2626 http://www.alsglobal.com		AMPLE Ample Periodor Faulton American Americ	PCS-1 14/16 9-15 Soil 1 14 x x x 1 1 x					International In	$\frac{4}{1}\frac{1}{15}\frac{1}{16}\frac{1}{2}\frac{1}{20}\frac{3}{5}\frac{10}{10}$ Organic, Metake Inorg	



April 22, 2016

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

Dear Mr. Cashman,

On April 20th, 1 sample was received by our laboratory and assigned our laboratory project number EV16040117. The project was identified as your Point Roberts Marina 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

 Page 1

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CLIENT: CLIENT CONTACT: CLIENT PROJECT:	Whatcom Environr 228 E. Champion S Bellingham, WA 98 Harold Cashman Point Roberts Mari	St., Suite 101 3225	COL	DATE: ALS JOB#: ALS SAMPLE#: ATE RECEIVED: LECTION DATE:	4/22/2016 EV16040117 EV16040117-01 04/20/2016 4/19/2016 8:40:00 AM		
CLIENT SAMPLE ID	Stockpile-1			CCREDITATION:	C601		
		SAMPLE D	ATA RESULTS				
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	2800	150	50	MG/KG	04/21/2016	PAB
Methyl T-Butyl Ether	EPA-8021	U	5.0	50	MG/KG	04/21/2016	PAB
Benzene	EPA-8021	U	1.5	50	MG/KG	04/21/2016	PAB
Toluene	EPA-8021	U	2.5	50	MG/KG	04/21/2016	PAB
Ethylbenzene	EPA-8021	4.2	2.5	50	MG/KG	04/21/2016	PAB
Xylenes	EPA-8021	U	10	50	MG/KG	04/21/2016	PAB
TPH-Diesel Range	NWTPH-DX	1200	50	2	MG/KG	04/20/2016	EBS
TPH-Oil Range	NWTPH-DX	U	100	2	MG/KG	04/20/2016	EBS
Lead	EPA-6020	6.1	0.50	5	MG/KG	04/20/2016	RAL
						ANALYSIS A DATE	ANALYSIS BY
SURROGATE	METHOD	%REC				DATE	DI
TFT 50X Dilution	NWTPH-GX	348 GS2				04/21/2016	PAB
TFT 50X Dilution	EPA-8021	338 GS2				04/21/2016	PAB
C25 2X Dilution	NWTPH-DX	87.3				04/20/2016	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 extremely weathered gasoline and weathered diesel.

Gasoline range product results biased high due to semivolatile range product overlap. Diesel range product results biased high due to gasoline range product overlap.

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Page 2



LABORATORY BLANK RESULTS

CERTIFICATE OF ANALYSIS

MB-042016S - Batch 103512 - Soil by NWTPH-GX

	METHOD			REPORTING	ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS	UNITS	LIMITS	DATE	BY
TPH-Volatile Range	NWTPH-GX	U	MG/KG	3.0	04/20/2016	PAB
U - Analyte analyzed for but	not detected at level above rep	oorting limit.				
MB-042016S - Batch 10	03512 - Soil by EPA-	8021				
				REPORTING	ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS	UNITS	LIMITS	DATE	BY
Methyl T-Butyl Ether	EPA-8021	U	MG/KG	0.10	04/20/2016	PAB
Benzene	EPA-8021	U	MG/KG	0.030	04/20/2016	PAB
Toluene	EPA-8021	U	MG/KG	0.050	04/20/2016	PAB
Ethylbenzene	EPA-8021	U	MG/KG	0.050	04/20/2016	PAB
Xylenes	EPA-8021	U	MG/KG	0.20	04/20/2016	PAB

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

MB-042016S - Batch 103449 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	MG/KG	25	04/20/2016	EBS
TPH-Oil Range	NWTPH-DX	U	MG/KG	50	04/20/2016	EBS

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

MB-042016S - Batch 103448 - Soil by EPA-6020

				REPORTING	ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS	UNITS	LIMITS	DATE	BY
Lead	EPA-6020	U	MG/KG	0.10	04/20/2016	RAL

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

Page 3

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CLIENT:	Whatcom Environmental Svcs., Inc.	DATE:	4/22/2016
	228 E. Champion St., Suite 101	ALS SDG#:	EV16040117
	Bellingham, WA 98225	WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	Point Roberts Marina UST		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 103512 - Soil by NWTPH-GX

				LIN	IITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN	MAX	DATE	
TPH-Volatile Range - BS	NWTPH-GX	108		66.5	122.7	04/20/2016	PAB
TPH-Volatile Range - BSD	NWTPH-GX	105	4	66.5	122.7	04/20/2016	PAB

ALS Test Batch ID: 103512 - Soil by EPA-8021

		021			LIN	IITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	MIN	MAX	DATE	
Methyl T-Butyl Ether - BS	EPA-8021	97.8			66	116	04/20/2016	PAB
Methyl T-Butyl Ether - BSD	EPA-8021	92.9	5		66	116	04/20/2016	PAB
Benzene - BS	EPA-8021	99.9			67.7	124	04/20/2016	PAB
Benzene - BSD	EPA-8021	93.2	7		67.7	124	04/20/2016	PAB
Toluene - BS	EPA-8021	103			71	123	04/20/2016	PAB
Toluene - BSD	EPA-8021	97.3	5		71	123	04/20/2016	PAB
Ethylbenzene - BS	EPA-8021	102			69.8	117	04/20/2016	PAB
Ethylbenzene - BSD	EPA-8021	99.0	3		69.8	117	04/20/2016	PAB
Xylenes - BS	EPA-8021	104			70	119	04/20/2016	PAB
Xylenes - BSD	EPA-8021	101	3		70	119	04/20/2016	PAB

ALS Test Batch ID: 103449 - Soil by NWTPH-DX

				LIMITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN MAX	DATE	
TPH-Diesel Range - BS	NWTPH-DX	107		75.5 122.1	04/20/2016	EBS
TPH-Diesel Range - BSD	NWTPH-DX	99.3	8	75.5 122.1	04/20/2016	EBS

ALS Test Batch ID: 103448 - Soil by EPA-6020

					LI	MITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	MIN	MAX	DATE	
Lead - BS	EPA-6020	103			80	120	04/20/2016	RAL
Lead - BSD	EPA-6020	102	0		80	120	04/20/2016	RAL

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ALS ENVIRONMENTAI RE20 Holly Drive Stuite 100	Chain Of Custody/	ALS Job# (Laboratory Use Only)
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ALS) Fax (425) 356-2626 http://www.alsglobal.com		Date 1/4/16 Page / Of /
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May 23, 2016

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

Dear Mr. Cashman,

On May 20th, 1 sample was received by our laboratory and assigned our laboratory project number EV16050119. The project was identified as your Point Roberts Marina 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

Page 1
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ALS Group USA, Corp dba ALS Environmental

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CLIENT:	Whatcom Environr 228 E. Champion S	,		DATE: ALS JOB#:	5/23/201 EV1605				
	Bellingham, WA 98	-		ALS SAMPLE#:			EV16050119-01		
CLIENT CONTACT:	Harold Cashman		D	ATE RECEIVED:		05/20/2016			
CLIENT PROJECT:	Point Roberts Marina UST Site Assessment		COL	LECTION DATE:	5/19/2016 10:00:00 AM				
CLIENT SAMPLE ID	SS-9		WDOE AG	CCREDITATION:	C601				
		SAMPLE D	ATA RESULTS						
	METHOD		REPORTING LIMITS	DILUTION FACTOR		ANALYSIS DATE	ANALYSIS BY		
ANALYTE TPH-Volatile Range	METHOD NWTPH-GX	RESULTS U	3.0	1	UNITS MG/KG	05/20/2016	PAB		
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	05/20/2016	PAB		
Benzene	EPA-8021	U	0.030	1	MG/KG	05/20/2016	PAB		
Toluene	EPA-8021	U	0.050	1	MG/KG	05/20/2016	PAB		
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	05/20/2016	PAB		
Xylenes	EPA-8021	U	0.20	1	MG/KG	05/20/2016	PAB		
TPH-Diesel Range	NWTPH-DX	120	25	1	MG/KG	05/20/2016	EBS		
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	05/20/2016	EBS		
Lead	EPA-6020	1.6	0.50	5	MG/KG	05/23/2016	RAL		
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY		
TFT	NWTPH-GX	118				05/20/2016	PAB		
TFT	EPA-8021	117				05/20/2016	PAB		
C25	NWTPH-DX	91.4				05/20/2016	EBS		

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

Page 2 ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626 ALS Group USA, Corp dba ALS Environmental



CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	 5/23/2016 EV16050119 C601
CLIENT CONTACT: CLIENT PROJECT:	Harold Cashman Point Roberts Marina UST Site Assessment	

LABORATORY BLANK RESULTS

MBG-051916S - Batch 104495 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY	
TPH-Volatile Range	NWTPH-GX	U	MG/KG	3.0	05/19/2016	PAB	-

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

MB-051916S - Batch 104495 - Soil by EPA-8021

				REPORTING	ANALYSIS	ANALYSIS	
ANALYTE	METHOD	RESULTS	UNITS	LIMITS	DATE	BY	
Methyl T-Butyl Ether	EPA-8021	U	MG/KG	0.10	05/19/2016	PAB	
Benzene	EPA-8021	U	MG/KG	0.030	05/19/2016	PAB	
Toluene	EPA-8021	U	MG/KG	0.050	05/19/2016	PAB	
Ethylbenzene	EPA-8021	U	MG/KG	0.050	05/19/2016	PAB	
Xylenes	EPA-8021	U	MG/KG	0.20	05/19/2016	PAB	

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

MB-052016S - Batch 104554 - Soil by NWTPH-DX

				REPORTING	ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS	UNITS	LIMITS	DATE	BY
TPH-Diesel Range	NWTPH-DX	U	MG/KG	25	05/20/2016	EBS
TPH-Oil Range	NWTPH-DX	U	MG/KG	50	05/20/2016	EBS

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

MB-052016S - Batch 104505 - Soil by EPA-6020

	-			REPORTING	ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS	UNITS	LIMITS	DATE	BY
Lead	EPA-6020	U	MG/KG	0.10	05/23/2016	RAL

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

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CLIENT:	Whatcom Environmental Svcs., Inc.	DATE:	5/23/2016
	228 E. Champion St., Suite 101	ALS SDG#:	EV16050119
	Bellingham, WA 98225	WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	Point Roberts Marina UST Site		
	Assessment		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 104495 - Soil by NWTPH-GX

					LIMITS		ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	MIN M	AX	DATE	
TPH-Volatile Range - BS	NWTPH-GX	98.8			66.5 12	2.7	05/19/2016	PAB
TPH-Volatile Range - BSD	NWTPH-GX	95.4	4		66.5 12	2.7	05/19/2016	PAB

ALS Test Batch ID: 104495 - Soil by EPA-8021

				LIM	ITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN	MAX	DATE	
Methyl T-Butyl Ether - BS	EPA-8021	72.2		66	116	05/19/2016	PAB
Methyl T-Butyl Ether - BSD	EPA-8021	72.4	0	66	116	05/19/2016	PAB
Benzene - BS	EPA-8021	89.5		67.7	124	05/19/2016	PAB
Benzene - BSD	EPA-8021	89.2	0	67.7	124	05/19/2016	PAB
Toluene - BS	EPA-8021	90.7		71	123	05/19/2016	PAB
Toluene - BSD	EPA-8021	90.5	0	71	123	05/19/2016	PAB
Ethylbenzene - BS	EPA-8021	92.6		69.8	117	05/19/2016	PAB
Ethylbenzene - BSD	EPA-8021	92.8	0	69.8	117	05/19/2016	PAB
Xylenes - BS	EPA-8021	95.4		70	119	05/19/2016	PAB
Xylenes - BSD	EPA-8021	96.2	1	70	119	05/19/2016	PAB

ALS Test Batch ID: 104554 - Soil by NWTPH-DX

				LIMITS	ANALYSIS ANALYSIS I	3Y
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN MAX	DATE	
TPH-Diesel Range - BS	NWTPH-DX	104		75.5 122.1	05/20/2016 EBS	
TPH-Diesel Range - BSD	NWTPH-DX	103	1	75.5 122.1	05/23/2016 EBS	

ALS Test Batch ID: 104505 - Soil by EPA-6020

					115	ANALYSIS ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN	MAX	DATE
Lead - BS	EPA-6020	102		80	120	05/23/2016 RAL
Lead - BSD	EPA-6020	103	1	80	120	05/23/2016 RAL

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